BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE, AT PUNE

ORIGINAL APPLICATION NO. 30 OF 2023

ARYAVAT FOUNDATION …**APPLICANT**

V/s

M/S COROMANDEL INTERNATIONAL LTD.
AND OTHERS …**RESPONDENTS**

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PUNE

DATE : 29/07/2023

ADVOCATE FOR THE APPLICANT

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

WESTERN ZONE BENCH PUNE

AT PUNE.

ORIGINAL APPLICATION NO. 30 OF 2023

ARYAVAT FOUNDATION **APPLICANT**

V/s

M/S COROMANDEL INTERNATIONAL LTD.
AND OTHERS **RESPONDENTS**

REPLY ON BEHALF OF THE RESPONDENT NO.1

MAY IT PLEASE THE HON'BLE TRIBUNAL

I) PRELIMINARY OBJECTIONS

1. At the outset, the Respondent No.1 submits that the contents, submissions and averments made in the present application are devoid of any merit, is not maintainable either in law or on facts and not admitted by this answering Respondent, hence, this Application ought to be dismissed with costs. The present Application is nothing but the abuse of process of law and filed with ulterior motive to harass this answering Respondent No.1.

2. At the outset, the Application filed by the Applicant is not maintainable before this Hon'ble Tribunal, as the Applicant has

failed to make out substantial question relating to the environment in accordance with the provisions of Section 2(m) of the National Green Tribunal Act, 2010 (NGT Act). Thus, the present Application is liable to be dismissed with exemplary costs.

3. The Applicant has also failed to substantiate that he is an aggrieved person in the contents of the Original Application. The Applicant herein has filed the present Application, stating that, it is a non-governmental organization and is engaged in fighting for environmental issues. The Respondent No.1 submits that it is also not disclosed in the body of the Application other than what has been reproduced hereinabove and which is based upon the Applicant's own disclosure, to show what are his credentials and bonafides in approaching the Tribunal. The Hon'ble Supreme Court in Civil Appeal No.2407-2412 of 2021, has held that when issues and objections to the credentials and bonafides of litigants approaching the National Green Tribunal are seriously raised, the same cannot be ignored. Before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and bonafides of the Applicants must be tested. The Hon'ble Supreme

Court, therefore, laid stress that when credentials and bonafides of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to affect the rights of many, the National Green Tribunal should ensure the bonafides and credentials of such litigants. The Hon'ble Supreme Court also observed that the Tribunal must examine questions as to what were the aims and objectives of the Applicants and what are their sources of funding etc. Merely filing some Public Interest Litigations in the past would not suffice. Paragraphs-96 to 99 of the said judgment read as under: -

> *"96. Another aspect that needs consideration is that a serious issue was raised before the learned NGT by the appellants herein with regard to the credentials and bonafides of the original applicants.*
> *97. When the matter was heard by us, we too made pertinent queries to Shri Mehta and Shri Chahar with regard to the credentials of the applicants before the learned NGT. One applicant is Uday Education and Welfare Trust; the second applicant is Samvit Foundation and the third applicant is U.P. Timber Association. Undisputedly, the U.P. Timber Association was a litigant interested in the litigation. However, insofar as the other original applicants, i.e. Uday Education and Welfare Trust and Samvit Foundation, for whom Shri Dhruv Mehta and Shri Brijender Chahar, learned Senior Counsel are appearing, specific queries with regard to the activities undertaken by the said original applicants were made as to whether they were involved in any activity with regard to the protection of the environment; had they at least been engaged in promoting plantation; what were the aims and objectives of the said original applicants; and what are the sources of funding, etc. Shri Mehta and Shri Chahar,*

learned Senior counsel, fairly submitted that apart from the fact that they (original applicants) had previously filed some public interest litigations wherein orders were passed in their favour, they had no other information. 9 98. Shri Dhruv Mehta, learned Senior Counsel has rightly relied on the judgment of this Court in the case of Ankita Sinha and Others (supra) to submit that the learned NGT is empowered to take suo motu cognizance. This Court has held that, taking into consideration the nature of functions of the learned NGT, it cannot be equated with other Tribunals and in environmental matters, it will also have a power to take suo motu cognizance. However, when the credentials and bonafides of a litigant approaching the learned NGT are seriously raised, the same cannot be ignored.

99. We find that before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and bonafides of the applicants must be tested. In the present case, there is scope to infer that the litigation could be at the behest of the existing WBIs who wanted to avoid competition and continue to get raw material at a cheaper rate. There is also scope to infer that it could be at the behest of the WBIs in the adjoining Yamuna Nagar district of Haryana where lakhs of tons of timber is exported from the State of Uttar Pradesh. There is scope to infer that it could be in the interest of middlemen who are engaged in exporting timber from Uttar Pradesh to Haryana. We would, therefore, only request the learned NGT that, when credentials and bonafides of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to adversely affect the rights of many, it should ensure the bonafides and credentials of such litigants."

The aforesaid fact has been reiterated by this Hon'ble Tribunal's Eastern Bench in Appeal No.5 of 2021 (EZ). Copies of the judgment

of the Hon'ble Supreme Court and the Hon'ble NGT, Eastern Zone Bench are annexed hereto and marked as **ANNEXURE – R-1 colly**.

4. The Applicant has also stated in the Original Application that, it has obtained information under the RTI Act, 2005 and thus, has thereafter, proceeded to file the present Application. This Hon'ble Tribunal in the case of '*Ajay Bhosale Vs Union of India & Ors', in O.A. No.63 of 2019'* has held that obtaining an information under RTI Act, does not become the cause of action to file the Original Application before this Hon'ble Tribunal. On this ground itself, this Original Application is not maintainable and this Hon'ble Tribunal has no jurisdiction to hear and entertain the present Original Application and thus, the same is liable to be rejected. Copy of the order passed in OA No.63 of 2019 is annexed hereto and marked as **ANNEXURE – R-2**.

5. The Respondent No.1 submits that allegations with reference.to. the CC&A renewal Application and other issues are baseless and ill-informed. A similar complaint was previously filed by Yuva Shakti Sangathan. However, after verification of the facts the said Yuva Shakti Sangathan has acknowledged the facts via letter dated 10.03.2023 and has withdrawn the complaint . The complaint was

also made to the Authorities and the same was withdrawn. Copy of original letter along with translated letter is annexed herewith and marked as **ANNEXURE – R-3.**

6. The Respondent No.1 states that though the Tribunal in terms of Section 19 of the said Act is not bound by the Civil Procedure Code, but shall be guided by the principle of natural justice. Thus, the Tribunal has to regulate its own procedure and the same has to be in consonance with the principles of natural justice and another obvious percept of regulation of procedure by the Tribunal is that it should not be opposed to the basic rule of law and public policy.

II) FACTS OF THE CASE

7. The Respondent No.1 herein is a Public limited Company, registered and incorporated under the provisions of Indian Companies Act, 1956 and is dealing with the manufacturing of pesticides and pesticides intermediates and is having its Headquarter at Secunderabad, Telangana. There are 465 Number of employees, employed by the Respondent No.1 in its plant. The Respondent No.1 has time and again complied with the requisite conditions stated in the said Consent. Copy of the CCA is annexed hereto and marked as **ANNEXURE – R-4**.

8. The manufacturing process includes a cycle, which has been shown in the flow chart and the same is annexed hereto and marked as **ANNEXURE – R-5**. The present plant has been set up at Sarigam GIDC after receipt of the Environmental Clearance Certificate. Copy of the Environmental Clearance Certificate is annexed hereto and marked as **ANNEXURE – R-6**.

9. The Respondent No.2 had rejected the Application for the grant of Consent to the Respondent No.1 herein. The said Respondent No.1 has re-applied to the Respondent No.2 for obtaining the Consolidated Consent-cum-Authorisation (CCA). The said Application for obtaining the CCA is pending before the Respondent No.2 and hence, in view of the provisions of Section 25 of the Water (Prevention & Control) Act, 1974 the same is to be deemed granted after expiry of period of 120 days. In view of the same, the Respondent No.1 is in deemed possession of the said CCA. As far as renewal of CC&A is concerned, it is submitted as under: -

- The answering Respondent has not violated any regulations in this regard. All compliance with Air, Water, Hazardous waste conditions as specified in the consent has been complied.
- The answering Respondent regularly submits Monthly Data in

XGN Portal such as Production, Water Consumption, Wastewater Disposal, Electricity Consumption, waste disposal data. We are also submitting the Annual Returns Form – 4 and Form – 5 on the XGN as well.

- For emission regulation, the Respondent No.1 has provided multiple scrubbing systems, double stage condensers with adequate utility arrangement to control process generated emissions and all scrubbers also have online sensors to monitor real time emission level.
- Wastewater of industrial process is treated in biological inhouse ETP and then only discharge to CETP as per defined discharge limit.
- Moreover, effluent discharge point is also equipped with the facility of OCEMS to monitor continuously discharge parameters with flow.
- The same is being uploaded on the portal of Respondent No.2 for both effluent and emission.
- The Answering Respondent is disposing of its hazardous waste through Manifest system given in the HOWM Rule -2016 and transportation vehicles of hazardous waste are enabled with the GPS tracing system which is continuously monitored by the Respondent No.2.
- The Answering Respondent regularly conducts the Environmental Monitoring of water, wastewater, hazardous waste, ambient air, stack monitoring, ambient noise by NABL approved Laboratory.

All the data of compliance is annexed herewith and marked

as **ANNEXURE - R-7.**

Furthermore, the Respondent No.1 applied for the CC&A renewal Application Inward No. 262830 dated 21/08/2022. Currently Application is under scrutiny at Head Office of Respondent No.2 at Gandhinagar after acceptance from RO office.

III) PARAWISE REPLY

10. With respect to the contents of Para 1 to 6 of the present Application, this answering Respondent submits that, these are introductory part of Applicant and Respondents' details like address and some other information about the data compiled from RTI. The Respondent No.1 has already dealt with it in the preliminary objections.

11. With respect to the contents of Para 7 of the present Application, it is submitted that, initially the Respondent No.1 had applied for the CC&A Amendment Application (Product mix change) before expiry for existing CC&A, Inward No 191702 on 08/03/2021. The said Application was rejected vide letter NO. GPCB/ SAR / CCA / 24285 /603879 dated 20/10/2021 due to some dispute on selling practice of our by-product as by-product as exist in our CC&A and not on any violations or non-compliance. Copy of the said Rejection

order dated 20.10.2021 is annexed herewith and marked as **ANNEXURE – R-8.**

12. The Respondent No.1 submits that as there was some delay in CCA&A amendment, the Respondent No.1 reapplied for the CC&A renewal Application no.203853 dated 21.09.21 before rejection of ongoing Application of CCA-Amendment with proper justification and supporting documents for CC&A renewal. After Application scrutiny, Respondent No.2 Board queried on by-product therefore, a separate Application was submitted to Respondent No.2 to continue the by-products as by-products only in its category during renewal and not to consider as a "Hazardous Waste" category which is being examined by expert committee constituted by Respondent No.2. This CC&A renewal Application was rejected vide letter NO. GPCB / SAR / CCA / 24285 /679326 dated 29/07/2022, stating the major reason that existing by-products will be considered as hazardous waste instead of by-product as per HOWM Rule – 2016. Copy of the said rejection letter is annexed hereto and marked as **ANNEXURE – R-9**.

13. The Respondent No.1 made a proposal to Respondent No.2 that the board should consider its by-product as only by-product because materials are already listed as a by-product in the CC&A and EC

and the generated by-product are having the quality as defined for fresh product as per NABL approved lab analysis result. The Respondent No.1 again reapplied for the CC&A Renewal Application Inward No. 262830, dated 02/08/2022, copy of which is annexed herewith and marked as **ANNEXURE – R-10.**

14. The Respondent No.1 submits that after applying for the CC&A renewal, the Regional Officer of the Respondent No.2 visited the unit of the Respondent No.1 and observed the compliance conditions, and no major observations were made. The Respondent No.1 submits that only after visit of officials of the Respondent No.2 and reviewing the compliance status of industry they have accepted the Application at RO Level and put forward the Application for scrutiny at HO level. Currently Application of the Respondent No.1 is under scrutiny at the Head Office of the Respondent No.2 at Gandhinagar.

15. The Respondent No.1 has also parallelly pursued to Hazardous waste cell, Respondent No.2, to expedite the Application of material as a by-product instead of hazardous waste as per "Identification of Material as waste or by-product in compliance with the hazardous and other wastes (Management and transboundary movement) rules 2016" published as guideline/framework by the CPCB in September

2019. Copy of the guideline/framework of CPCB, September 2019 is annexed hereto and marked as **ANNEXURE – R-11**.

16. The Respondent No.1 presented its case to the technical expert committee on occasions, viz., 29.01.2022, 25.03.2022 and 11.04.2023. The Respondent No.1 also submitted the technical justification required in the framework to consider the material as a by-product. The technical expert committee pursuant to the Minutes of the meeting dated 17th July 2023 (**MoM**) requested the Respondent to furnish further information by its MoM. The Respondent No.1 has submitted the information sought by the technical expert committee by its reply dated 24th July 2023. Hereto annexed is the MoM as **ANNEXURE – R-12** and the reply of this Respondent No.1 dated 24th July 2023 as **ANNEXURE – R-13.** The Respondent No.1 is awaiting the decision of technical expert committee. This Respondent states that as per the Water (Prevention and Control of pollution) Act, 1974, section 25, sub-section 7, the consent may be treated as a deemed consent by default. Copy of the CC&A Renewal Application Chronology including By-product Consideration Application is annexed herewith and marked as **ANNEXURE – R-14.**

17. With respect to the contents of Para 8 of the present Application, it is stated in compliance of Para No. 7, Respondent No.1 has already applied for CC&A renewal Application but due to pending evaluation by the technical expert committee on the question of By-product vis-à-vis hazardous waste, this Respondent No.1 has not received the CC&A renewal yet and it is under process. The Respondent No.1 is regularly in touch with Respondent No.2 and requested to grant CC&A Renewal on the ground of replies made to technical committee queries w.r.t. to the proposal to continue the by-products as by-products only . The Respondent No.1 submits that the Respondent No.2 has conducted third round of technical committee meeting on 11th of April 2023, and the Respondent No.1 has presented/replied to queries by all committee members. The Respondent No.1 would like to draw the attention of this Hon'ble Tribunal to the fact that, despite receiving two NODs from the Respondent No.2, none of them have mentioned that the current CC&A has been expired. General Site observation have been made and Answering Respondent have made the changes in premises as directed by Respondent No.2 to comply all the requirement of Environmental Regulations.

18. This Respondent No. 1 states that pursuant to the directions of the technical expert committee by its MoM dated 17th July 2023, GPCB (that is Respondent No. [2]) has provided a chance of hearing to this Respondent No.1 by its letter dated 20th July 2023, hereto annexed as **ANNEXURE - R-15.** This Respondent No.1 has responded to this letter dated 20th July 2023 by its reply dated 24th July 2023 hereto annexed as **ANNEXURE – R-16** and requested GPCB to grant this Respondent No.1, the CC&A Renewal while considering the chemicals as hazardous waste on provisional basis without prejudice to the rights of this Respondent No.1 to approach authority to consider the chemicals as a by-product. The Respondent No.1 states that the technical expert committee is deciding the issue on whether the chemicals has to be treated as a By-product or a hazardous waste. This Respondent No.1 is awaiting the decision of the technical expert committee.

19. The Respondent No.1 submits it is pertinent to note that SCN was also issued on the matter for the by-product's consideration is not acceptable but as mentioned above, the Respondent No.1 is awaiting for update on the Application status. The Respondent No.1 has replied all NODs and Show Cause notices received from the

Respondent No.2. The same are annexed hereto and marked as annexed **ANNEXURE – R-17 colly**.

20. With respect to the contents of Para 10 of the present Application, The Respondent No.1 is in receipt of the NOD outward No. 469470 dated 22.09.2018 from Respondent No.2. The Respondent No.1 complied all requisitions as directed by Respondent No.2 and replied to the NOD with proper justification and supporting documents. The points and their compliance are as follows.

- The final outlet was turbid in nature as clarifier III of ETP was not working properly.
  Submitted Compliance: At that time online TSS meter reading was also taken and was showing 50 ppm at the time of sample collection & Respondent No.2 analysis of the same has reflected 84 ppm, which was within the prescribed limit of 200 ppm given in CCA.
- Wastewater observed in Storm water indicating contamination.
  Submitted Compliance: The Respondent No.1 has containment arrangement in storm water system & all contaminated water is taken into a pit & sent for treatment to ETP plant before discharge to CETP.

Copy of the reply is annexed herewith and marked as **ANNEXURE – R-18.**

21. With respect to the contents of Para 11 of the present Application, the Respondent No.1 is in receipt of NOD outward No. 471363 dated 05.10.2018 from Respondent No.2. The Answering Respondent has done all the compliance as directed by Respondent No.2 and has replied to the NOD with proper justification and supporting documents. The points and their compliance are as follows.

- Heavy white smoke emission observed from your stack and spreading into atmosphere.

  Submitted Compliance: In the incineration process CH3Cl combusting took place, which converts it into Co2, HCl & H2O. HCl and H2O get neutralized/condensed in caustic solution; only CO2 along with the steam goes into atmosphere. RESPONDENT NO.2 officials visited the site on 15.09.2018 and taken incinerator stack sample and results of the same are well within prescribed limits. They have also checked the CEMS data and online monitoring data also in prescribed limit. The present status of this incinerator is in operation and periodically smoke quality is also being monitored by Respondent No.2 and Respondent No.2 appointed Schedule-1 auditor. The real time data of this stack is also being uploaded on Respondent No.2 portal
- Foul odour was sensed from the unit on 15/09/2018.

  Submitted Compliance: The Respondent No.1 has already installed a deodorant system in our factory but again this deponent has called the party for inspection and suggested improvement in

the system. The Respondent No.1 planned installation of 280 nozzles new system to make it more effective, same will be commissioned in one month's time.

The said compliance has been carried out and currently our entire premises is covered with the deodorant system, and we run this system for 24*7.

Copy of the Reply is annexed herewith and marked as **ANNEXURE – R-19.**

22. With respect to the contents of Para 12 of the present Application, The Respondent No.1 has been issued the closure direction outward No.471364 dated 05.10.2018 from the Respondent No.2. The Respondent No.1 has complied with all requisitions as directed by Respondent No.2 and applied for revocation Application with proper justification and supporting documents. The points and their compliance are as follows.

- You have not yet applied for EC-Amendment for additional Spray Dryer.

  Submitted compliance: At that time, the Respondent No.1 has immediately stopped the usage of the spray dryer and applied for EC-Amendment and after that they were issued with the revocation order as well. The Respondent No.1 has complied with all the conditions stated in the revocation order.

Said reply was accepted by the Respondent No.2 as well. Application for revocation order for closure order issued outward No. 471364 dated 05.10.2018 and compliance of conditional revocation letter vide letter No. GPCB/CCA-SRG-229(27)/ID:24285/472431 dated 16/10/2018. The Respondent No.1 also received the response from the MoEF regarding EC-Amendment order. On that ground the Respondent No.2 issued a permanent revocation letter outward 526019 dated 14/06/2019. Copies of the said documents are annexed hereto and marked as **ANNEXURE – R- 20.**

23. With respect to the contents of Para 13 of the present Application, as stated above the Respondent No.1 was in receipt of the closure order and after that it has also received the revocation order.

24. With respect to the contents of Para 14 of the present Application, the Respondent No.1 is in receipt of NOD outward No. 474945 dated 05.11.2018 from the Respondent No.2. The Respondent No.1 has complied as directed by Respondent No.2 and has replied to the NOD with proper compliance and supporting documents. The points and their compliance are as follows.

- Foul/Bad odour observed in premises and outside premises.

Submitted Compliance: New deodorant system installed (900 meters with 300 nozzles), which covers 3 sides full boundary wall as well as internal plant area.

The present status of this Deodorant is functional and runs 24X7 with coverage all periphery of the premises

- It has provided fogger (De-odorant system, which was found not in operation during inspection)

  Submitted Compliance: The Respondent No.1 is operating deo odorant system continually 24 hrs. A new deodorant system installed (900 meters with 300 nozzles), which covers 3 sides full boundary wall as well as internal plant area.

Copy of the reply which is annexed herewith and marked as **ANNEXURE – R - 21.**

25. With respect to the contents of Para 15 of the present Application, the Respondent No.1 was issued the closure direction dated 29.01.2019 by the Respondent No.2 for the fire incident in company. The Respondent No.1 made the compliance as directed by Respondent No.2 and has applied for revocation of closure order with proper compliance and supporting documents. The Respondent No.2 has issued the revocation based on conditions stated in the revocation order dated 14/06/2019. The Respondent No.1 has also complied with all conditions given in the revocation order and submitted the response to Respondent No.2. After this the

Respondent No.1 has been granted with the permanent revocation by Respondent No.2 on 05/11/2019. Copies of the documents pertaining to this are annexed herewith and marked as **ANNEXURE - R-22.**

26. With respect to the contents of Para 16 of the present Application, the Respondent No.1 issued the NOD dated 21.10.2021 by Respondent No.2. This Answering Respondent has done all the compliance as directed by Respondent No.2 and has replied to the NOD with proper justification and supporting documents.

- Respondent No.2 has made observation regarding the greyish water coming out of the storm water drain of unit and odour issue in plant area.

  Submitted Reply: The Respondent No.1 has collected the water accumulated in the storm water drain and treated through the biological ETP.

- Odour issues were observed because our products TMP and TEP have strong odour properties.

  Submitted Reply: The Respondent No.1 has installed a deodorant system in the periphery of the plant to overcome this issue.

Copy of the Reply is annexed herewith and marked as **ANNEXURE – R-23.**

27. With respect to the contents of Para 17 of the present Application, the Respondent No.1 received the NOD dated 30.07.2022 from Respondent No.2. The Respondent has complied as directed by Respondent No.2 and has replied to the NOD with proper justification and supporting documents. Copy of the Reply is annexed hereto and marked as **ANNEXURE – R-24.**

28. With respect to the contents of Para 18 of the present Application, it is pertinent to note that Respondent No.1 has already clarified above in paragraph 18 of this reply that the Respondent No.1 has already applied for the renewal of CC&A application and the same is pending evaluation by the hazardous waste technical expert committee. .

29. With respect to the contents of Para 19 of the present Application, the Respondent No.1 has been issued the Show Cause Notice dated 30.07.2022 by Respondent No.2. The Answering Respondent has done all the compliance as directed by Respondent No.2 and has replied to the SCN with proper justification and supporting documents. The points and their compliance are as follows.

- During inspection it is observed that unit is using flexible pipeline at many locations in their ETP for conveyance of effluent and unit is not operating primary ETP units.

Submitted Compliance:

- Regarding observed flexible pipeline at ETP. Observed flexible pipeline are removed at ETP area and Fixed pipeline are provided.
- Regarding not operating primary ETP units.

  During inspection dated 08/02/2022 by Respondent No.2 officials, primary clarifier was under routine/ regular maintenance work. And due to that, operation of primary clarifier was stopped, and it found not in operation during said inspection.

- During inspection leakages were observed in the quenching system of incinerator. This may result into odour.

  Submitted Compliance:

  As an immediate action, the old quenching system has been replaced with a new quenching system.

Copy of the Reply is annexed hereto and marked as **ANNEXURE – R-25**.

30. With respect to the contents of Para 20 of the present Application, as stated above, the Respondent No.1 has already applied for CC&A renewal Application and this Respondent No.1 has clarified in paragraph 18 of this reply.

31. With respect to the contents of Para 21 of the present Application, the Respondent No.1 is in receipt of NOD dated 30.07.2022 from

the Respondent No.2 officials after visits of 08.02.2022 and 08.03.2022. The Respondent No.1 has complied the requisitions as directed by the Respondent No.2 and has replied to the NOD with proper compliance and supporting documents. Respondent No.2 has made a total of 7 Nos. of observations in plant. The Respondent No.1 has complied with all the observed points and submitted our response in a timely manner. Major observations were regarding disposal of civil debris in adjacent plot of Respondent No.1, and storage of Hazardous waste in plant area. The Respondent No.1 has submitted its justification by stating that the civil debris were generated during the storm drain cleaning work and renovation work to avoid any water contamination during monsoon, and Respondent No.1 have stored it in Respondent No.1's plot only for drying purpose and there is no evidence of soil contamination as area remediation study is conducted by national reputed SVNIT Surat. Stored sludge bags in ETP were generated due to regular maintenance work of ETP and same has been disposed off as directed by Respondent No.2. Copy of the Reply is annexed hereto and marked as **ANNEXURE – R-26**.

32. With respect to the contents of Para 22 of the present Application, the point was regarding accumulation of civil debris in the plot of

Respondent No.1. The same debris was disposed of to Treatment, Storage and Disposal Facility (TSDF) site as directed by Respondent No.2. The Respondent No.2 raised Rs. 67,500/- (Sixty-Seven Thousand Five Hundred) as Environmental Damage Compentation (EDC). The Respondent No.1 has also conducted Site-remediation study through the SVNIT, Surat as directed by Respondent No.2 and found no contamination and therefore no remediation was required. The compliances were done and in line with the directions of Respondent No.2

33. With respect to the contents of Para 23 of the present Application, the Respondent No.1 is in receipt of NOD dated 10.02.2020 from the Respondent No.2 after Respondent No.2's visit dated 15.01.2020. As directed in the NOD to submit the detailed action taken report to achieve the permissible norms specified in CCA, the Respondent No.1 has stopped the incinerator immediately and carried out calibration of OCEMS and also conducted manual stack monitoring through the third party. The Respondent No.1 also requested the Respondent No.2 to carry out resampling of the incinerator stack. The action plan has also been submitted. Copy of the reply is annexed hereto and marked as **ANNEXURE – R-27**.

34. With respect to the contents of Para 24 of the present Application, the Respondent No.1 has been issued the Show Cause Notice on 15.06.2020 by the Respondent No.2. The said notice was pertaining to the working of the TOC meter. The Respondent No.1 replied stating that the deviation was observed between the manual analysis of COD and online reading of the TOC meter. The deviation might be due to the choking of some traces in filter of the TOC meter for short period of time. After that the Respondent No.1 has carried out maintenance activity of the TOC meter and Calibrated the TOC meter and compared the online result with the Laboratory COD result and they were in line with each other. Copy of the reply is annexed hereto and marked as **ANNEXURE – R-28**.

35. With respect to the contents of Para 25 of the present Application, the Respondent No.1 is in receipt of Show Cause Notice dated 18.09.2020 from the Respondent No.2. The Respondent No.2 has seen that Respondent No.1 has stored the MEE salt in open within the premises in HDPE bags and this may cause contamination during the rain. The Respondent No.1 has shifted the MEE salt to a closed storage area, and has also submitted the photographs to the Respondent No.2. Copy of the detailed reply is annexed hereto and marked as **ANNEXURE – R-29**.

36. With respect to the contents of Para 26 of the present Application, the Respondent No.1 is in receipt of the Show Cause Notice dated 04.11.2020 from the Respondent No.2. The SCN was regarding analysis results of sample collected from stack attached to spray dryer of Mancozeb Plant A on 22.09.2020 shows, PM Stack higher

than the permissible limit. The Respondent No.1 has submitted detailed reply stating that as this stack is having OCEMS, we also notice intermittent spike in the reading during 23.09.2020. After that the Respondent No.1 has immediately stopped the plant and inspected the bag house filter. The Respondent No.1 has observed that 2 bags out of 520 no. were torn out. The Answering Respondent immediately changed them and complied with the prescribed limit. Copy of the detailed reply is annexed hereto and marked as **ANNEXURE – R-30.**

37. With respect to the contents of Para 27 of the present Application, the Respondent No.1 was issued Show Cause Notice dated 13.05.2021 after the visit of Respondent No.2 dated 01.02.2021. The Respondent No.1 has submitted the response to the observation made regarding loading of plastic bags/liners in tempo no. GJ-15-X-6936. The tempo was used internally for transportation of liners from storage area to our dedicated area for the decontamination. At that time some maintenance issues were observed in tempo after loading of the material. That is why the Respondent No.1 was just unloading the material to the scrap yard. The Respondent No.1 has also submitted the details of disposal of the Plastic Bags/Liners to Respondent No.2. Copy of the detailed reply is annexed hereto and marked as **ANNEXURE – R-31.**

38. With respect to the contents of Para 28 of the present Application, allegation regarding illegal discharge found happening from the

plant of the Respondent No.1 is not relevant as per the Inspection Report Dated 07.12.2021. It is pertinent to note that the inspection was made by Respondent No.2 on 26.11.2021 to conduct physical verification of hazardous waste inventory. It is also pertinent to note that Respondent No.2 has decided to randomly make a physical verification of hazardous waste inventory along with SVNIT, Surat team in a few industries as sample survey. In this connection SVNIT Team along with Respondent No.2 have visited the site on 26.11.2021 (10.30 Hrs) and issued Notice of Entry and Inspection (NEI), as an inspection protocol to industry mentioning only one following observation. Copy of the said notice is annexed hereto and marked as **ANNEXURE – R-32**. Copy of the reply is annexed hereto and marked as **ANNEXURE – R-33**.

39. With respect to the contents of Para 29 of the present Application, All the attachments given in the Annexure A-18 of the original Application by the Applicant are inspection reports generated by the Respondent No.2 for their internal reference. This type of report contains the visit related observations not compiling the compliance submitted w.r.t. order issued for that inspection report. The said inspection reports are made after the physical site visit. It is required

to be noted herein that all attached inspection reports are of the time while the Respondent No.1 was having valid CC&A.

40. With respect to the contents of Para 30 of the present Application, it is submitted that the inspection reports are generated before the expiry of the valid CC&A as stated hereinabove. The Respondent No.1 submits that the Notice issued to the Respondent No.1 is before expiry of the CC&A are compiled well and response of them has also been accepted by Respondent No.2 while notice issued after expiry of CCA has also been complied well but due to confusion between by-product and hazardous waste, final decision is still awaited.

41. With respect to the contents of Para 31 of the present Application, it is to be noted that Show-cause notice dated 30/07/2022 is due to some dispute on selling practice of the by-product as by-product as it exist in the CC&A and not on any violations or non-compliance. The Respondent No.1 has submitted valid proof and details regarding Respondent No.1's compliance with the conditions. All other mentioned notices in Application have never mentioned regarding the scant regard for the environment, and the Respondent No.1 fully exercises the necessary caution for operating the Plant. The Applicant has failed to prove that the Respondent No.1 is

negligent towards environment or that the Respondent No.1 has not taken necessary caution for operating the Plant.

42. With respect to the contents of Para 32 of the present Application, the Respondent No.1 has clarified the reason behind operating the industry without valid consent and the Respondent No.1 again clarifies that that it has always complied with direction issued by the Respondent No.2 and all has been accepted by Respondent No.2. The Respondent No.1 hereby confirms that it has not violated any conditions prescribed in the consolidated consent. The answering Respondent states that this Respondent has fully complied with all directions and have carried out improvements as required by the Respondent No.2. .

43. With respect to the contents of Para 33 of the present Application, It is pertinent to note that the NGO named Yuva Shakti Sangathan has addressed a complaint and later they withdraw their charges by themselves stating that they were earlier not aware about actual scenario of the unit. This Respondent No.1 states that the present application has been filed with malafide intention by suppressing material facts. and the allegations made by the Applicant are not backed by any technical details or verification. As far as the damage to environment and biodiversity is concerned the said area is falling

under notified industrial estate of GIDC where in other industries also continue with. their operation. The smoke generated from incinerator is being dispersed by adequate stack height prescribed by the Respondent No.2-and this Respondent No.1 always maintain the incineration parameters as per CPCB guidelines for incinerator. Moreover, the Respondent No.1 has not received any complaint by local populace regarding symptoms of eye irritation. As mentioned earlier the matters mentioned in their letter dated 13/01/2023____ is not supported by any technical justification. The Respondent No.1 prays to the honourable tribunal not to consider such allegations made without any technical clarification.

44. With respect to the contents of Para 34 of the present Application, the question made by the Applicant is not based on the proper technical clarification. The Applicant has filed the Application on the data referred by the Application of Yuva Shakti Sangathan. This Respondent No.1 states that there is no violation by the Respondent No. 1 as envisaged under section 14 of NGT Act, 2010. The Para No. 34 is self-explanatory that all raised concerns are responded as per above given explanation.

45. With respect to the contents of Para 35 of the present Application, this Respondent No.1 prays that the grounds stated in Para 35 are

not relevant and this Hon'ble Tribunal should not consider, for the reasons explained in the above matter.

46. With respect to the grounds A to F made by the Applicant, they are liable to be rejected in view of the facts and circumstances mentioned herein above.

47. In reply to ground G, it is submitted that, the Respondent No.1 agrees that the clearance and permits are meant to ensure that the industries comply with the environmental standards and regulations and do not cause harm to the environment or public health and same is also respected by us. Stipulated norms have been never violated by the Respondent No.1. Moreover, the Respondent No.1 is also operating Coromandel Medical Centre (CMC) nearby operation facility for local residents and the CMC is facilitated by medical professionals. The matter is only that the CC&A renewal is not done due to pending evaluation by the technical expert committee on the question of By-product vis-à-vis hazardous waste. . There is no violation of the existing CC&A, all the conditions prescribed in the CC&A is being complied by the industry continuously as mentioned in Para No. 9.

48. With respect to the contents of Para 36 of the present Application, the Respondent No.1 is operating the plant in GIDC industrial estate

by adhering all the conditions prescribed in the CCA and as stated here in above the only matter is regarding the CCA renewal which is not grated due to pending evaluation by the technical expert committee on the question of By-product vis-à-vis hazardous waste. . There is no such incident or action done by the Respondent No.1 which may damage the environment, human health, biodiversity etc.

49. With respect to the contents of Para 37 of the present Application, Applicant's approach to the Honourable Tribunal bringing the aforesaid facts and circumstances is not true as explained above. The Applicant has suppressed material facts and this Respondent No.1 states that this Application filed by the Applicant is false, vexatious and is not maintainable either in law or on facts. This present Application has been filed with malafide intention before this Hon'ble Tribunal and the Prayer should not be considered, it should be rejectedand the Application deserves to be dismissed at the outset.

50. In view of the aforesaid facts and circumstances, this Respondent No.1 prays that this Hon'ble Tribunal may be pleased to dismiss the present Application with compensatory costs and grant such other and further reliefs to this Respondent No.1 in the interest of justice and equity. The Respondent No.1 submits that the present application has failed to substantiate the substantial question relating

to the environment. The application for renewal of the CC&A is pending with the Respondent No.2. The said decision has to be taken by the Respondent No.2 and it is beyond the control of the Respondent No.1. The factors which are not attributable to the Respondent No.1 cannot be concluded that the Respondent No.1 is at fault.

Pune

Date : 29/07/2023



Advocate for Respondent No.1

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

WESTERN ZONE BENCH PUNE

AT PUNE.

ORIGINAL APPLICATION NO. 30 OF 2023

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

BETWEEN

Aryavat Foundation . **APPLICANT**

And

M/s Coromandel International Ltd.
And others ... **RESPONDENTS**

AFFIDAVIT IN SUPPORT OF REPLY ON BEHALF OF THE RESPONDENT NO.1

MAY IT PLEASE THE HON'BLE TRIBUNAL

I, Santosh Chandrashekhar Hordoddi Age 46 years, Occu.: Business, having office at Sarigam Dist- Valsad (Gujrat) the Respondent No.1 herein above, do hereby state on solemn affirmation as under:-

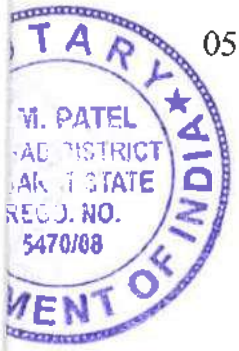
01. The Respondent No.1 has already been denied the contents of this entire Original Application, as the same are baseless, and are having without any documentary evidence.

02. At the outset, the Applicant submits that the contents, submissions and averments made in the present Applicant are devoid of any merit

and not admitted by this answering Respondent, hence, this Application ought to be dismissed with costs.

03. The present Application is nothing but the abuse of process of law and filed with ulterior motive to harass this answering Respondent No.1.

04. At the outset, the Application filed by the Applicant is not maintainable before this Hon'ble Tribunal, as the Applicant has failed to make out substantial questions of law and relating to the Environment in accordance with the provisions of .Sec.2(m) of the National Green Tribunal Act, 2010. Thus, the present Application is liable to be dismissed with expletory cost.



05. That the Respondent No.1 is filing the reply to the Interim Application No.30 of 2023 in Original Application. The facts and circumstances are well set out in the main body of the Reply. The Respondent No.1 adopts, maintains, confirms, repeats and reiterates whatever has been stated in the main body of the reply to the sake of brevity, convenience and in order to avoid repetition to this Affidavit. The Respondent No.1 craves leave of this Hon'ble Tribunal to treat the statements, averments and submissions in the main body of the Reply as part and parcel of this Affidavit as if the

same are reproduced herein ad-seriatim, with a view to avoid repetition and for the sake of brevity.

06. I say that whatever stated in the Reply and the present Affidavit is true and correct to the best of my knowledge, information and belief and the legal advice, which I believe to be true.

Solemnly affirmed at Sarigam on 24 day of May, 2023.

Santosh Chandrashekhar Hordoddi
GM & Unit Head
Coromandel International Ltd, Sarigam

AFFIANT

COROMANDEL INTERNATIONAL LIMITED SARIGAM

NOTARY GOVERNMENT OF INDIA PATEL DISTRICT ... STATE ... NO. 0470/08

Solemnly Affirmed before me by Shri/Smt. Santosh chandrashekhar of Sarigam who has been indentified before me by Shri ... of ... Whom I know personally

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Book No. 03
Page No. 110
Serial No. 4748
Date 24 MAY 2023

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ANNEXURE-R-1

Item No.04 Court No.1

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)

Appeal No.05/2021/EZ
(I.A. No.78/2021/EZ)

IN THE MATTER OF:

Anand Kumar Jha
Son of Shri Bhalchandra Jha,
Resident of Type-B, Dakra,
Dakra Colliery,
Ranchi .....Appellant(s)

Versus

1. Union of India,
Through its Secretary,
Ministry of Environment, Forests and Climate Change,
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi-11003;

2. Jharkhand State Pollution Control Board,
Through its Member Secretary,
H.E.C., Dhurwa,
Ranchi-834004;

3. State of Jharkhand,
Through Chief Secretary,
Project Bhawan, Doranda,
Ranchi-834002;

4. Damodar Valley Corporation (DVC),
Through its Chairman-cum-Managing Director DVC Towers,
VIP Road, Kolkata-700054

.....Respondent(s)

Date of hearing: 15.05.2023

CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER

For Appellant(s) : Mr. Kaustav Dhar, Advocate (in Virtual Mode)

For Respondent(s): Mr. Apurba Ghosh, Advocate for R-1,
Mr. Ashok Prasad, Advocate for R-2 (in Virtual Mode),
Ms. Aishwarya Rajyashree, Adv. for R-3 (in Virtual Mode),
Mr. Sanjay Upadhyay, Advocate a/w
Mr. Prasun Mukherjee, Advocate and
Mr. Deepak Agarwal, Advocate for R-4

ORDER

1. This Appeal has been filed by the Appellant seeking quashing of the Environmental Clearance dated 28.04.2021 granted to the Respondent No.4, Damodar Valley Corporation (DVC), for Tubed Coalmine Project of 6 MTPA in the District of Latehar, Jharkhand.

2. The contention of the Appellant is that the said mining block is located in an area of 460 ha; the EIA report of the project does not estimate the background concentration of Mercury (Hg) and Chromium (Cr) in Particulate Matter as required by Standard ToR No.15; there is no detailed timeline, maps etc. provided in the EIA report with respect to Additional ToR No.15; no details have been given in the EIA report regarding ecological restoration and mine reclamation plan prepared with local/native species found in the area as was required by Additional ToR No.3; the Palamau Tiger Reserve and other Protected areas are in close proximity to the site of the Tubed Coalmine Project and there is no presence of Schedule-I species which appears to be unlikely.

3. In the present Appeal the Environmental Clearance dated 28.04.2020 is under challenge, as such the Tribunal raised a preliminary objection regarding limitation.

4. Learned Counsel for the Appellant has relied upon the judgment of the Hon'ble Supreme Court dated 23.09.2021 in *Miscellaneous Application No. 665 of 2021 in SMW(C) No. 03 of 2021; Re: Cognizance for Extension of Limitation*. It is mentioned therein that the limitation period has itself been extended by the Hon'ble Supreme Court by the said judgment in cases where limitation would have expired during the period from 15.03.2020 till 02.10.2021.

5. The Respondent No.4, Damodar Valley Corporation, has filed counter-affidavit dated 26.04.2022 wherein a preliminary objection of limitation has been taken. The second ground of objection is whether the Appellant can be permitted to maintain the present Appeal as an 'aggrieved person'.

6. We will first take up the second issue namely as to whether the Appellant can be said to be an aggrieved person within the meaning of Section 16 and 18 of the National Green Tribunal Act, 2010 to entitle him to maintain the present Appeal. Section 16 of National Green Tribunal Act, 2010, reads as under: -

> *"**16. Tribunal to have appellate jurisdiction**-*
> *Any person aggrieved by, -*
>
> *(a) an order or decision, made, on or after the commencement of the National Green Tribunal Act, 2010, by the appellate authority under section 28 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(b) an order passed, on or after the commencement of the National Green Tribunal Act, 2010, by the State Government under section 29 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(c) directions issued, on or after the commencement of the National Green Tribunal Act, 2010, by a Board, under section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(d) an order or decision made, on or after the commencement of the National Green Tribunal Act, 2010, by the appellate authority under section 13 of the Water (Prevention and Control of Pollution) Cess Act, 1977 (36 of 1977);*
>
> *(e) an order or decision made, on or after the commencement of the National Green Tribunal Act, 2010, by the State*

Government or other authority under section 2 of the Forest (Conservation) Act, 1980 (69 of 1980);

(f) an order or decision, made, on or after the commencement of the National Green Tribunal Act, 2010, by the Appellate Authority under section 31 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);

(g) any direction issued, on or after the commencement of the National Green Tribunal Act, 2010, under section 5 of the Environment (Protection) Act, 1986 (29 of 1986);

(h) an order made, on or after the commencement of the National Green Tribunal Act, 2010, granting environmental clearance in the area in which any industries, operations or processes or class of industries, operations and processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986 (29 of 1986);

(i) an order made, on or after the commencement of the National Green Tribunal Act, 2010, refusing to grant environmental clearance for carrying out any activity or operation or process under the Environment (Protection) Act, 1986 (29 of 1986);

(j) any determination of benefit sharing or order made, on or after the commencement of the National Green Tribunal Act, 2010, by the National Biodiversity Authority or a State Biodiversity Board under the provisions of the Biological Diversity Act, 2002 (18 of 2003),

may, within a period of thirty days from the date on which the order or decision or direction or determination is communicated to him, prefer an appeal to the Tribunal:

Provided that the Tribunal may, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal within the said period, allow it to be filed under this section within a further period not exceeding sixty days.

7. Section 18 of the National Green Tribunal Act, 2010 reads as under: -

> ***18. Application or appeal to Tribunal-***
>
> *(1) Each application under sections 14 and 15 or an appeal under section 16 shall, be made to the Tribunal in such form, contain such particulars, and, be accompanied by such documents and such fees as may be prescribed.*
>
> *(2) Without prejudice to the provisions contained in section 16, an application for grant of relief or compensation or settlement of dispute may be made to the Tribunal by--*
>
> *(a) the person, who has sustained the injury; or*
>
> *(b) the owner of the property to which the damage has been caused; or*
>
> *(c) where death has resulted from the environmental damage, by all or any of the legal representatives of the deceased; or*
>
> *(d) any agent duly authorised by such person or owner of such property or all or any of the legal representatives of the deceased, as the case may be; or*
>
> *(e) any person aggrieved, including any representative body or organization."*

8. In the paragraph-1 under the heading 'Facts' in the Memo of Appeal the Appellant has described himself as a resident of Village Dakra in Ranchi District of Jharkhand and he *"is stated to be concerned by the environmental impact of the mining activities of the Respondent No.4 in the State of Jharkhand"*. It is stated that the Appellant has been observing for the past several years that the air quality in various parts of the State of Jharkhand especially in the region around the coal mines has severely deteriorated due to large number of coal mines in Jharkhand. The Appellant is stated to have observed that due to pollution being caused, there is an

increase in the respiratory illness in the persons residing in the region and he has been raising the issue of pollution and other environmental issues due to coal mines in electronic and other media. It is also stated that the Appellant being a resident of Jharkhand is concerned by the grant of Environmental Clearance to Tubed Coal Mines Project of Respondent No.4 and hence has filed the present Appeal.

9. In our opinion, merely saying that he is concerned with pollution in Jharkhand, the Appellant cannot be said to be a 'person aggrieved' within the meaning of Section 16 and Section 18 of the National Green Tribunal Act, 2010. The Tubed Coal Mines Project of the Respondent No.4 is located in Latehar District of Jharkhand. The Appellant is not a resident of Latehar District nor has he stated that he is a resident of any of the villages which may fall within the area of operation of the Tubed Coal Mines Project of the Respondent No.4. The Project Proponent in its counter-affidavit has stated that the place of residence of the Appellant is about 200 km from the Project site.

10. Among the various issues raised for assailing the grant of Environmental Clearance to the Respondent No.4 one of the grounds taken by him is that 'Public Consultation' was not conducted as per the EIA Notification, 2006 and that the process of 'public consultation' has not been done in the present case while granting Environmental Clearance to the Project of Respondent No.4.

11. Nowhere in the body of the Appeal has the Appellant claimed that he had sought hearing during public consultation as a matter of right but was not given such opportunity. None of the persons who

live in the vicinity of the villages covered by the Tubed Coal Mines Project of the Respondent No.4 are present before this Tribunal to complain that they were not provided opportunity of public hearing and that public consultation was not held as per the EIA Notification, 2006.

12. In this view of the matter, we hold that the Appellant is not a person aggrieved within the meaning word "any person aggrieved" under Section 16 and Section 18 of the National Green Tribunal Act, 2010.

13. Mr. Sanjay Upadhyay, learned Counsel for the Project Proponent submitted that it is also not disclosed in the body of the Appeal other than what has been reproduced hereinabove and which is based upon the Appellant's own disclosure, to show what are his credentials and *bonafides* in approaching the Tribunal. Reliance has been placed on the judgment of the Hon'ble Supreme Court in *Civil Appeal No.2407-2421 of 2021, State of Uttar Pradesh & Ors. vs. Uday Education and Welfare Trust & Anr.*

14. The Hon'ble Supreme Court in *Civil Appeal No.2407-2412 of 2021, The State of Uttar Pradesh & Ors. Etc. Etc. vs. Uday Education and Welfare Trust & Anr. Etc. Etc.* and connected cases, has held that when issues and objections to the credentials and *bonafides* of litigants approaching the National Green Tribunal are seriously raised, the same cannot be ignored. Before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and *bonafides* of the Applicants must be tested. The Hon'ble Supreme Court, therefore, laid stress

that when credentials and *bonafides* of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to affect the rights of many, the National Green Tribunal should ensure the *bonafides* and credentials of such litigants. The Hon'ble Supreme Court also observed that the Tribunal must examine questions as to what were the aims and objectives of the Applicants and what are their sources of funding etc. Merely filing some Public Interest Litigations in the past would not suffice. Paragraphs-96 to 99 of the said judgment read as under: -

> *"96. Another aspect that needs consideration is that a serious issue was raised before the learned NGT by the appellants herein with regard to the credentials and bonafides of the original applicants.*
>
> *97. When the matter was heard by us, we too made pertinent queries to Shri Mehta and Shri Chahar with regard to the credentials of the applicants before the learned NGT. One applicant is Uday Education and Welfare Trust; the second applicant is Samvit Foundation and the third applicant is U.P. Timber Association. Undisputedly, the U.P. Timber Association was a litigant interested in the litigation. However, insofar as the other original applicants, i.e. Uday Education and Welfare Trust and Samvit Foundation, for whom Shri Dhruv Mehta and Shri Brijender Chahar, learned Senior Counsel are appearing, specific queries with regard to the activities undertaken by the said original applicants were made as to whether they were involved in any activity with regard to the protection of the environment; had they at least been engaged in promoting plantation; what were the aims and objectives of the said original applicants; and what are the sources of funding, etc. Shri Mehta and Shri Chahar, learned Senior counsel, fairly submitted that apart from the fact that they (original applicants) had previously filed some public interest litigations wherein orders were passed in their favour, they had no other information.*

98. Shri Dhruv Mehta, learned Senior Counsel has rightly relied on the judgment of this Court in the case of Ankita Sinha and Others (supra) to submit that the learned NGT is empowered to take suo motu cognizance. This Court has held that, taking into consideration the nature of functions of the learned NGT, it cannot be equated with other Tribunals and in environmental matters, it will also have a power to take suo motu cognizance. However, when the credentials and bonafides of a litigant approaching the learned NGT are seriously raised, the same cannot be ignored.

99. We find that before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and bonafides of the applicants must be tested. In the present case, there is scope to infer that the litigation could be at the behest of the existing WBIs who wanted to avoid competition and continue to get raw material at a cheaper rate. There is also scope to infer that it could be at the behest of the WBIs in the adjoining Yamuna Nagar district of Haryana where lakhs of tons of timber is exported from the State of Uttar Pradesh. There is scope to infer that it could be in the interest of middlemen who are engaged in exporting timber from Uttar Pradesh to Haryana. We would, therefore, only request the learned NGT that, when credentials and bonafides of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to adversely affect the rights of many, it should ensure the bonafides and credentials of such litigants."

15. In the present case, nothing has been indicated by the Appellant as to why he is **only** concerned by the environmental impact of the mining activities of the 'Respondent No.4' in the State of Jharkhand as stated by him in paragraph-1 of the **"FACTS".** What is his source of funding to maintain the Appeal or to take up such

environmental issues has not been disclosed. Assailing the Environmental Clearance, several scientific and technical facts and documents have been referred to by the Appellant; what is his source of funding and source of obtaining such documents, has not been disclosed. Not a single person who may be said to be a resident of any village affected by the mining operation of the Tubed Coal Mines Project of the Respondent No.4 is before us. Therefore, a serious shadow of doubt is cast upon the credentials and *bonafides* of the Appellant to maintain the present Appeal and in our considered view he cannot be said to be a 'person aggrieved' within the meaning of Section 16 and Section 18 of the National Green Tribunal Act, 2010 and, therefore, this Appeal is not maintainable at the behest of the Appellant.

16. The next preliminary issue raised by the Respondent No.4 is with regard to limitation. The Tribunal even on the first date while entertaining the Appeal had raised the issue of limitation and the same had been kept open for decision.

17. Mr. Sanjay Upadhyay, learned Counsel for the Respondent No.4, Damodar Valley Corporation, submitted that though the Environmental Clearance was granted to the Respondent No.4 on 28.04.2020 for 06 million tonnes per annum of the Tubed Coal Mines Project and uploaded on the Website of DVC (www.dvc.gov.in) under the head 'Business' sub-heading 'mining', the recommendations for grant of Environmental Clearance was made in the 51st Meeting of Expert Appraisal Committee on 05.12.2019, the Minutes of which were uploaded on the portal and, therefore, the decision of the Expert Appraisal Committee was already in public domain and, therefore, in the knowledge of the

Appellant whereas the present Appeal has been filed after a delay of almost one and half years challenging the Environmental Clearance granted to Respondent No.4.

18. The learned Counsel has also referred to the provisions of Paragraph-8 of the MoEF&CC Notification dated 14.09.2006 also known as 'EIA Notification, 2006' and submitted that Paragraph-8 provides that the regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the Applicant within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environmental Impact Assessment Report, and where Environmental Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents.

19. Reference has also been made to Paragraph-8 (ii) which provides that the regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement and intimation of this decision shall be simultaneously conveyed to the Applicant.

20. Paragraph-8 (i) & (ii) of the EIA Notification, 2006, read as under: -

"8. Grant or Rejection of Prior Environmental Clearance (EC)-

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days."

21. According to the Respondent No.4, the recommendations for Environmental Clearance was made in the 51st Meeting of the Expert Appraisal Committee on 05.12.2019, Minutes of which were uploaded on the website/portal on 13.12.2019. Under sub

paragraph-(i) of paragraph-8 of the EIA Notification, 2006, the period of hundred and five days (105) would end on 28.03.2020. The period of limitation has been extended by the Hon'ble Supreme Court in view of the outbreak of COVID-19 pandemic in *Miscellaneous Application No.21 of 2022 in Miscellaneous Application No.665 of 2021 in Suo Motu Writ Petition (C) No.3 of 2020, Re: Cognizance for Extension of Limitation* and connected cases, and on 23.03.2020 the Hon'ble Supreme Court directed extension of the period of limitation in all proceedings pending before the Courts and Tribunals with effect from 15.03.2020 till further orders and which has been further extended till 28.02.2022. The present Appeal was filed on 08.10.2021 i.e. within the extended period of limitation and, therefore, the same cannot be said to be barred by limitation.

22. However, since we have already held the Appeal to be not maintainable considering the *bonafides* and credentials of the Appellant we dismiss this Appeal as not maintainable.

23. In view of the above, the Appeal No.05/2021/EZ is dismissed.

24. Interlocutory Applications, if any stand disposed of accordingly.

25. There shall be no order as to costs.

.....
B. Amit Sthalekar, JM

.....
Dr. Arun Kumar Verma, EM

May 15, 2023
Appeal No.05/2021/EZ
(I.A. No.78/2021/EZ)
MN

TRUE COPY
ADVOCATE

ANNEXURE-R-2

Item No. 4 (Pune Bench)

BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

(By Video Conferencing)

Original Application No. 63/2019(WZ)
(I.A. No. 100/2019 & I.A. No. 86/2021)

Mr. Ajay Jayvantrao Bhosale

.....Applicant

Versus

Union of India through MoEF&CC & Ors.

....Respondent(s)

Date of hearing: 01.12.2022

CORAM: HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. VIJAY KULKARNI, EXPERT MEMBER

Applicant	:	Mr. Nitin Lonkar, Advocate
Respondent(s)	:	Ms. Manasi Joshi, Advocate for R-1, 6 & 7 Mr. Aniruddha Kulkarni, Advocate for R-3 to 5 Mr. S. Swaminathan, Advocate for R-8 & 9/PCMC Mr. Saket Mone along-with Mr. Abhishek Salian, Advocates for R-11/PP

ORDER

1. Today this matter is listed on the issue of limitation against which objection has been filed by the learned Counsel for the Applicant.

2. Heard the arguments of learned Counsel for the Applicant Mr. Nitin Lonkar and learned Counsel for Respondent No. 11/Project Proponent- Mr. Saket Mone along-with learned Counsel Mr. Abhishek Salian.

I.A. No. 86/2021(WZ)

3. This I.A. has been filed by the Respondent No. 11/Project Proponent (PP), praying for dismissal of the Original Application No. 63/2019(WZ). The main ground which has been set up in this application is that Original Application is time barred, therefore, it requires to be dismissed at the threshold itself. The core issue raised by the Applicant is

that the Respondent No. 11 did not obtain prior Environmental Clearance (EC) with respect to the project in question.

4. As per the Project Proponent (PP), he commenced the construction and excavation in the year, 2012, therefore, the cause of action in respect of the alleged construction first arose in the year, 2012 which is well over 07 years from the date of the filing of the present Original Application.

5. The Sections 14 and 15 of the National Green Tribunal Act, 2010 provide for 06 months from the date when the cause of action first arose within which the Original Application ought to have filed. Therefore, if the 06 months period is calculated from the year 2012, it would expire in the year 2013 and as regards Section 15, it provides for 05 years period from the date of cause of action first arose, which too would expire in the year, 2017, while the Original Application has been filed on 14.08.2019.

6. The learned Counsel for the Respondent No. 11 has drawn our attention to para no. 40 of the main petition, where-in it is stated by the Applicant that the Project Proponent carried out illegal construction on 0 sq. mtrs. to 18500 sq. mtrs. vide sanction dated 24.11.2016.

7. As per the Applicant in O.A., the Project Proponent had intention to go on beyond 36,500 sq. mtrs. vide sanction dated 31.03.2018. The civil construction activity is recurring process. The Project Proponent/Respondent No. 11 has increased the project capacity from 0 sq. mtrs to 18500 sq. mtrs. from 2011 to 19.05.2018, therefore, it is nothing but a recurring cause of action for building construction activity.

8. The Applicant in Original Application had obtained information through online search and under RTI Act from 2017 to 18.05.2018 and thereafter had sent legal notice through Counsel to the Respondents inviting their attention towards the violations committed by the Project

Proponent. Therefore, the cause of action first arose on 15.06.2019 when SEIAA issued a Show Cause Notice to the Project Proponent.

9. Therefore, 06 months period from 15.06.2019 should be counted, which would end on 14.12.2019, while the present application has been filed on 14.08.2019, therefore, it is within time.

10. As per Respondent No. 11/Project Proponent (PP), the above contention of the Applicant in Original Application is absolutely false because the Applicant is trying to establish the date 19.05.2019 as the date, when the first cause of action arose on the basis of his having obtained information under RTI. It is further argued by the learned Counsel for the Respondent No. 11 that any person may move an RTI application on a particular date of his choice in order to create cause of action so as to bring it within the period of limitation in order to initiate legal proceedings, which cannot be allowed to happen because that is not the intent of law.

11. The learned Counsel for the Respondent No. 11 has placed reliance of the Judgment *Jai Javan Jai Kisan and ors. v. Vidarbha Cricket Association and Ors. [MANU/GT/0006/2017],* where-in relevant para no. 11 is as follows:-

> *"11. Conjoint reading of Section 14 and 15 of the National Green Tribunal Act reveals that essentially any application moved for claiming reliefs there-under must necessarily present a Civil case wherein substantial question relating to environment or environmental damage arising under the enactments specified in the Schedule-I of the Act (including accident occurring while handling any hazardous substance) is involved. We are, therefore, of the considered opinion that it is the substantial question relating to the environment or environmental damage as aforesaid which gives rise to the cause for an action under the provisions of National Green Tribunal Act, 2010. In the present case, the question raised is about restoration of the environmental damage on account of injury to it as a result of raising VCA Stadium without EC or consent to operate under the provisions of Schedule-I Acts viz Environment (Protection) Act, 1986, the Air (Prevention and*

Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act 1974. As stated herein above, the causes of injury are insufficiency of Effluent Treatment Plant (ETP), open species, parking spaces and tree cover. These facts were very much manifest when the VCA stadium became functional in the year 2008. In our opinion, therefore, the cause of action for the present Application arose first when the VCA stadium became functional. There is nothing in the Application to state that these injuries stood compounded further to actuate the Applicants to initiate the action in the present case as framed."

12. Thereafter, the learned Counsel for the Respondent No. 11 has placed reliance on *Graminee Environment Development Foundation v. Balaji Infrastructure Ltd. & Ors. [(2017) SCC Online NGT 1098],* where-in relevant para nos. 11 to 13 are as follows:-

*"**11.** Section 15 (3) of the NGT Act, 2010 in clear terms requires the Application for restitution of the property damaged to be made within the period of five (5) years from the date on which cause for such relief first arose, and provides for discretion to the Tribunal to condone delay for 'sufficient cause' if the application is filed within further period of sixty (60) days and no further. In the present case, the Applicant avers that the cause of action first arose on 24.2.2015, when the letter was addressed by the Member Secretary, Maharashtra Coastal Zone Management Authority (MCZMA) to the Collector, Raigad to take action in respect of the grievance made by the Applicant and yet no action was taken by the authorities. The Applicant has further revealed in her Application that she has been making several complaints to the Authorities about the said grievance, first such complaint being made on 15.9.2014 to the Divisional Commissioner, Konkan Division, Navi Mumbai. Reading of the letter dated 24.2.2015, Annexure ''I to the Application (Pg.81) reveals the nature of grievance made by the Applicant. In short, the Applicant was aggrieved by the alleged illegal blasting work, storage of minerals and reclamation by Dighi Port Ltd. Similarly, the grievance made with complaint dated 15.9.2014 is regarding alleged illegal work of reclamation of seashore and filling rocks at village Nanavali and intertidal land encroachment without EC by Dighi Port Ltd, and Balaji Infrastructure Ltd.*

***12.** In our considered opinion, making of grievance of the kind in the present case by writing a letter cannot be constituted as 'cause of action' but the actual act or its consequence constitutes 'cause of action' in any case. In the present case, cause of action has arisen as a result of blasting work as well as dumping of rocks etc. by Dighi Port Ltd and its holding Company Balaji Infrastructure Ltd in the said land.*

> ***13.*** *A perusal of the Application gives some clue as to when such acts of blasting of hills and dumping of material excavated started. The Applicant has pleaded in her Application that Respondent No.1 encroached upon 3km of seashore of village Nanavali and without permission of any Govt. Authority dumped soil and rocks there. It is further pleaded that Respondent No.1 has been doing illegal activities of levelling, blasting, excavation of land, filling of land space with soil, dumping huge rocks and artificial land spaces without any permission; and in spite of such illegalities going on, Respondent Nos. 2 to 7- Govt. Authorities did nothing. The Applicant in her pleadings referred to EC granted in the name of Dighi Port Ltd on 30th September, 2005 for construction of Port at village Dighi, Taluka Shrivardhan, District Raigad and states that she does not challenge or dispute anything about such EC or any work at Dighi Port and her only grievance is that Respondent No.1 has encroached upon the property and extended various kinds of constructions beyond consented area. These facts as pleaded if read in conjunction with the plaint in Regular Civil Suit No.4 of 2009 filed by the Applicant in the Court of Civil Judge, Junior Division, Shrivardhan, do make sense as to when alleged activity had started. At para-7 of the said plaint, the Applicant has categorically stated that on 26.12.2008 the defendant (therein) i.e. Dighi Port Ltd came at the land adjacent to the house of the Applicant in order to make encroachment and reclaimed the land, and this highhanded activity of Dighi Port Ltd was resisted by the Applicant with objection that they cannot reclaim land by blasting the hills and dumping rocks at the said land. A clear fact emerges that the act of blasting the hill sides, dumping materials illegally and reclamation of land, first started in or about December, 2008. Thus, cause of action for the present Application clearly arose in or about December, 2008."*

13. Based on the above provisions of law, it is vehemently argued by the learned Counsel for the Respondent No. 11/Project Proponent that the present application is time barred and needs to be dismissed on that ground alone.

14. During argument, the learned Counsel for the Applicant in Original Application has pointed out that he is relying on para no. 18.25 & 18.26 of the reply affidavit dated 26.10.2021, mentioned at page nos. 981 to 986 of the paper book, which are as follows:-

> *"**18.25.** I state that, this Hon-ble Tribunal in the matter of "Forward Foundation, A Charitable Trust and Ors. Vs. State of Karnataka and Ors. (OA No. 222/2014) Judgment dated*

7th May, 2015", reported in 2015 SCC Online NGT 5 in dealing with the issue of limitation and cause of action has specifically held as follows-

"24. The expression 'cause of action' as normally understood in civil jurisprudence has to be examined with some distinction, while construing it in relation to the provisions of the NGT Act. Such 'cause of action' should essentially have nexus with the matters relating to environment. It should raise a substantial question of environment relating to the implementation of the statutes specified in Schedule I of the NGT Act. A 'cause of action' might arise during the chain of events, in establishment of a project but would not be construed as a 'cause of action' under the provisions of the Section 14 of the NGT Act, 2010 unless it has a direct nexus to environment or it gives rise to a substantial environmental dispute. For example, acquisition of land simplicitor or issuance of notification under the provisions of the land acquisition laws, would not be an event that would trigger the period of limitation under the provisions of the NGT Act, 'being cause of action first arose'. A dispute giving rise to a 'cause of action' must essentially be an environmental dispute and should relate to either one or more of the Acts stated in Schedule I to the NGT Act, 2010. If such dispute leading to 'cause of action' is alien to the question of environment or does not raise substantial question relating of environment, it would be incapable of triggering prescribed period of limitation under the NGT Act, 2010. [Ref Liverpool and London S.P. and I Asson. Ltd: v. M.V. Sea Success I and Anr., (2004) 9 SCC 512, J. Mehta v. Union of India, 2013 ALL (I) NGT REPORTER (2) Delhi, 106, Kehar Singh v. State of Haryana, 2013 ALL (I) NGT REPORTER (DELHI) 556, Goa Foundation v. Union of India, 2013 ALL (I) NGT REPORTER DELHI 234].

25. In contradistinction to 'cause of action first arose', there could be 'continuing cause of action', 'recurring cause of action' or 'successive cause of action'. These diverse connotations with reference to cause of action are not synonymous. They certainly have a distinct and different meaning in law, 'Cause of action first arose' would refer to a definite point of time when requisite ingredients constituting that 'cause of action' were complete, providing applicant right to invoke the jurisdiction of the Court or the Tribunal. The Right to Sue' or 'right to take action' would be subsequent to an accrual of such right. The concept of continuing wrong which would be the foundation of continuous cause of action has been accepted by the Hon'ble Supreme Court in the case of Bal Krishna Savalram Pujari & Ors. v. Sh. Dayaneshwar Maharaj Sansthan & Ors., AIR 1959 SC 798.

***18.26** Further I state that, the **Forward Foundation** Judgment was challenged before the FIon'b1e Supreme Court in the matter of **Mantri Technoze Pvt. Ltd. Vs. Forward Foundation, Civil Appeal No. 5016/2016 reported in (2019) 18 SCC 494** has specifically held vide judgment dated 5th March, 2019 and has confirmed the said judgment*

of Forward Foundation and even the Review petition of the same has been dismissed vide order dated 06/08/2019 and has thus become final and binding.

> *"In fact, in the original application before the Tribunal there was no mention of the provision under which it was being filed. It is well settled principal of law that non-mention of or erroneous mention of the provision of law would not be of any relevance, if the Court had the requisite jurisdiction to pass an order. It would be mere irregularity and would not vitiate the application or the judicial order of the Tribunal"*
>
> *The NGT Act being a beneficial legislation, the power bestowed upon the Tribunal would not be read narrowly. An interpretation which furthers the interests of environment must be given a broader reading. (See Kishsore Lal v. Chairman, Employees' State Insurance Corpn. (2007) 4 SCC 579, para 17). The existence of the Tribunal without its broad restorative powers under Section 15(1)(c) read with Section 20 of the Act, would render it ineffective and toothless, and shall betray the legislative intent in setting up a specialized Tribunal specifically to address environmental concerns. The Tribunal, specially constituted with Judicial Members as well as with Experts in the field of environment, has a legal obligation to provide for preventive and restorative measures in the interest of the environment"*
>
> *"The Tribunal has also jurisdiction under Section 15(1)(a) of the Act to provide relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in Schedule I. Further, under Section 15(1)(b) and 15(1)(c) the Tribunal can provide for restitution of property damaged and for restitution of the environment for such area or areas as the Tribunal may think fit. It is noteworthy that Section 15(1)(b) & (c) have not been made relatable to Schedule I enactments of the Act. Rightly so, this grants a glimpse into the wide range of powers that the Tribunal has been cloaked with respect to restoration of the environment."*
>
> *"Section 15(1)(c) of the Act is an entire island of power and jurisdiction read with Section 20 of the Act. The principles of sustainable development, precautionary principle and polluter pays, propounded by this Court by way of multiple judicial pronouncements, have now been embedded as a bedrock of environmental jurisprudence under the NGT Act. Therefore, wherever the environment and ecology are being compromised and jeopardized, the Tribunal can apply Section 20 for taking restorative measures in the interest of the environment."*

15. The Applicant in Original Application has also placed reliance upon the important dates and events, which have been quoted by him in para

14 of the reply affidavit, mentioned at page nos. 926 to 928 of the paper book, which are as follows:-

"14. IMPORTANT DATES AND EVENTS:

I state that, the following events and dates are very important to understand the collusion between the Government Authorities and Respondent No. 11-PP and tactics, favouring practices adopted by the Joint Committee Members and Respondent No. 11-PP;

"

Sr. No.	Events	Date
1.	*1st Application for EC*	*07.09.2013*
2.	*1st Show Cause Notice by SEIAA & PS- DoE*	*30.08.2014*
3.	*1st Withdrawal Communication for SCN*	*10.03.2015*
4.	*1st Consent to Establish*	*10.03.2015*
5.	*2nd Application for EC*	*30.06.2016*
6.	*2nd Consent to Establish*	*12.10.2017*
7.	*3rd Application for EC*	*06.10.2018*
8.	*Notice/Complaint of Original Applicant*	*19.05.2019*
9.	*MPCB 1st Site Visit by Field Officer*	*10.06.2019*
10.	*2nd Show Cause Notice by SEIAA & PS- DoE*	*15.06.2019*
11.	*MPCB 2nd Site Visit by SRO-2*	*27.06.2019*
12.	*Filing of OA*	*14.08.2019*
13.	*First Order of NGT*	*22.10.2019*
14.	*Service to Joint Committee of SEIAA & MPCB*	*02.11.2019*
15.	*Personal hearing given to PP by PS-DoE*	*11.11.2019*
16.	*2nd Withdrawal Communication for SCN*	*16.11.2019*
17.	*Second Order of NGT*	*10.12.2019*
18.	*Joint Committee Visit to project site*	*15.12.2019*
19.	*Architect Certificates prepared on*	*20.12.2019*
20.	*Joint Committee Report filed to NGT*	*07.01.2020*
21.	*Third Order of NGT issuing Notice 86 Show cause to PP*	*05.02.2020*
22.	*Service to the Respondent No. 11-PP*	*15.02.2020*
23.	*Grant of ex-post facto EC*	*18.02.2020*
24.	*Appeal No. 26/2020 filed on*	*19.03.2020*
25.	*Fourth Order of NGT*	*13.07.2020*
26.	*Respondent No. 11-PP Reply Affidavit Sworn on*	*24.09.2020*
27.	*Respondent No. 11-PP filed*	*24.09.2020*
28.	*Fifth Order of NGT*	*03.09.2021*
29.	*Respondent No. 11-PP filed 86/2020 filed on*	*06.10.2021*
30.	*Respondent No. 11-PP Corrected Reply Affidavit served on Original*	*09.10.2021*

	Applicant	

"

16. He has argued that in this case, there is recurring cause of action and therefore, the date which has stated in his application i.e. 15.06.2019, when the SEIAA issued a Show Cause Notice to the Project Proponent, should be treated to be the date of cause of action.

17. We have heard the arguments of the parties and perused the record and also have gone through the Judgments, which have been relied upon by both the parties, we find that as far as legal position is concerned, Sections 14 & 15 of the National Green Tribunal Act, 2010 provide as follows:-

> *"Section 14:- Tribunal to settle disputes.-*
>
> *(1) .....*
>
> *(2) .....*
>
> *(3) No application for adjudication of dispute under this Section shall be entertained by the Tribunal unless it is made within a period of six months from the date on which the cause of action for such dispute first arose:*
>
> *Provided that the Tribunal may, if it is satisfied that the applicant was prevented by sufficient cause from filing the application within the said period, allow it to be filed within a further period not exceeding sixty days."*
>
> *Section 15:- Relief, compensation and restitution –*
>
> *(1) .....*
>
> *(2) .....*
>
> *(3) No application for grant of any compensation or relief or restitution of property or environment under this section shall be entertained by the Tribunal unless it is made within a period of five years from the date on which the cause for such compensation or relief first arose:*
>
> *Provided that the Tribunal, may, if it is satisfied that the applicant was prevented by sufficient cause from filing the application within the said period, allow it to be filed within a further period not exceeding sixty days."*

18. According to the Applicant in Original Application, as per his own pleadings which are stated in para no. 40, it is clear that construction of the project by the Project Proponent was started in the year 2011 and continued till 19.05.2018. He states that he had obtained information

through online search and under RTI from 2017 to 18.05.2018. Thereafter, he had sent legal notice through Counsel on 19.05.2019. According to him, the SEIAA had issued first Show Cause Notice on 15.06.2019. Therefore, that date should be taken to be the date of cause of action, which first arose.

19. We are not inclined to accept this argument because according to his pleading, he had full knowledge in the year 2011 itself when the construction had started. The pretext of having come to know about this project being constructed through RTI on a later date as stated above appears to be only in order to bring the present Original Application within limitation period. We agree with the learned Counsel for the Project Proponent (PP) that it is very easy for any person to use RTI to seek information for any project on any date chosen by him. We are of the considered opinion that such kind of practice cannot be allowed. We are not inclined to accept the argument made by the learned Counsel for the Applicant in Original Application and are convinced with the argument raised by the learned Counsel for the Respondent No. 11/Project Proponent. We find that this Original Application is time barred, hence this Original Application stands dismissed as time barred.

20. All connected I.A.s also stand disposed of.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

December 01, 2022
Original Application No. 63/2019(WZ)
(I.A. No. 100/2019 & I.A. No. 86/2021)
P.Kr



ANNEXURE-R-3

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

March 20, 2023,

PCB ID:24285

To,

1. Mahamahim Rajyapalshri, (Shree Aacharya Devvrat)
   Gujarat Raj Bhavan,
   Gandhinagar – 382020

2. Honorable Chief Minister, (Shri Bhupendrabhai Patel)
   Swarnim Sankul -1, 3rd and 4th floor,
   Sachivalay, Sector – 10,
   Gandhinagar – 382010

3. Respected Chairman, (Shri Justice Ravi R. Tripathi)
   Gujarat State Human Rights Commission,
   Block no.-1, 4th and 5th Floor, Kamayayogi Bhawan,
   Sector – 10/A, Gandhinagar – 382010

4. Honorable Minister, (Shri Malubhai Bera),
   Department of Forest and Environment,
   Swarnim Sankul– 1, 2nd Floor,
   Sachivalay, Sector – 10,
   Gandhinagar – 382010

5. Regional Director, (Shri Prasun Gagrva),
   Central Pollution Control Board,
   Parivesh Bhawan, Atmajyoti Ashram Road,
   Opposite VMC Ward office No. 10,
   Shubhanpura, Vadodara, Gujarat – 390023

6. Hon'ble Chairman
   Gujarat Pollution Control Board,
   Paryavaran Bhavan, Sector – 10 A,
   Gandhinagar – 382010

Subject : Request to not consider complaint letter dated 24/02/2023 by Yuva Shakti Sangathan from Bhilad, Umargam against our company Coromandel International Limited, Sarigam

Ref : Complaint withdrawal Letter given by Yuva Shakti Sangathan dated 10/03/2023

Dear Sir,

This is reference to above mentioned subject and reference, this has come to our attention that some vested interest group Yuva Shakti Sangathan have given a complaint letter to government officials regarding our organization's details such as CC&A, EC, NODs, Odor Nuisance, Chemical details etc. dated 24/02/2023. After some time, Yuva Shakti Sangathan has written a letter to us that they are withdrawing their claim and complaint against our industry on 10/03/2023.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Thanking You.
Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

Encl:

1. **Complaint withdrawal letter by Yuva Shaki Sangathan dated 10/03/2023.**
2. **Complaint letter given by Yuva Shaki Sangathan dated 24/02/2023**

CC

1. Honorable State Level Minister, (Shri Mukeshbhai Patel)
   Forest and Environment Division, Swarnim Sankul – 2,
   2nd Floor, Sachivalay Sector – 10,
   Gandhinagar – 382010

2. Honorable Member Secretary, (Shri D. M. Thakar)
   Gujarat Pollution Control Board,
   Paryavaran Bhavan, Sector – 10 A,
   Gandhinagar – 382010

3. District Magistrate and Collector,
   Valsad Collector Office, Ta. Valsad
   Dist. - Valsad

4. Regional Officer (Shri A. O. Trivedi),
   Regional Office: Sarigam,
   Gujarat Pollution Control Board
   Plot No. – 2114/2,
   Chemical Zone, GIDC. Sarigam – 396155

RECEIVED
G P C Board Sarigam
Sign: Dt. 20/03/2023

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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W: www.coromandel.biz

murugappa

YUVA SHAKTI SANGATHAN

Head Office :
Bhilad, Tal. Umargam
Dist. Valsad - 396 105

President : Mitesh V. Patel
Mob. No. : 9913507033
9978403020

Reg. No. : Guj-1535 (1860), F-1579 (1950)

તારીખ - 10/03/2023

પ્રતિશ્રી,
મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ,
પ્લોટ નંબર - ૨૧૦૨, ૨૧૦૪ / ૧,૭૩૫ & ૨૧૧૨ / ૨૧૧૩,
જી.આઈ.ડી.સી. - સરીગામ, તાલુકા - ઉમરગામ,
જિલ્લા - વલસાડ, રાજ્ય - ગુજરાત

સવિનય જય ભારત સાથે જણાવવાનું કે આપના એકમની પ્રદૂષણ અને જીપીસીબીએ આપેલ પરવાનગીની અવધીને લઈ જરૂરી માર્ગદર્શન લેવામાં આવતા અમોને જાણવામાં આવ્યું છે કે હાલમાં એકમમાં એવું કોઈ પ્રદૂષણ ન હતું તેમજ આપના એકમની જીપીસીબીએ આપેલ પરવાનગીની અવધી સમાપ્ત પહેલા આપના એકમ દ્વારા રિન્યુયલ અરજી કરવામાં આવી છે. જે માટે અમો આપના એકમ વિરુદ્ધ કરેલ ફરિયાદને મોકૂફ રાખીએ છીએ.

આભાર..

લિ. આપનો વિશ્વાસુ

Patel M.V.

(મિતેશ વી. પટેલ)

English Translation – Yuva Shakti Sangathan complaint withdrawal letter

It is to inform you that after getting proper information regarding pollution by your unit and validity of GPCB approval, we have come to know that there is no such pollution by your industry and your unit has applied for CC&A renewal before expiry of GPCB Permission. For that we are withdrawing the complaints made against your unit.

YSS YUVA SHAKTI SANGATHAN YSS

Head Office :
Bhilad, Tal. Umargam
Dist. Valsad - 396 105

President : Mitesh V. Patel
Mob. No. : 9913507033
9978403020

Reg. No. : Guj-1535 (1860), F-1579 (1950)

તા. 24/02/2023

પ્રતિશ્રી,

(1) મહામહિમ રાજ્યપાલશ્રી, (શ્રી આચાર્ય દેવવર્ત)
ગુજરાત રાજ ભવન,
ગાંધીનગર – 382020

(2) આદરણીય મુખ્ય મંત્રીશ્રી, (શ્રી ભુપેન્દ્રભાઈ પટેલ)
સ્વર્ણિમ સંકુલ – 1, ત્રિજો અને ચોથો માળ,
સચિવાલય, સેક્ટર – 10,
ગાંધીનગર – 382010

(3) આદરણીય ચેરમેનશ્રી, (શ્રી જસ્ટિસ રવિ આર. ત્રિપાઠી)
ગુજરાત રાજ્ય માનવ અધિકાર આયોગ,
બ્લોક નં. 1, ચોથો અને પાંચમો માળ, કર્મયોગી ભવન,
સેક્ટર – 10/A, ગાંધીનગર – 382010

(4) આદરણીય મંત્રીશ્રી, (શ્રી મૂળુભાઈ બેરા),
વન અને પર્યાવરણ વિભાગ,
સ્વર્ણિમ સંકુલ – 1, બીજો માળ,
સચિવાલય, સેક્ટર – 10,
ગાંધીનગર – 382010

(5) પ્રતિશ્રી,
રિજનલ ડાયરેકટરશ્રી, (શ્રી પ્રસૂન ગર્ગવા),
કેન્દ્રિય પ્રદૂષણ નિયંત્રણ બોર્ડ,
પરિવેશ ભવન, આત્માજ્યોતિ આશ્રમ રોડ,
વીએમસી વોર્ડ ઓફિસ નં. 10 ની સામે,
શુભાનપુરા, વડોદરા, ગુજરાત – ૩૯૦૦૨૩

(6) આદરણીય ચેરમેન સાહેબશ્રી,
ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ,
પર્યાવરણ ભવન, સેક્ટર – 10 A,
ગાંધીનગર – 382010

વિષય – મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ., પ્લોટ નંબર - ૨૧૦૨, ૨૧૦૪ / ૧,૭૩૫ & ૨૧૧૨ / ૨૧૧૩, જી.આઈ.ડી.સી. – સરીગામ, તાલુકા - ઉમરગામ, જિલ્લા - વલસાડ, રાજ્ય - ગુજરાત એકમને ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડએ ઉદ્યોગ ચલાવવા આપેલ મંજૂરીની અવધી તારીખ 30/09/2021 ના રોજ સમાપ્ત થયેલ હોય તેમ છતાં એકમ હાલમાં કાર્યરત હોય જેને તાત્કાલિક બંધ કરવામાં આવે તે બાબત.....

સવિનય જય ભારત સાથે ઉપરોક્ત વિષયના અનુસંધાનમાં અમો અરજદારની આપ સાહેબશ્રીને લેખિત રજૂઆત છે કે,

1. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ, પ્લોટ નંબર - ૨૧૦૨, ૨૧૦૪ / ૧,૭૩૫ & ૨૧૧૨ / ૨૧૧૩, જી.આઈ.ડી.સી. – સરીગામ, તાલુકા - ઉમરગામ, જિલ્લા - વલસાડ, રાજ્ય - ગુજરાત ઠેકાણે ઉદ્યોગ ચલાવવામાં આવે છે. જેને ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ દ્વારા તા. 22/02/2017 ના રોજ મંજૂરી હુકમ નંબર AWH-84402 થી મંજૂરી આપવામાં આવેલ છે. અને આ એકમમાં પેસ્ટીસાઇડ (Tech) અને પેસ્ટીસાઇડ ફોર્મયુલેશન વગેરેનું ઉત્પાદન કરવામાં આવે છે.
2. સાહેબશ્રી ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડએ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ એકમને તા. 22/02/2017 ના રોજ Consent Order No. AWH – 84402 થી મંજૂરી આપેલ જે મંજૂરીની અવધી તા. 30/09/2021 બાદ સમાપ્ત થઈ ગયેલ હોય. અને એકમ આજે લગભગ 1 વર્ષ અને 4 મહિનાથી વગર મંજૂરીએ કાર્યરત છે.
3. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ એકમને ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ, પર્યાવરણ ભવન, ગાંધીનગરના પર્યાવરણ ઇજનેર શ્રી એમ. વી. પટેલ, દ્વારા તારીખ 30/07/2022 ના રોજ NO.GPCB/SRG-CCA-229(38)/ID-24285 થી કારણ બતાવો નોટિસ આપવામાં આવેલ છે. જે નોટિસમાં દર્શાવવામાં આવ્યું હતું કે,
    1. ગુજરાત પોલ્યુશન કંટ્રોલ બોર્ડે તારીખ **22/02/2017** ના રોજ સંકલિત સંમતિ અને અધિકૃતતા **(CC&A), AWH-84402** થી આપેલ છે. જે તારીખ **30/09/2021** ના રોજ સમાપ્ત થાય છે. અને **CCA** - નવીકરણ અરજી ઇનવર્ડ નંબર - **11/10/2021** દ્વારા મંજૂર કરી છે. જે અરજી ને તારીખ **29/07/2022** ના રોજ કારણ બતાવો નોટિસમાં ઉલ્લેખિત કારણોસર નકારી કાઢવામાં આવી હતી.
    2. જે કારણોમાં જણાવ્યુ હતું કે, **(1)** હાલમાં એકમ પાલનમાં નથી. **(2)** એકમે તારીખ **20/10/2021** ના **CCA** - સુધારા અસ્વીકારના આદેશનું પાલન કર્યું નથી. **(3)** બાય-પ્રોડક્ટ માટેની દરખાસ્ત જે **HWM Rule – 2016** ની જોગવાઈઓ અનુસાર સ્વીકાર્ય નથી.
    3. જ્યારે બોર્ડના અધિકારીઓ દ્વારા તારીખ **08/02/2022** અને તારીખ **08/03/2022** ના રોજ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ ઔદ્યોગિક પ્લાન્ટની મુલાકાત લેવામાં આવી હતી તે દરમિયાન નિરીક્ષણમાં જણાયું હતું કે એકમ ઘણા સ્થળોએ ફલેક્સિબલ પાઇપલાઇનનો ઉપયોગ કરી રહ્યું છે. તેમજ **ETP** માં ગંદકીના વહન માટે અને એકમ પ્રાથમિક **ETP** એકમોનું સંચાલન કરતા નથી. અને ઇન્સિનેટરની ક્વેન્ચિંગ સિસ્ટમમાં નિરીક્ષણ દરમિયાન લિકેજ જોવા મળે છે. જે દુર્ગંધમાં પરિણમી શકે છે.
4. સાહેબશ્રી ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ, પર્યાવરણ ભવન, ગાંધીનગરના સભ્ય સચિવ શ્રી ડી. એમ. ઠાકર, દ્વારા તારીખ 30/07/2022 ના રોજ NO.GPCB/SRG-CCA-229(38)/ID-24285 થી જોખમી અને અન્ય કચરો (વ્યવસ્થાપન અને ટ્રાન્સબાઉન્ડરી મૂવમેન્ટ) નિયમો – **2016** ના ઉલ્લંઘન બદલ પર્યાવરણ (સંરક્ષણ) અધિનિયમ, **1986** ની કલમ-**5** હેઠળ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ એકમને દિશા નિર્દેશો આપવામાં આવ્યા હતા. જેમાં દર્શાવવામાં આવ્યું હતું કે,
    1. જ્યારે બોર્ડના અધિકૃત અધિકારીઓ દ્વારા તારીખ **08/02/2022** અને તારીખ **08/03/2022** ના રોજ પર્યાવરણ (સંરક્ષણ) અધિનિયમ, **1986** ની કલમ **10** હેઠળ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ ઔદ્યોગિક પ્લાન્ટની મુલાકાત દરમિયાન અવલોકનો કરવામાં આવ્યા હતા.

2. જેમાં યુનિટના પ્રવેશ પરના નિરીક્ષણ દરમિયાન દૂષિત ભંગાર સાથે એક ટ્રેક્ટર લગભગ જોખમી કચરો દૂષિત ભંગાર હોવાનું જણાયું હતું. જે યુનિટમાંથી બહાર નીકળતું હતું અને ડ્રાઇવરે જાણ કરી હતી કે તેઓ તેને યુનિટના બીજા પ્લોટ નંબર **731/2** પર લઈ જઈ રહ્યા છે. નિરીક્ષણ કરતાં જાણવા મળ્યું છે કે સ્ટ્રોમ વોટર ડ્રેઇનની જાળવણી (પુનઃનિર્માણ) ચાલી રહી છે. અને તેનો ઉત્પન્ન થયેલ દૂષિત ભંગાર અને અન્ય ભંગાર સામગ્રી આશરે **1.5 MT** યુનિટના પ્લોટ નંબર **731/2** પર ડમ્પ કરવામાં આવ્યો છે. જે એકમ પાસે આ પ્લોટ માટે બોર્ડની **NOC/CCA** નથી. પ્લોટ નંબર **731/2** પરની પરિસ્થિતિ જોતાં એવું કહી શકાય કે યુનિટે આ પ્લોટ પર જાણી જોઈને આ પ્રકારનો કચરો ફેંક્યો છે. અને યુનિટે એકમના પ્લાન્ટની અંદર વિવિધ સ્થળોએ પેદા થયેલ જોખમી કચરો સંગ્રહિત કર્યો છે.
3. તેમજ શ્રી ડી. એમ. ઠાકર, ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડના સભ્ય સચિવ દ્વારા ઓર્ડર કરવામાં આવ્યો હતો કે, પર્યાવરણ (સંરક્ષણ) અધિનિયમ, **1986** ની કલમ **5** હેઠળ ફાઇલ નં. લીગલ-**G-28** હેઠળ આપવામાં આવેલી સત્તાનો ઉપયોગ કરીને નિર્દેશો જારી કરેલ હતા. જેમાં **(1)** ઉદ્યોગ લગભગ તમામ ડમ્પ કચરો એકત્રિત કરશે. અને પ્લોટ નંબર **731/2** પર જે **1.5** મેટ્રિક ટન કચરો છે તેને **HWM** નિયમો - **2016** ની જોગવાઈઓ અનુસાર તેનો નિકાલ કરશે. **(2)** ઉદ્યોગ પ્લોટ નંબર **731/2** સ્થળની સુધારણા હાથ ધરશે અને તેમાંથી ઉપાય અહેવાલ સબમિટ કરશે. પ્રતિષ્ઠિત સંસ્થા, જેમ કે **NEERI, NPC, IIT,** શેડ્યૂલ-**1** ઓડિટર વગેરે. **(3)** યુનિટ **CCA** શરતોનું પાલન કરશે. **(4)** ઉદ્યોગે રૂ. **67,500/-** ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડના એકાઉન્ટમાં વચગાળાના પર્યાવરણીય વળતર (વચગાળાના **EC**) તરીકે જમા કરવાના રહેશે. જો ઉપરોક્ત નિર્દેશોનું પાલન કરવામાં ન આવે તો એકમને પર્યાવરણ (સંરક્ષણ) અધિનિયમ, **1986** ની કલમ **15** હેઠળ કાર્યવાહી માટે જવાબદાર સમજી પાંચ વર્ષ સુધીની કેદની સજા અને રૂ. એક લાખનો દંડ અથવા બંને મુજબ કાર્યવાહી કરવા જણાવાયું હતું.

5. સાહેબશ્રી ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ, પર્યાવરણ ભવન, ગાંધીનગરના પર્યાવરણ ઇજનેર શ્રી એમ. વી. પટેલ, દ્વારા તારીખ 30/07/2022 ના રોજ હવા (પ્રદૂષણ નિવારણ અને નિયંત્રણ) અધિનિયમ-**1981** ની કલમ **31 (A)** હેઠળ દિશાસૂચનની સૂચના આપવામાં આવેલ છે. જે દિશાસૂચનની સૂચનામાં દર્શાવવામાં આવ્યું હતું કે,
   1. જ્યારે બોર્ડના અધિકૃત અધિકારીઓ દ્વારા એર એક્ટ-**1981** ની કલમ-**24** હેઠળ **08/02/2022** અને **08/03/2022** ના રોજ એકમના ઔદ્યોગિક પ્લાન્ટનું નિરીક્ષણ કરવામાં આવ્યું તે દરમિયાન એવું નોંધવામાં આવ્યું હતું કે; **(1)** યુનિટે પ્લાન્ટ માં **MCP + Acephate + DDVP** પેકેજિંગ સાથે જોડાયેલ નવું સ્કબર ઇન્સ્ટોલ કર્યું છે. જે બોર્ડના અગાઉના **CTE/CCA** માં મંજૂરી મળેલ નથી.
   2. એકમનું ઉત્પાદન ક્ષેત્રમાં એવું જોવામાં આવે છે કે યુનિટની ડિઓડરન્ટ સિસ્ટમ પણ ઓપરેશનલ સ્થિતિમાં નથી. જેના કારણે આજુબાજુના વિસ્તારમાં દુર્ગંધ ફેલાવાની સંભાવના છે. અને દુર્ગંધ અનુભવાય રહી હતી.
   3. ઇન્સપેક્શન દરમિયાન ઇન્સિનરેટર જાળવણી હેઠળ જોવા મળે છે કે ઇન્સિનેટરની નજીક ભારે દુર્ગંધ અનુભવાય છે.
   4. યુનિટે હાલના **CCA** માં **NG** ફાયર્ડ હોટ એર જનરેટરના ફ્લુ ગેસ વેન્ટ દર્શાવ્યા નથી.
   5. એવું જોવામાં આવે છે કે યુનિટે ફોગિંગ સિસ્ટમ પ્રદાન કરી છે જે સમગ્ર યુનિટમાં પૂરી પાડવામાં આવતી નથી.
   6. ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ દ્વારા હવા અધિનિયમ-**1981** ની કલમ-**31 A** હેઠળ દિશાનિર્દેશો જારી કરવાની દરખાસ્ત કરવામાં આવી હતી.

7. હવાની કલમ 31(A) હેઠળ દિશાનિર્દેશો શા માટે જારી ન કરવા (નિવારણ અને નિયંત્રણ પ્રદૂષણ) અધિનિયમ - 1981 તમને મેન્યુફેક્ચરિંગ પ્રવૃત્તિથી પ્રતિબંધિત કેમ ન કરવા તેનો પણ ખુલાશો માંગવામાં આવ્યો હતો.
8. શા માટે ઔદ્યોગિક પ્લાન્ટના પાવર સપ્લાય અને પાણી પુરવઠાના જોડાણને કાપી નાખવા માટે સંબંધિત સત્તાવાળાઓને નિર્દેશ ન કરવો તેનો પણ ખુલાશો માંગવામાં આવ્યો હતો.

6. સાહેબશ્રી તારીખ 20/10/2022 ના રોજ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમના ધુમાડાની ચીમનીમાંથી ભારે માત્રામાં ઝેરીલો ધુમાડો કાઢવામાં આવી રહ્યો હતો. જેના કારણે પર્યાવરણ અને જીવસૃષ્ટિને ભારે નુકશાન થઈ રહ્યું હતું. આજ રીતે એકમ દ્વારા કાયમી વાયુ પ્રદૂષણ કરવામાં આવતું હોય છે. તેમજ આ એકમ ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ – સરીગામ કચેરીની બાજુમાં આવેલ હોય. મારા ખ્યાલ મુજબ ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ – સરીગામ કચેરીના પ્રાદેશિક અધિકારી શ્રી એ. ઓ. ત્રિવેદી પોતાની કચેરીથી ઊભા રહી પણ નજર ફેરવશે તો પણ નરી આંખે જોઈ શકાય અને એકમથી હવામાં પ્રસરતા દુર્ગંધને પણ અનુભવી શકાય તેમ છતાં કોઈજ કાર્યવાહી થતી ન હોય છે.
7. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ પ્લાન્ટ પરિસરમાં કાયમી પેસ્ટીસાઇડની ખરાબ દુર્ગંધ અનુભવાતી હોય છે. તેજ પ્રકારની પ્લાન્ટ પરિષરની આજુબાજુ લગભગ 1 કિ.મી ના ત્રિજ્યામાં પણ પેસ્ટીસાઇડની ખરાબ દુર્ગંધ અનુભવાતી હોય છે. જે માટે એકમના Mancozeb તથા Acephate પ્લાન્ટમાં તપાસ કરવાની જરૂર છે.
8. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ પ્લાન્ટ પરિષરમાં કાયમી ધુમાડો જોવા મળે છે. જે ધુમાડો ધીમી ગતિએ આજુબાજુના વિસ્તારમાં પ્રસરી જાય છે. જે ધુમાડાથી જીવસૃષ્ટિને ભારે નુકશાન થાય છે. તેમજ આંખમાં બળતરા તેમજ શ્વાસમાં તકલીફ પણ પડતી હોય છે.
9. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમ દ્વારા હવે પછી કોઈ પણ પ્રકારે ધી એન્વાયરમેંટ પ્રોટેકશન એક્ટ ૧૯૮૬ કાયદાનું ઉલ્લંઘન ન કરવામાં આવશે તે બાબતને લઈ રૂ ૧૦૦/- ના સ્ટેમ્પ પેપર પર બાંહેધરી પત્રક આપવામાં આવેલ છે. અને રૂ. ૫૦ લાખની બેંક ગેરંટી પણ ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડને આપવામાં આવેલ છે. જે બેન્ક ગેરેંટીને તાત્કાલિક જપ્ત કરવામાં આવે.
10. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમમાં જોવા મળેલ પ્રદૂષણ નિયત માત્રા કરતાં ઘણું વધારે અને પર્યાવરણને ગંભીર અસર કરે એ પ્રકારનું છે.
11. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ ઉદ્યોગના TMP પ્લાન્ટમાં એમોનિયા (Ammonia) ની દુર્ગંધ હમેશાં માટે અનુભવાતી હોય છે. જે દુર્ગંધ એકમ પરિષરમાંથી બહાર આવી હવામાં જાય છે.
12. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમએ લગાવેલ MEE પણ ચાલુ ન હોય એવી અમોને શંકા હોય જેની પણ તપાસ કરવામાં આવે.
13. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમમાં બોર્ડના અધિકારીઓ દ્વારા ઉદ્યોગની મુલાકાત લઈ પાણી અધિનિયમ કલમ - 21 મુજબ ગંદા પાણીના નમૂના લેવામાં આવે અને નમૂનાનો પૃથક્કરણ કરી COD ની તપાસ કરવાની જરૂર છે. કારણ કે ઉદ્યોગમાંથી પ્રદુષિત પાણી બોર્ડે આપેલ ધારાધોરણ કરતાં વધારે માત્રમાં બહાર કાઢવામાં આવે છે.
14. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમનું ગામની તરફ આવેલ ઇન્સીનરેટર કાર્યરત છે કે કેમ તેની તપાસ કરવી તેમજ ઇન્સીનરેટરમાંથી તથા આજુબાજુમાંથી ખુબજ દુર્ગંધ અનુભવાતી હોય છે જેની તપાસ કરશો.

15. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમના વિરૂદ્ધ બોર્ડને ઉદ્યોગથી ઉદભવતા હવા પ્રદૂષણ બાબતે આજુબાજુના વિસ્તારના સામાજિક આગેવાનો તરફથી વારંવાર ફરિયાદો મળે છે. અને ઉદ્યોગના હવા પ્રદૂષણના કારણે આજુબાજુના રહીશોના સ્વાસ્થ્યને પણ ભારે નુકશાન થઇ રહ્યું હોય તેવી રજૂઆતો થયેલ છે. જેની યોગ્ય તપાસ ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડમાં કરવામાં આવે અને કરેલ ફરિયાદોમાં આજ સુધી કરવામાં આવેલ કાર્યવાહીની તપાસ કરવામાં આવે.

16. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમને તા. 22/02/2017 ના રોજ મંજૂરી હુકમ નંબર AWH-84402 થી આપવામાં આવેલ મંજૂરીની શરતો પ્રમાણે પૂરતા હવા પ્રદૂષણ નિયંત્રણ સાધનો કાર્યક્ષમ રીતે ચલાવતા નથી. જેના કારણે પ્રદૂષણ થાય છે. તથા દુર્ગંધ રોકવા માટે યોગ્ય પગલાં લેવામાં આવતા નથી. જેની તપાસ કરશો.

17. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ Mancozeb (Tech) માંથી ઉદભવતી સ્ટ્રીમને પ્રથમ ફેન્ટોન ટ્રીટમેન્ટ આપી પછી ડાયલ્યુટ સ્ટ્રીમ સાથે ભેળવી શુદ્ધિકરણ કરવાની પર્યાવરણીય મંજૂરી (EC) માં મંજૂરી આપેલ છે. પરંતુ લગભગ એકમ દ્વારા હાલ ફેન્ટોન ટ્રીટમેન્ટ કરવામાં આવતી નથી આમ EC ની શરતોનો ભંગ કરવામાં આવે છે. જેની તપાસ કરવામાં આવે. અને પર્યાવરણીય મંજૂરી (EC) ના નીતિનિયમોના ભંગ બદલ પર્યાવરણીય મંજૂરી (EC) ને નામંજૂર કરવામાં આવે.

18. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ Mancozeb (Tech) ના ઉત્પાદન દરમ્યાન ઉદભવતા અશુધ્ધ ગંદાપાણીમાં Manganese નું પ્રમાણ 0.54 to 0.6 % જેટલું હોય છે તેને રીમવું કરવા/સાંદ્રતા ઘટાડવા Caustic/Mgo ટ્રીટમેન્ટ કરવામાં આવતી નથી જેની તપાસ કરવામાં આવે.

19. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ Mancozeb (Tech) માં ઉદભવતા અશુધ્ધ ગંદાપાણીનું તાપમાન ને કુલીંગ કરવા માટે લગાડવામાં આવેલ કુલીંગ ટાવરની પુરતી ક્ષમતા ન હોઈ જેના કારણે ગંદાપાણીનું તાપમાન નિયંત્રણ માત્રા કરતાં વધારે હોય છે. જેની તપાસ કરવામાં આવે.

20. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ Mancozeb (Tech) માંથી અશુધ્ધ ગંદાપાણી માંથી સોડીયમ સલ્ફેટ MEE માં રીકવર કર્યા પછી ઉદભવતા MEE કન્ડેન્સેટની બાયપાસ લાઇનનો પણ એકમ પરિસરોમાં હોવાની ચર્ચા છે. જેની તપાસ પણ કરવામાં આવે.

21. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમના ગાર્ડપોન્ડમાં શુંધ્ધિકરણ ગંદાપાણીના પેરા મીટર વધારે હોવાના સંજોગોમાં શુંધ્ધિકરણ કરેલ ગંદુપાણી કલેક્શન ટેંકમાં ફરી લઈ શકાય તે માટે કોઈ વ્યવસ્થા એટલે કે ઓટો ન્યૂમારીકલ વાલ બેસાડેલ છે કે નહીં તેની તપાસ કરવી.

22. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમ પેસ્ટીસાઇડનું ઉત્પાદન કરે છે. પરંતુ શુધ્ધિકરણ કરેલ ગંદાપાણીના અંતિમ નિકાલ પહેલા બાયો એશ ટેસ્ટ / ફિસીંગ ટેસ્ટ કરવામાં આવે છે કે નહીં તેની તપાસ કરવી.

23. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમે કન્સન્ટમાં આપેલ પેરામીટરના પૃથ્થકરણ થઈ શકે તેવી અધ:તન લેબોરેટરી બનાવેલ છે કે નહીં તેની તપાસ કરવી.

24. સાહેબશ્રી મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ કંપનીને આજ સુધીમાં ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ દ્વારા લગભગ 27 થી વધુ વાર ક્લોઝર નોટિસ, શૉ-કોઝ નોટિસ, સૂચના નોટિસ, નોટિસ આપવામાં આવેલ હોય. જે જોતાં સ્પષ્ટ થાય છે કે આજ સુધીમાં કંપનીએ ભયંકર પણે પ્રદૂષણ કરી માનવજીવન અને પર્યાવરણને નુકશાન કર્યું છે.

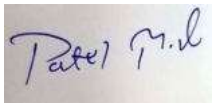
25. સાહેબશ્રી ઉમરગામ તાલુકો આદિવાસી વિસ્તાર તરીકે જાણીતો છે. જ્યાં આદિવાસી સમાજ બહુદા પ્રમાણમાં રહે છે. જ્યાં આવી અનેક કંપનીઓ આવેલ છે. માટે આપના વિભાગ દ્વારા આવી ઘટનામાં કડક કાર્યવાહી કરવી જોઈએ એવી આશા રાખીએ છીએ. આજે અમારો આદિવાસી સમાજ પ્રકૃતિ ને દેવ તરીકે પૂજે છે. જે પ્રકૃતિનો નાશ કરવામાં આવી રહ્યો છે.

26. સાહેબશ્રી ઉપરોક્ત તમામ મુદ્દાઓને ધ્યાનમાં લઈ કુદરતી ન્યાય જલ્દીથી આપશો એવી નમ્ર વિનંતિ આપને હાથ જોડી કરું છું સાથે એટલીજ રજૂઆત છે કે અમારા ઉમરગામ તાલુકામાં ભોપાલ કાંડ જેવું પુનરાવર્તન ન થાય તે પહેલા આગમ ચેતીના પગલાં લઈ મે. કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ – સરીગામ એકમને બંધ કરવામાં આવે..

સહકારની અપેક્ષા સહ,

આભાર.

લિ. આપનો વિશ્વાસુ



<u>બિડાણ – એકમ વિરુદ્ધ આજ દિન સુધી પ્રકાશિત થયેલ સમાચાર પત્રની નકલ</u>

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શનિવાર, તા. ૧૩-૮-૨૦૧૬

સિટી ન્યૂઝ

મુંબઈ સમાચાર • MUMBAI SAMACHAR

રસાયણ ફેક્ટરીમાં પંપ ફાટતાં એક જણ દાઝ્યો

વાપી: વાપીના સરીગામ ખાતે આવેલી ખાનગી કંપનીમાં સ્ટોરેજ ટેન્કમાંથી જલદ રસાયણ પંપિંગથી પ્રમમાં કાઢવાની વખતે અચાનક પંપ ફાટતાં કામગાર દાઝી ગયો હતો. આ કંપનીમાં વીસ દિવસમાં આવી બીજી ઘટના બની હોવાથી અન્ય કામગારોમાં ફફડાટ ફેલાયો છે. પ્રાપ્ત માહિતી મુજબ સરીગામ ઔદ્યોગિક વસાહતમાં કોરોમંડલ ઇન્ટરનેશનલ લિમિટેડ નામની કંપનીમાં બે દિવસ પહેલા ઇથેલીન ડાયમાઇન નામનું જલદ રસાયણ સ્ટોરેજ ટેન્કમાંથી પંપિંગ દ્વારા પ્રમમાં કાઢવામાં આવી રહ્યું હતું ત્યારે અચાનક પંપ ફાટી જતાં ત્યાં હાજર મોહંમદ ફૈઝલ પટેલ નામનો કામગાર દાઝી ગયો હતો. દરમિયાન વલસાડ જિલ્લાના ફેક્ટરી ઇન્સ્પેક્ટર વસાવાએ આ મામલે જણાવ્યું હતું કે આ બનાવને પગલે પોતે ઘટનાસ્થળે તપાસ કરીને આગળની કાર્યવાહી શરૂ કરી છે.

જોકે આ મામલે કંપનીના પ્રવક્તાનો સંપર્ક સાધવામાં આવતાં આવી કોઇ ઘટના બની ન હોવાનું તેમણે કહ્યું હતું. પણ ફેક્ટરી ઇન્સ્પેક્ટરે ઘટનાસ્થળની મુલાકાત લીધી હોવા અંગે તેમને પૂછવામાં આવતાં પ્રવક્તાએ આવી ઘટના બની હોવાનું કબૂલ્યું હતું. ■



વર્તમાન પ્રવાહ

સરીગામમાં કોરોમંડલ કંપનીમાં ગેસ લાઈનમાં ભડકો થતા ૬ કામદારો દાઝ્યા



દિવ્ય ભાસ્કર - ગુરુવાર, 4 ઓક્ટોબર, 2017

દમણ . સેલવાસ

ગુજરાત • 4 ઓક્ટોબર, 2017 • 4

સરીગામમાં ગેસ ગળતરથી ગુંગળામણ, લોકોમાં નાસભાગ

કોરોમંડલ કંપનીમાં એમોનિયા ગેસ લીક થતાં કામદારો અને દુકાનદારો દુકાન ટપોટપ બંધ કરી ભાગ્યા

સતત દોઢ કલાક સુધી અફરાતફરીનો માહોલ

બે કલાક સુધી ગેસ ગળતર ચાલુ રહ્યું



વાપી, ગુરૂવાર, 21 જુલાઈ, 2016 દિવ્ય ભાસ્કર

સરીગામની કોરોમંડલ કંપનીમાં બોઈલર બ્લાસ્ટ થતાં 6 દાઝ્યા

બુધવારે મેન્ટેન્સની કામગીરી દરમિયાન બનેલી ઘટના

દાઝી ગયેલ સારવાર હેઠળ.



ચાર દિવસથી ધૂમાડા પર મહદંશે કાબૂ

રહસ્યમય આગ બાદ સરીગામ સ્થિત કોરોમંડલને GPCBની ક્લોઝર નોટિસ

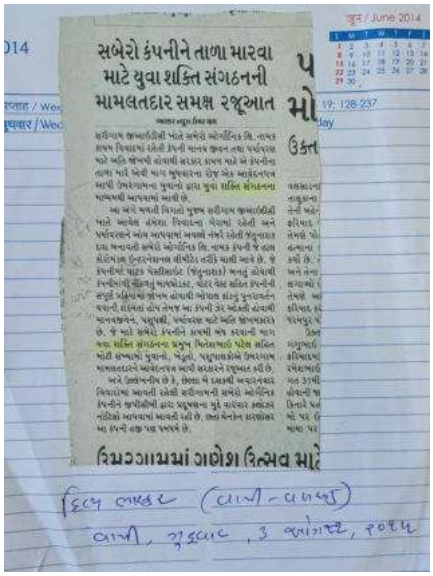
અસરગ્રસ્ત ૧૦ હજાર નાગરિકોના સત્તાવાર નિવેદનો ન નોંધી છાવરવાનો ખેલ

૧૫ ટાંકીઓ, ૧૦ ક્લોઝર નોટિસો, ફોમ અકસ્માત છતાં ૬ઠી પરવાનગી

કોરોમંડલે ડાકણી કોરણે બંધ કરવા આવેદનપત્ર

ત્રિપુરી ટીમોએ નાગરિકોનાં નિવેદનો નોંધવા જોઈએ

શ્રી સરસ્વતિ પૂજા



સબેરો કંપનીને તાળા મારવા માટે યુવા શક્તિ સંગઠનની મામલતદાર સમક્ષ રજૂઆત

દિલીપ ઠાકર (વાપી-વલસાડ)

વાપી, ગુરૂવાર, ૩ જાન્યુઆરી, ૨૦૧૫



વાપી, મંગળવાર, 21 ઓક્ટોબર, 2015 ઉમરગામ • ભીલાડ • સરીગામ સંજાણ • ઉદવા

સરીગામ કંપનીમાં કામદારનું મોત થતાં બબાલ



સરીગામની જંતુનાશક દવા બનાવતી કોરોમંડલ કંપની લોકો માટે જોખમી

કંપની બંધ કરવામાં આવે તેવી માંગણી સાથે કલેક્ટરને આવેદનપત્ર અપાયું

ગુજરાતમિત્ર

વાપી-વલસાડ-વાપી

શનિવાર, તા. ૪ મે, ૨૦૧૮



વર્તમાન પ્રવાહ

સરીગામની કોરોમંડલ ઈન્ટરનેશનલ (સાબરો ઓર્ગેનિક)નો કાળો ઈતિહાસ સ્થાનિકોને થર-થર કંપાવે છે



SANDESH

09

DAY, 7•10•2018

પદ્મપ્રસને રોકવા ગાંધીનગર GPCB મોર્ચે મોડે હરકતમાં આવ્યું

સરીગામની કોરોમંડલ ઈન્ટરનેશનલ કંપનીને જીપીસીબીની ક્લોઝર નોટિસ

તાત્કાલિક અસરથી વીજ-પાણીના કનેકશન કાપી નાખવા સૂચન કરાયા



ભોપાલ ગેસ દુર્ઘટનાનું પુનરાવર્તન થાય તે પહેલાં કોરોમંડલ કંપનીને કાયમી બંધ કરો

ચાર દિવસથી સતત ધુમાડા નિકળતા યુવા શક્તિ સંગઠને માગ કરી



સરીગામ સ્થિત સબેરો કંપનીને કાયમી ધોરણે બંધ કરવાની માંગ

4 રવિવાર / Sunday

ઇમ્પ્રુવમેન્ટ રાઇટિંગ

ફ્રિડમ ૦૬, સન્ડેઝ ૨૦૨૨

હાનિકારક

આગ લાગવાના બનાવો અને ઝેરીલા રાસાયણિક ધુમાડાથી લોકોના આરોગ્યને અસર

સરીગામની જંતુનાશક દવા બનાવતી કંપની લોકો માટે જોખમી

કંપની બંધ કરવામાં આવે તેવી માંગ સાથે જિલ્લા કલેક્ટરને આવેદનપત્ર અપાયું



■ કંપનીથી આજુબાજુના રહિશોના આરોગ્યને અસર પહોંચતા લોકોની રજૂઆત.

આ કંપનીમાં ભોપાલ જેવી મોટી દુર્ઘટના થવાનો પણ ભય

જી.પી.સી.બી. કલોઝર આપીને સંતોષ માને છે



સરીગામની કોરોમંડલ ઈન્ટરનેશનલ લી.ને GPCBની કલોઝર નોટિસ

કંપનીને કાયમી ધોરણે બંધ કરાવવા કલેક્ટરને રજૂઆત

૪ દિવસ અગાઉ કંપનીના ગોડાઉનમાં આગ લાગ્યા બાદ હવામાં ફેલાયેલા રાસાયણિક ધુમાડાને કારણે લોકો મુશ્કેલીમાં



વર્તમાન પ્રવાહ

સરીગામની કોરોમંડલ કંપનીથી સ્થાનિક પ્રજામાં ફેલાયેલો ભય

વારંવાર ધડાકા કરતી કંપનીમાં થયેલા વધારાના બાંધકામ સામે માત્ર નોટિસ પાઠવી ધૃતરાષ્ટ્રની માફક બેસી ગયેલા અધિકારી સામે પ્રજામાં રોષની લાગણી

ઉમરગામ તાલુકામાં ભોપાલ કાંડ જેવું પુનરાવર્તન થશે તો જવાબદાર કોણ?

કોરોમંડલ સરીગામના ઝેરી ધુમાડાથી થઈ રહેલા વાયુ પ્રદૂષણને લઈ યુવા શક્તિ સંગઠને કેન્દ્રિય પ્રદૂષણ નિયંત્રણ બોર્ડને કંપની બંધ કરવા કરી માંગ



GPCB સરીગામ કચેરીથી લઈ ગાંધીનગર GPCB વડી કચેરીના અધિકારીઓ કોરોમંડલ સરીગામ એકમની બાજુ બેસાડી પંચાયતા હોવાથી સોપોસીઓને ફરિયાદ કરવાની જરૂર પડી - એડ્યુકેટ મિતેશ પટેલ (પ્રમુખ-યુવા શક્તિ સંગઠન)



ANNEXURE-R-4

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A, **Gandhinagar** 382 010
Phone : (079) 23226295
Fax . : (079) 23232156
Website : www.gpcb.gov.in

COROMANDEL, SARIGAM
RECEIVED
Sign. 1079/P
Date : 5/4/17

BY: RPAD

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 3(c) & 5(5) of the Hazardous Waste (Management Handling and Transboundary Movement) Rules'2008, framed under the EP Act-1986.

And whereas Board has received CC&A application **Inward ID No: 115227, dated 01/12/2016** for the Renewal of consolidated consent and authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:
(Under the provisions / rules of the aforesaid environmental acts)

To,
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

1. **Consent Order No: AWH – 84402, Date of Issue: 22/02/2017.**
2. The consents shall be valid up to **30/09/2021** for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following items / products:

Sr. No.	Name of the Products	Quantity (MT/Annum)	Remarks
GROUP A			
1	Mancozeb (Tech.)	38000	Either or combination of the products
2	Mancozeb (Tech.) + Maneb (Tech.)	38000	
3	Mancozeb (Tech.) + Zineb (Tech.)	38000	
4	Mancozeb (Tech.) + Propineb (Tech.)	22116	
	Total Production capacity of Group A	**38000**	
GROUP B			
1	Diethyl Thiophosphoryl Chloride (DETC)	3600	Either or combination of the products
2	DMTC	2160	
3	Diafenthiuron	1650	
4	Thiamethoxam	1650	
5	Pymetrozine	1650	
6	Diflubenzuron	1650	
	Total Production capacity of Group B	**3600**	

GROUP C			
1	DMTC Amide	**4796**	
	Total Production capacity of Group C	**4796**	
GROUP D			
1	Glyphosate (Tech.)	5000	Either or combination of the products
2	PMIDA	3300	
	Total Production capacity of Group D	**5000**	
GROUP E			
1	Chlorpyriphos (Tech.)	5000	
	Total Production capacity of Group E	**5000**	
GROUP F			
1	Acephate (Tech.)	7000	
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	Either or combination of the products
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	Either or combination of the products
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	
	Total Production capacity of Group K	**2000**	

GPCB

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GROUP L			
1	Methamidafos (Tech.)	0	
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic Acid	429	Either or combination of the products
2	2,3-Difluoro-5-chloro pyridine	353	
3	Clodinafop propargyl (Tech.)	933	
4	Triclopyr Acid (Tech.)	933	
5	Triclopyr Butotyl Ester (Tech.)	933	
6	Picloram (Tech.)	495	
7	Pretilachlor (Tech.)	933	
8	Bispyribac sodium (Tech.)	330	
9	Azoxystrobin	52.8	
10	Boscalid	660	
11	Metalaxyl	933	
12	Proclaraz	933	
	Total Production capacity of Group N	**933**	
GROUP O			
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	Either or combination of the products
2	Fipronil (Tech.)	933	
3	Emmamectin Benzoate (Tech.)	495	
4	Difenoconazole (Tech.)	660	
5	Triazophos (Tech.)	933	
6	Glufosinate Ammonium Salt	933	
7	Metribuzin	933	
	Total Production capacity of Group O	**933**	
GROUP P			All of the products

1	Imidacloprid (Tech.)	510	
2	Acetamiprid (Tech.)	480	
	Total Production capacity of Group P	**990**	
BY PRODUCTS			
1	Ammonium Chloride Powder (NH4Cl)	13398	-
2	Sodium Chloride (NaCl) Powder	8238	-
3	Sodium Sulphate (Na2SO2) Powder	19779	-
4	Ammonium Sulphate (NH4)2SO4 (Powder)	8370	-
Total Production capacity of all Groupsand By-Product		**160277**	

LIST OF FORMULATION PRODUCT

Sr. No.	FORMULATION PRODUCTS	Qty. MT/Annum
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
	LIQUID FORMULATIONS	
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+ Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650

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20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% + Cypermethrine 5% EC	1650
23	Cypermethrin 10% EC	1650
24	Cypermethrin 25% EC	1650
25	Maneb 80% WP	8910
26	Propineb 70% WP	9240
27	Zineb 80% WP	8910
28	Triclopyr Butotyl ester 480 gm/lit	990
29	Methamidophos 600 gm/lit SL	5280
30	Imidaclopyrid 17.8% SL	8580
31	Clodinafop propargyl 15% WP	10230
	Total	243210

3.0 **CONDITIONS UNDER THE WATER ACT:**

3.1 The source of water supply shall be GIDC Sarigam.

3.2 The quantity of total water consumption shall not exceed **1078 KLPD** as per below break up
a) Industrial: **1018 KLPD.**
b) Domestic: **60 KLPD.**

3.3 The quantity of total of waste water shall not exceed **1073.33 KLPD** as per below break up
a) Industrial: **1013.33 KLPD**
b) Domestic: **60 KLPD.**

3.4 Out of 10133.33 KLPD the concentrated and toxic effluent stream generated i.e. 93.83 KL/day shall be segregated and completely incinerated in a well-designed in house Liquid waste incinerator or shall be disposed through common incineration facility SEPPL-Kutchh or GSEPL-Palsana, 669.5 KLPD High TDS low COD effluent shall be evaporated through Multiple Effective Evaporators (MEEs)/ in case of any breakdown or maintenance of in house MEEs, high TDS effluent will be sent to SEPPL for evaporation and drying, 190 KL/day dilutes stream + 60 KL/Day domestic = i.e. 250 KL/Day along with MEE condensate 331 kl/Day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharges as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day.
The mechanism to monitor of the concentrated stream and diluted stream to be developed and the submit the board for verification.
The record of concentrated stream generated treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis.
In no case, concentrated stream shall be sent with diluted stream for the further treatment.
The unit shall affix of water meter as per section 4 (1) of the water (prevention and control of pollution) cess Act-1977 for the purpose of measuring and recording the quantity of water consumed of such places as may be required.

3.5 **TRADE EFFLUENT:**

3.5.1 The concentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well designed incinerator - in-house incinerator or SEPPL-Kutchh or GSEPL-Palsana incineration facility or co-processing facility.
The incineration system shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc.
The industry shall operate fully & efficiently incineration system / air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partly non operational for any reason what so ever (whether for maintenance/repairs/electricity failure or otherwise). They shall not restart such activity unless & until the incineration system is fully in operation.
The pipeline connecting various equipments of sump of incineration system should be minimum in number & shall have permanent connection (no loose or flexible connection).
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for combustion & temperature, measuring devices within incinerator at different points & scrubber outside the incinerator shall be provide. There all data shall be recovered every day.
The applicant shall have to register the unit under the provisions of the factories act- 1948 & shall be obtained necessary factory license.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store & handle solid waste in accordance with provisions of the relevant rules in this behalf.
The printed Log Book shall be maintained for :

a. Energy consumption.
b. Waste water flow at inlet & outlet of incineration system.
c. Quantity of sludge generated.
d. Laboratory analysis reports for each of the specified parameters of liquid Effluent, gaseous discharge & soil sludge samples.

The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production, though such figures shall be supplied on monthly basis. The unit shall supply separate figures for consumption of electricity for running the incinerator by having separate meter /sub meters for such incinerator.

3.5.2 The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards:

PARAMETERS	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C.
Colour (pt.co.scale) in units	100 units
Suspended solids	200 mg/l
Oil and grease	10 mg/l
Phenolic compounds (as C_6H_5OH)	1.0 mg/l
Cyanide (as CN)	0.2 mg/l
Fluoride	2 mg/l
Sulfides	2 mg/l
Ammonical Nitrogen (As N)	10S0 mg/l
Arsenic (As)	0.2 mg/l
Total Chromium	2 mg/l
Chromium – Hexavalent	0.1 mg/l
Copper (Cu)	3.0 mg/l
Lead (Pb)	0.1 mg/l

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Mercury (as Hg)	0.01 mg/l
Nickel (Ni)	3.0 mg/l
Zinc (as Zn)	5 mg/l
Cadmium (Cd)	2.0 mg/l
Iron	3 mg/l
BOD (5 days at 20°C.	300 mg/l
COD	750 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/l
Insecticides / Pesticides	Absent
Sodium Absorption Ratio	26
Sodium Percent	60
Bio-assay test	90 % survival of fish after 96 hrs in 100 % effluent

- All efforts shall be made to remove color & unpleasant odor as far as practicable.

3.5.3 The final treated effluent conforming to the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being managed by Sarigam Waste Effluent Management Co. Ltd.

3.5.4 Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.

4.0 CONDITIONS UNDER THE AIR ACT:

4.1 The following shall be used as fuel in dryers, boiler, Incinerator & DG Sets respectively.

SR NO.	FUEL	CONSUMPTION	Utility
1	Natural Gas	Approx. 2500 SCM/Hr	Boiler /Incineration / MEE
2	Furnace Oil	2 KL/Hr	Boiler
3	Natural Gas	1000 SCM/Hr	Hot air generator
4	HSD	6 KL/day	DG

4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.

4.3 The flue gas emission through Boiler stack attached to stack shall conform to the following standards:

Stack No.	Stack Attached to	Stack Height In Meter	Control Measures provided	Parameter	Permissible Limits
1	Boiler – 3 Nos	50	---	PM SO_2 NO_x	150 mg/NM^3 100 ppm 50 ppm
3	DG set – 01 No (1000 KVA)	12	---		
4	DG set-2 Nos (500 KVA)	12	---		
5	DG set-1 No (200 KVA)	12	---		
6	Liquid & Gas Incinerator Incinerator 01	52	Ventury Alkali Scrubber	PM SO2 NOx HCL CO Total Organic Carbon Total Dioxine and Furans Sb+AS+Pb+Cu+Mn+Ni=V	50 200 400 50 100 20 0.2 ng TEQ 1.5
7	Solid Incinerator Incinerator 03				
8	Liquid Incinerator Incinerator 04	50	Ventury Alkali Scrubber		

4.4 The process emission through various stacks/vent of rectors, process, vessel shall conform to the following standards.

Sr. NO.	Plant	Stack attached to	Stack height Mtr.	Air Pollution Control Measures	Parameter to be Monitored	Permissible limit, Mg/nm3	Remarks
1	**GROUP A**						
	Mancozeb or	1) Mancozeb reactor – 01 Nos- 20 KL or	30	Air Blower/ Air Ventury	CS2 PM SO2	180 50 40	Either or combination of the products
	Mancozeb + Maneb or	2) Maneb reactor 01 Nos- 20 KL or					
	Mancozeb + Zineb or	3) Zineb reactor Nos- 20 KL					
	Mancozeb + Propineb	4) Propineb Reactor – 01 Nos – 14 KL					
		5) Spray Dryer – 3000 Kgs/Hr. – 2 Nos	30	Bag filter / Water Scrubber			
2	**GROUP B**						
	Diethyl Thiophosphoryl Chloride (DETC) or DMTC	Reactor – 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	Either or combination of the products
	Diafenthiuron(Tech.)	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Thiamethoxam	Reactor 01 Nos – 6.3 KL		No stack			
	Pymetrozine	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Diflubenzuron	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
3	**GROUP C**						
	DMTC Amide	Reactor 01 Nos – 10 KL	20	Acidic scrubber	NH3	30	
4	**GROUP D**						
	Glyphosate (Tech.)	Slurry Preparation – 2 nos of reactor each 10 KL capacity and connected to common stack –01Nos	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	Either or combination of the products

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	PMIDA	Reactor 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	
5	**GROUP E**						
	Chlorpyriphos (Tech.)	HTCP Reactor – 01 Nos – 6.0 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl	20	
6	**GROUP F**						
	Acephate (Tech.)	Ammonia solution preparation reactor – 01 Nos – 04 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
7	**GROUP G**						
	Monocrotophos (Tech) OR Dicrotophos(Tech.)	Chlorination Reactor – 01 Nos – 6.3 KL and Neutralizer Reactor – 01 KL – 12 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl Cl2	20 9	Either or combination of the products
	GROUP H						
	DDVP	Gas to Incinerator – 01			CH3Cl		
8	**GROUP I**						
	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor – 2 Nos- 12 KL, connected to common scrubber & Storage tank – 03 Nos – 20 KL connected to common scrubber	11	Alkali Scrubber	HCl Cl2 PCl3	20 9 9	
9	**GROUP J**						
	Trimethyl Phosphite (TMP) **OR**	1) TMP/TEP plant reactor – 01 Nos – 3 KL	20 11	1st Scrubber Water scrubber 2nd with Acid	NH3 Odor	30 Nil	Either or combination of the products

	Triethyl Phosphite (TEP)	2) TMP/TEP products storage tanks – 02 Nos -40 KL		Media Acid scrubber/Carbon tower			
10	**GROUP K**						
	Phosphorous Sulphochloride ($PSCl_3$)	PSCl3 plant reactor – 01 Nos – 6.3 KL and storage tank – 01 Nos – 10 KL	22	Alkali Scrubber	HCL PCl3	20 9	
	GROUP L						
	Methamidafos	No process stack					
11	**GROUP M**						
	Phosphorous Acid	phosphorous acid Reactor – 01 Nos – 5 KL	20	Water Scrubber	HCl	20	
12	GROUP N						
	2-(4-Hydroxy phenoxy) Propionic acid	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products
	2,3-Difluoro-5-chloro pyridine	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triclopyr Acid / Triclopyr Butotyl Ester	Reactor – 01 Nos – 6.3 KL	No process stack				
	Clodinafop Propargyl	Reactor – 01 Nos – 6.3 KL	No process stack				
	Picloram	Picloram& pretilachlor Reactors – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Pretilachlor		No process stack				
	Bispyribac Sodium	Reactor – 01 Nos – 6.3 KL	No process stack				
	Azoxystrobin	Reactor – 01 Nos – 6.3 KL	No process stack				
	Boscalid	Reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Metalaxyl	Metalaxyl Reactor – 01 Nos – 6 KL	20	Alkali Scrubber	HCl	20	
13	**GROUP O**						
	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products

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	Fipronil	Fipronil reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Emmamectin Benzoate	Reactor – 01 Nos – 6.3 KL	No process stack				
	Difenoconazole	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triazophos	Reactor – 01 Nos – 6.3 KL	No process stack				
	Glufosinate Ammonium Salt	Reactor – 01 Nos – 6.3 KL	No process stack				
	Metribuzin	Reactor – 01 Nos – 6.3 KL	No process stack				
14	NH4Cl	NH4Cl Storage Tank	11	Acid Scrubber			
15	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
16	HCl Storage Tank	HCl Storage Tank – 01 Nos – 20 KL	11	Alkali Scrubber	HCl Cl2	20 9	
17	Chlorine Shed	Chlorine Shed – 01 Nos	13.5	Alkali Scrubber	Cl2	9	
18	Drum Filling Station	Drum Filling Station – 01 Nos	11	Alkali Scrubber	Odor		
19	Sodium Sulphate recovery	Stack attached to Dryer	20	Bag filter	PM	150	
20	Ammonium Chloride recovery	Stack attached to Dryer	20	Bag filter	PM	150	
21	Quippo (1.364 MW)	Stack attached to Power plant	45	—	PM SO2 NOX	150 100 50	
22	Incinerators – 03 Nos – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO2 NOX	50 200 400	

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:-

Parameters	Permissible limit
Suspended Particulate Matter (size less than 10 um) PM 10 ug/M3 **	100 Microgram/M^3
Suspended Particulate Matter (size less than 2.5 um) PM 2.5 ug/M3 **	60 Microgram/M^3
Oxides of Sulphur **	80 Microgram/M^3
Oxides Of Nitrogen **	80 Microgram/M^3
HCL	200 Microgram/M^3

CL2	100 Microgram/M^3
H2S	500 Microgram/M^3
HC	160 Microgram/M^3
Ammonia	400 Microgram/M^3
HF	60 Microgram/M^3
CS2	2000 Microgram/M^3
CO	5000 Microgram/M^3

- 4 Hourly or 08 Hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not one two consecutive days of monitoring

4.6 The applicant shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no.4.3 and 4.4 as above.

4.7 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no.4.2 and 4.4 as above.

4.8 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification.

4.9 The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

5. GENERAL CONDITIONS:-

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board

5.2 Applicant shall also comply with the general condition give in annexure I

6. Authorization for the [Management & Transboundry Movement of Hazardous Waste Form-2 (See rule 6 (2) for grant of Authorization for occupier or Operator handling Hazardous Waste Rules – 2016.

6.1 Number of authorization: **AWH-84402, Date of issue: 22/02/2017**

6.2 Reference of application **No. 115227, dated 01/12/2016.**

M/s. COROMANDEL INTERNATIONAL LTD., is hereby granted an authorization to operate facility for following Hazardous wastes on the premises situated at Plot No. 2102, GIDC Industrial Area, Sarigam, Dist. Valsad.

Sr. No.	Waste	Category of Hazardous Waste as per the Schedules I, II and III of these rules		Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity
		Schedule	Category		
1.	ETP Sludge	I	35.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2640 MT/Year
2.	Discarded Container/bags	I	33.3	Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners/ disposed through common GPCB approved decontamination facility.	24000 Nos./Year

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3.	Oil & Grease skimming residue	I	35.4	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	32.40 MT/year
4.	Chemical Sludge containing residue pesticides	I	29.2	Collection, storage, transportation, disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
5.	Used Oil	I	5.1	Collection, storage, transportation, disposal by selling to registered reprocessors.	0.3 MT/Year
6.	Spent carbon	I	36.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	257.4 MT/Year
7.	Ash from incinerator	I	37.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4755 MT/Year
8.	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	0.240 MT/Year
9.	Spent HCl 30% Acetic acid – 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	24588 MT/Year 7000 MT/Year
10.	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2032 MT/Year
11.	Salts from MEE	I	37.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4570.44 MT/Year

12.	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	1995 MT/Year
13.	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation , disposal through – house incineration or SEPPL, Kutch, GISPL-Palsana	50 MT/Year

6.3 The Authorization shall be valid for a period of **30/09/2021.**

6.4 The Authorization is subject to the following general and specific conditions:

A. General Conditions under Hazardous and other Wastes (MANAGEMENT & TRANSBOUNDARY MOVEMENT) Rules-2016.

1. The Authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The Authorization or its renewal shall be produced for inspection at the request of an officer Authorized by the State Pollution Control Board.
3. The person Authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific Conditions (whichever is applicable)

1. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
2. Handing over of the hazardous and other wastes to the authorized actual user shall be only after making the entry into the passbook of the actual user

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3. In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.
4. The occupier of the facility shall comply Standard operating procedure/ guidelines published by MoEF&CC or CPCB or GPCB form time to time.
5. Unit shall comply provisions of E-Waste (Management) Rules, 2016.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

DPShah

(Mrs. D.P. Shah)
ENVIRONMENTAL ENGINEER

NO: GPCB/SRG-CCA-229()25)/ID:24285/408584 **Date:-** 31/3/2017

ISSUED TO:
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

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ADVOCATE

ANNEXURE-R-5

MANUFACTURING PROCESS DESCRIPTION

1. PHOSPHORUS TRICHLORIDE (PCl3)

The following are the main steps for PCl_3 production.

Phosphorus drums are transferred to melting tank containing water heated by sparging live steam into it. The melted phosphorus is transferred by water pressure through pump into phosphorus day tank which is installed in hot water tank.

Phosphorus is continuously fed into reactor filled with PCl_3 at a controlled rate by water through pump.

Chlorine liquid from toner is fed into chlorine vaporizers which is heated by steam. Chlorine gas at a controlled rate is fed to reactor via glass tube rotameter.

Phosphorus reacts with chlorine to form PCl_3, which vaporized due to exothermic heat, vapor passes through packed column and condenser which is externally cooled by cooling water. The distilled PCl_3 is transferred to storage tank and partly feed to the column as a reflux.

Reaction chemistry

$$P_4 + 6Cl_2 \longrightarrow 4\,PCl_3$$

Mass Balance:

Sr. No.	Material	1 MT product	Material	1 MT product	Remarks
1	Phosphorus	0.23	Phosphorus Trichloride	1.00	Product
2	Chlorine	0.80	Distillation loss	0.03	Scrubber
	Total	**1.03**	**Total**	**1.03**	

2. TRIMETHYL PHOSPHITE (TMP)Chemical

Process Description:

Trimethyl Phosphite is manufactured by reaction of Phosphorus Trichloride and Methanol and the liberated Hydrogen chloride is neutralised with Ammonia to make Ammonium Chloride.

Following are the basic steps of manufacturing Trimethyl Phosphite.

Formation of Trimethyl Phosphite (Main Reaction) Methanol, Solvent with catalyst, and PCl_3 and NH_3 with equal molar proportion fed to reactor under stirring. The reaction is highly exothermic. The Phosphorus Trichloride react with methanol to form TMP and HCl. And Hydrochloric Acid is immediately react with NH_3 to convert into Ammonium Chloride.

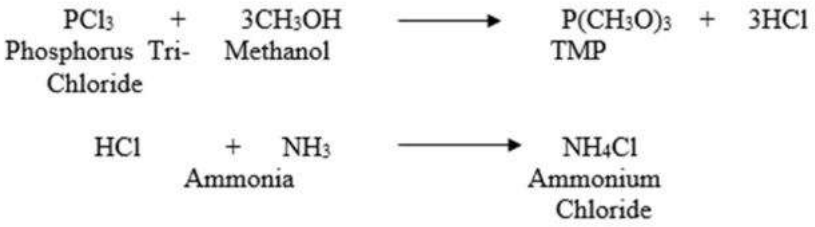
The form reaction mass is sent to washer where the slightly Ammonical Water is fed and stirred mixture is fed to separator.

The mixture of organic layer containing TMP and Aqueous layer containing Ammonium Chloride gets separated. The organic layer containing TMP is sent to series of purification/distillation columns, while the aqueous layer containing NH_4Cl is sent to NH_4Cl recovery plant.

The low boilers are stripped in the first distillation column while TMP along with the solvent sent for further purification to next distillation column.

The distillation is carried out under vacuum where the pure 99% + Trimethyl Phosphite is getting distilled out from the top of the column while the solvent along-with catalyst will be collected from the bottom of the column continuously and recycled back in first steps of reaction. The distilled product is stored under the nitrogen atmosphere in storage tank.

Reaction chemistry



Mass Balance:

Sr. No.	Material	1 MT product	Material	1 MT product	Remarks
1	Phosphorus Trichloride	1.3	TMP	1.00	Product
2	Methanol	0.95	Ammonium chloride	1.5	By Product
3	Ammonia	0.59	Mixed solvent with catalyst	7.33	Recycle
4	Recycle Water	2.82	Water for ETP	4.32	Recycle
	Fresh Water	0.057			
5	Catalyst	0.009			
6	Solvent	0.029			
7	Recycle Mixed solvent with catalyst	8.4			
8	H2SO4	0.003			
	Total	**14.15**	**Total**	**14.15**	

3. TRI ETHYL PHOSPHITE (TEP):

Process Description:

Tri Ethyl Phosphite is manufactured by reaction of Phosphorus Trichloride and Ethanol and the liberated Hydrogen chloride is neutralized with Ammonia to make Ammonium Chloride.

Following are the basic steps of manufacturing Triethyl Phosphite.

Formation of Triethyl Phosphite (Main Reaction) Ethanol, Solvent with catalyst, and PCl_3 and NH_3 with equal molar proportion fed to reactor under stirring. The reaction is highly exothermic. The Phosphorus Trichloride reacts with methanol to form TEP and HCl. And Hydrochloric Acid is immediately react with NH_3 to convert into Ammonium Chloride.

The form reaction mass is sent to washer where the slightly Ammonical Water is fed and stirred mixture is fed to separator. The mixture of organic layer containing TMP and Aqueous layer containing Ammonium Chloride gets separated. The organic layer containing TEP is sent to series of purification/distillation columns, while the aqueous layer containing NH_4Cl is sent to NH_4Cl recovery plant.

The low boilers are stripped in the first distillation column while TEP along with the solvent sent for further purification to the next distillation column. The distillation is carried out under vacuum where the pure 99% + Triethyl Phosphite is getting distilled out from the top of the column while the solvent along with catalyst will be collected from the bottom of the column continuously and recycled back in first steps of reaction. The distilled product is stored under the nitrogen atmosphere in storage tank.

Reaction chemistry

$$PCl_3 + 3C_2H_5OH \longrightarrow P(C_2H_5O)_3 + 3HCl$$

Phosphorus Tri-Chloride — Ethanol — TEP

$$HCl + NH_3 \longrightarrow NH_4Cl$$

Ammonia — Ammonium Chlorid

MASS BALANCE

Sr. No.	Material	1 MT product	Material	1 MT product	Remarks
1	Phosphorus Trichloride	1.25	TEP	1.00	Product
2	Ethanol	1.25	Ammonium chloride	1.45	By Product
3	Ammonia	0.59	Mixed solvent with catalyst	7.67	Recycle
4	Recycle Water	3.84	Water for washing	5.34	Recycle
5	Fresh water	0.095	**Total**	**15.46**	
6	Catalyst	0.003			
7	Solvent	0.030			
8	Recycle Mixed solvent with catalyst	8.4			
9	H2SO4	0.005			
	Total	**15.46**			

4. ACEPHATE:

Process description:

DMPAT in MDC as solvent is 'Isomerized' by aid of Di methyl Sulphate (DMS) to give Methamidophos (MMP). This MMP is then further 'Acetylated' by Acetic Anhydride to yield Acephate. This reaction generates Acetic Acid, which is Neutralize by Ammonia solution.

The Neutralize mass is then further extracted repeatedly with MDC. The aqueous layer generated contains 'Ammonium Acetate and is incinerated. The organic mass obtained is fed to MDC recover unit.

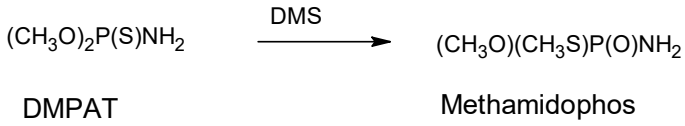
MDC is recovered by atmospheric and vacuum distillation. This recovered MDC is recycled back in the process. The residual mass of the distillation is carried forward for Acephate recovery by crystalisation.

Ethyl Acetate is added to the residual mass and crystallized to get Acephate. The wet Acephate thus obtained from filtration is further dried in rotary vacuum dryer.

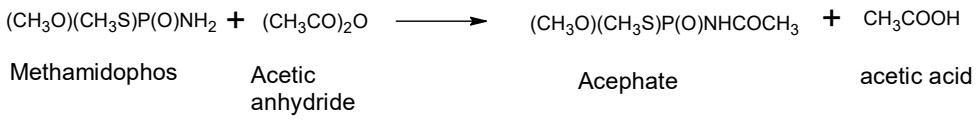
The mother liquor obtained from filtration is further used to recover Ethyl Acetate under vacuum. The Ethyl Acetate recovered is recycled back in the process. The residue obtained after Ethyl Acetate recovery is incinerated

Reaction chemistry

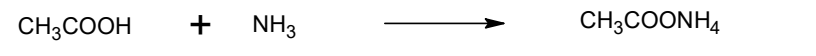
Isomerisation



Acetylation



Neutralisation



acetic acid ammonia ammonium acetate

Rec. of acetic Acid and Ammonium Sulphate



Ammonium Acetate Sulphuric Acid Acetic Acid

MASS BALANCE FOR ACEPHATE

MATERIAL INPUT (QUANTITY IN MT)

Sr. No.	Material	1 MT product
1	DMPAT	1.300
2	Dimethyl Sulphate	0.120
3	Acetic anhydride	0.960
4	Ammonia (gas)	0.220
5	Water	0.592
6	MDC	10.946
7	Ethyl acetate	2.347
	Total	**16.48**

MATERIAL OUTPUT (QUANTITY IN MT)

Sr. No.	Material	1 MT product	
1	Acephate	1.00	Product
2	Aqueous layer	1.8	To Incinerator for rec. of Acetic Acid & Ammonium Sulphate
3	MDC	10.357	Recycle
4	Process & Distillation loss	0.974	
5	Ethyl Acetate	1.962	Recycle
6	Organic residue	0.330	To Incinerator
	Total	**16.48**	

5. MANCOZEB:

Process description

Stage 1

Carbon Disulphide and Ethylene Diamine and Sodium Hydroxide are reacted in the presence of water to form the DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate (DBH).

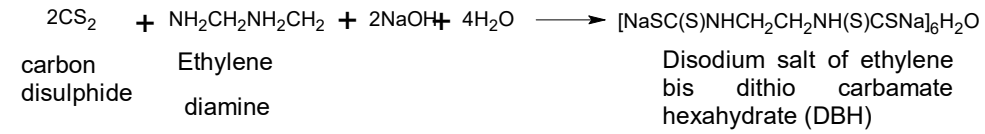
Stage 2

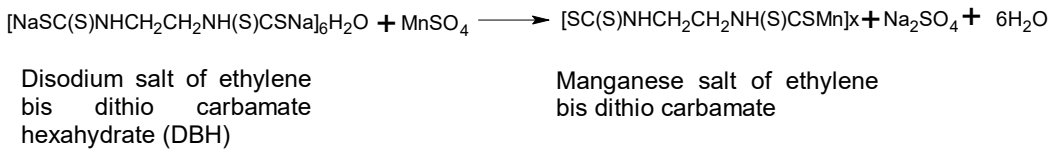
DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate is reacted with manganese sulphate to form manganese salt of Bis Dithio Carbamate.

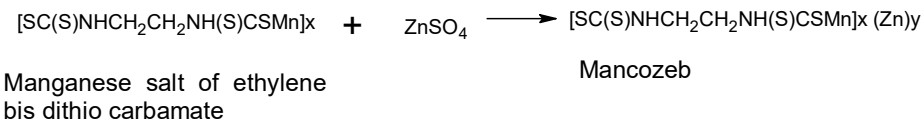
Stage 3

The manganese salt further reacts with Zinc Sulphate to convert into Mancozeb. Slurry is initially spray dried and subsequently vacuum dried for Mancozeb powder formulation.

Chemical reaction:







MASS BALANCE FOR MANCOZEB

Sr. No.	Material Input	1 MT product	Material Output	1 MT product	Remarks
1	Ethylene diamine	0.206	Mancozeb	1.00	Product
2	Carbon disulfide	0.572	Carbon disulfide	0.054	Recycle
3	Sodium hydroxide (47%)	0.580	Sodium Sulphate solution	2.603	ETP
4	Manganese Sulphate (27%)	1.906	Losses	0.570	Evaporation
5	Zinc Sulphate (32%)	0.166	Condensate water recycled	0.124	Recycle
6	SLS	0.033			
7	HMTA	0.020			
8	Water	0.868			
	Total	**4.351**	**Total**	**4.351**	

6. MONOCROTOPHOS:

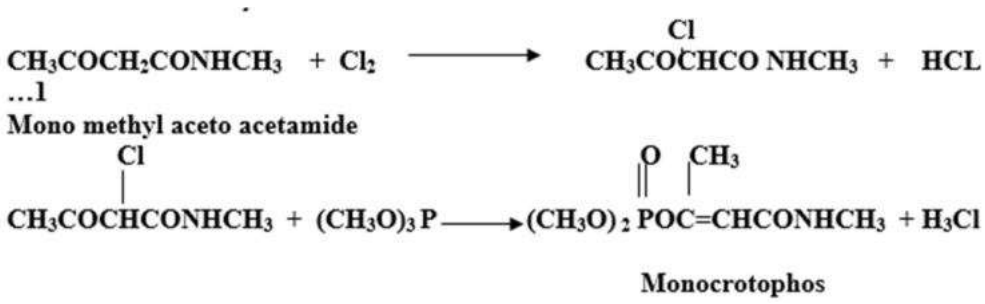
Process Description:

Monocrotophos is manufactured by a two stage reaction

In the first reaction Monomethyl Acetoacetamide is chlorinated to Monochloro Methyl Acetoacetamide (MMACl) in the presence of water. This reaction is carried out at low temperature. The chlorinated mass is neutralised. MMACl is then taken in an organic solvent and any moisture in is removed.

Then MMACl is reacted with Trimethyl Phosphite (TMP) and crude Monocrotophos is obtained. From this crude material solvent and un-reacted TMP are removed by vacuum distillationand Techanical grade Monocrotophos is obtained.

Reaction chemistry



Mass Balance:

Sr. No.	Material Input	1 MT product	Material Output	1 MT product	Remarks
1	MMAA 70%	0.759	Monocrotophos	1.00	Product
2	Urea	0.115	Aqueous mass	1.535	To Incinerator
3	EDC	2.17	EDC	1.528	Recycle
4	NaCl	0.153	EDC+TMP	1.073	Recycle
5	Chlorine	0.337	Organic residue	0.069	To Incinerator
6	Ammonia	0.083	Methyl chloride	0.209	To Incinerator
7	TMP	0.517	Losses	0.133	
8	EDC+TMP	0.690	Aqueous mass	2.001	Recycle
9	Water	0.723			
10	Aqueous mass	2.001			
	Total	**7.548**	**Total**	**7.548**	

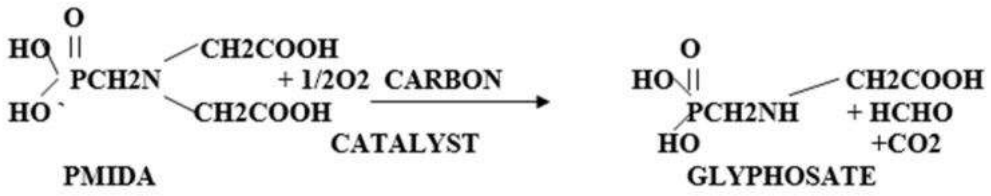
7. GLYPHOSATE

Stage I

Manufacturing of Phosphono Methyl Glycine (Glyphosate)

Phosphono Methyl Imino diacetic Acid slurry is prepared by addition of water and activated carbon & is further oxidized by molecular oxygen to give N-phosphanomethyl glycine followed by water distillation & followed by filtration and further drying.

Reaction chemistry



Mass Balance:

Sr. No.	Material	1 MT product	Material	1 MT product	Remarks
1	PMIDA	1.356	Glyphosate	1.00	Product
2	Activated carbon	0.0396	Carbon dioxide	0.255	
3	Oxygen	0.176	Formaldehyde	0.176	
4	Recycled Water	15.564	Activated carbon recycle	0.088	Recycle
5	Fresh Water	0.698	Water	15.564	Recycle
			Losses	0.668	
			Excess oxygen	0.083	
	Total	**17.834**	**Total**	**17.834**	

8. DDVP

Process

Flush the reactor with N2

Change the Chloral in Reactor.

Add TMP (Trimethyl Phosphate) by maintaining the temperature 45-50^{0}c by circulating the chilled water. During the reaction methyl Chloride gas generated will be remove through vent condense and sent to Incinerator.

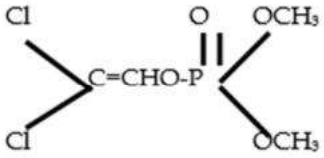
Finally maintain the Temperature 90^{0}c and stripped the methyl Chloride traces by N2 purging. Cool the mass to room temperature and check the quality of Product and pack the material.

Reaction chemistry

Cl_3C_2-(O)H + $(OCH_3)_3P$

Tri Chloro Acetaldehyde — Tri Methyle Phosphite

M. Wt. : 147.5 — 124



\+ CH_3Cl

DDVP — Methyl Chloride

(2,2 Di- Chloro Vinyl Di Methyl Phosphate)

M. Wt. : 221 — 50.5

MASS BALANCE FOR DICHLORVOS

Sr. No.	Material	1 MT product	Material	1 MT product	Remarks
1	Chloral	0.642	Dichlorvos	1.00	Product
2	TMP	0.586	Methyl chloride	0.228	To Incinerator
	Total	**1.228**	**Total**	**1.228**	

9. MANEB:

Process Description

Stage 1

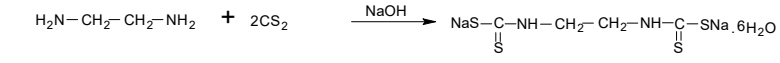
Carbon Disulphide and Ethylene Diamine and Sodium Hydroxide are reacted in the presence of water to form the DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate (DBH).

Stage 2

DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate is reacted with manganese sulphate to form Maneb.

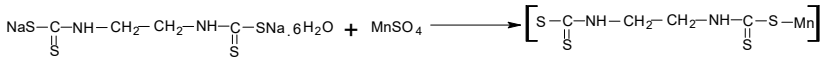
Chemical reaction

Stage-I



Ethylene diamine	Carbon disulfide	DBH
M.F.:-$C_2H_8N_2$	M.F.:-CS_2	M.F.:-C4H6S4N2Na2.6H2O
M.wt.:-60	M.wt.:-76	M.wt.:- 365

Stage:-II



DBH	Manganes sulphate	Maneb
M.F.:-C4H6S4N2Na2.6H2O	M.F.:- $MnSO_4$	M.F.:- $C_4H_6N_2S_4Mn$
M.wt.:- 365	M.wt.:- 151	M.wt.:- 265.3

+ Na_2SO_4 + $6H_2O$

Sodium sulphate

M.wt.:-142

MASS BALANCE FOR MANEB

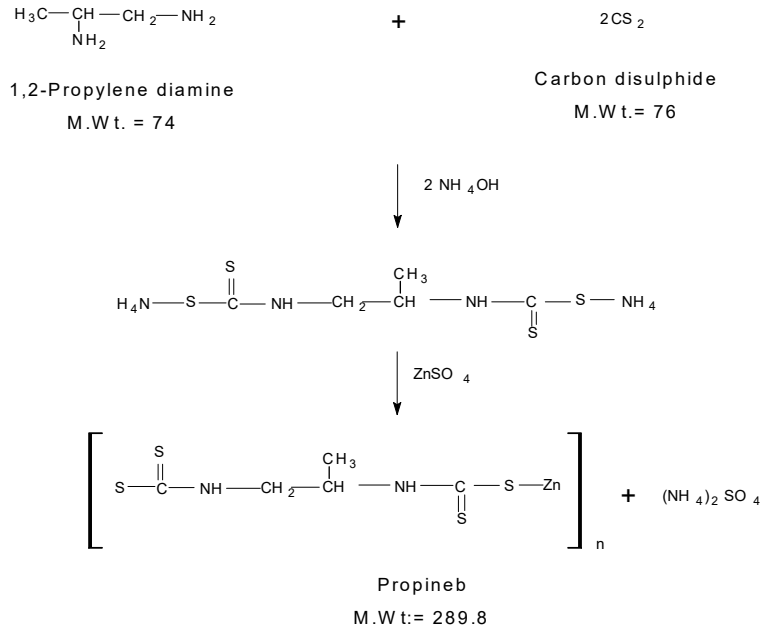
Sr. No.	Material Input	1 MT product	Material Output	1 MT product	Remarks
1	Ethylene diamine	0.206	Maneb	1.00	Product
2	Carbon disulfide	0.572	Carbon disulfide	0.054	Recycle
3	Sodium hydroxide (47%)	0.580	Sodium Sulphate solution	2.603	ETP
4	Manganese Sulphate (27%)	1.906	Losses	0.528	Evaporation
5	SLS	0.033	Condensate water recycled	0.124	Recycle
6	HMTA	0.020			
7	Water	0.868			
8	Condensate water recycled	0.124			
	Total	**4.309**	**Total**	**4.309**	

10. PROPINEB:

Brief Process:

Water is charged into the rector and carbon disulfide is added at room temperature and then 1,2- Propylene diamine is dissolved in water and the solution is added initially 20 % of the total amount and then the remaining 80 % is added simultaneously with 15 % ammonia to form disodium salt of is propylene bis dithiocarbamate which on further reaction with zinc sulfate (21 %) to convert into zinc iso propylene bis dithiocarbamate (Propineb) which is further subjected to filtration, washing and 30 – 35 % slurry is made to spray drier followed by drying in RVD.Fillers like SLS , stabilizer, HMTA as diluents to make 80 % technical grade with zinc content of 18 – 20 %.

Reaction chemistry



MASS BALANCE FOR PROPINEB

Sr. No.	Material Input	1 MT product	Material Output	1 MT product	Remarks
1	1,2 –PDA	0.378	Propineb	1.00	Product
2	Carbon disulfide	0.67	Carbon disulfide	0.064	Recycle
3	Ammonia solution (15%)	0.911	Sodium Sulphate solution Ammonium Sulphate solution	6.77	
4	Zinc Sulphate solution (21%)	2.995	Losses	2.078	Evaporation
5	SLS	0.035			
6	HMTA	0.0086			
7	Water	4.931			
	Total	**9.92**	**Total**	**9.92**	



ANNEXURE-R-6

F. No. J-11011/106/2009- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003
E-mail : plahujarai@yahoo.com
Telefax: 011 – 2436 3973
Dated: 5th May, 2009

To,

The Vice President (Manufacturing)
M/s Sabero Organics Gujarat Ltd.
Plot no. 2102-2104, 735 & 2112/2113
GIDC Sarigam, Dist. Valsad, Gujarat

Sub: Expansion of pesticides & pesticides Intermediates unit at Plot no. 2102-2104, 735 & 2112/2113, GIDC Sarigam, Dist. Valsad, Gujarat by M/s Sabero Organics Gujarat Limited- environmental clearance reg.

Sir,

This has reference to your letter no. nil dated 6th February, 2009 along with form 1 and pre- feasibility report on the above mentioned subject seeking environmental clearance under the Environment Impact Assessment Notification, 2006.

2.0 The Ministry of Environment and Forests has examined your proposal. It is noted that M/s Sabero Organics Gujarat Limited have proposed for expansion of pesticides & pesticides Intermediates unit at GIDC Sarigam in District. Valsad in Gujarat. The details of the products to be manufactured are annexed. The unit is located in notified industrial area, GIDC Sarigam. Environmental clearance to the existing unit was accorded in 22nd December, 2008. The plant is still under construction stage. No protected forests/eco-sensitive areas are located within the radius of 10 km from the unit. The total land area requirement after expansion will be 42213.3 m2, of which green belt will be developed in 2500 m^2 of land area. The cost of the project will be Rs. 153.80 crores, of which Rs. 17.50 crores will be utilized for environment protection measures.

3.0 The total water requirement after the proposed expansion will be 1533.8 m3/day which will be sourced from GIDC, Sarigam. Waste water generation will be 2384.6 m3/day, out of which 364.5 kl/day Mencozeb effluent will be treated in the proposed Mencozeb Effluent treatment plant (fenton reagent), 1381.9 m3/day of High TDS effluent will be evaporated in the proposed evaporation system, 276.8 m3/day of High COD effluent will be incinerated in company's own incinerator and 1089.9 m3/day of normal effluent stream will be treated in effluent treatment plant for primary, secondary & tertiary treatment & discharge into underground pipeline of GIDC Sarigam for final disposal into Arabian Sea. Total power requirement will be 4000 KVA and will be met through DGVCL. Fuel for boiler and incinerator will be natural gas (34200 m3/day). Fuel for the DG sets will be diesel (6000 lts/day). Process emissions In the form of HCl, Cl2, H2S and NH3 will be controlled by scrubbers. Boilers will have stack of 50 m height and D.G. sets will have stack of 12 m height for dispersion of gaseous emissions.

4.0 Solid waste generation will be in the form of ETP sludge (220 MT/month) which will be disposed to CSWDF developed by NECL, Nandesari, TSDF site of VWEMCL, Vapi & GEPIL, Surat. Oil & grease (2.775 MT/month) and spent carbon (21.45 MT/month) will be incinerated and ash will be disposed to CSWDF developed by NECL, Nandesari TSDF site. Process waste (8267.15 MT/month) will be sent for incineration. Incinerated ash (659.1 MT/month) and salt from Multiple Effect Evaporation System (1894.9 MT/month) will be disposed to CSWDF developed by NECL, Nandesari, TSDF site of VWEMCL, Vapi & GEPIL, Surat. Discarded drums & containers (2000 nos./month) will be sold to registered recycler.

5.0 The pesticides manufacturing units have been listed at Sl.no. 5(b) under category 'A' of Environmental Impact Assessment Notification, 2006. The proposal was considered by the Expert Appraisal Committee (Industry) in the 92nd meeting held on 18-20th March, 2009. As the unit is located in the industrial estate, the public hearing/ consultation of the project is not required as per para 7 (i)-III (b) Stage (3) – public consultation of EIA Notification, 2006.

6.0 Based on the information submitted by the project authorities, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, dated 14th September 2006 subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

(i) The process effluent generation shall not exceed 2324.6 m3/d and shall be segregated into high COD, high TDS and normal effluent stream. About 364.5 kl/day of Mencozeb effluent shall be treated in the proposed Mencozeb Effluent treatment plant (fenton reagent), 1381.9 m3/day of High TDS effluent shall be evaporated in the proposed evaporation system, 276.8 m3/day of High COD effluent shall be incinerated in company's own incinerator and total 1089.9 m3/day of normal effluent stream shall be treated in effluent treatment plant for primary, secondary & tertiary treatment & discharge into underground pipeline of GIDC Sarigam for final disposal into Arabian Sea. The effluent shall be stripped for solvent recovery before sending to ETP.

(ii) The gaseous emissions (SO_2, NOx , VOC, HC, NH3, H2S, Cl2 and HCl) along with SPM and RSPM from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

(iii) The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(iv) The process emissions in the form of HCl, H2S, NH3 and Cl2 from the reactors shall be scrubbed with water and alkali scrubbers. The spent scrubber solution shall be treated in the ETP. All the vents shall be connected to the incinerator for odour control.

(v) The gaseous emissions from the DG sets shall be dispersed through stack height as per CPCB standards. Acoustic enclosures shall be provided to mitigate the noise pollution.

(vi) Standards notified for pesticides unit under the Environment (Protection) Act, 1986 and amended time to time shall be followed by the Unit.

(vii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.

(viii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by GPCB.

(ix) All the storage tanks shall be under negative pressure to avoid any leakages. Breathers, N_2 blanketing and condensers will be provided for all the storage tanks. Closed handling systems for chemicals and solvents will be provided. Magnetic seals will be provided for pumps/agitators for reactors for reduction of fugitive emissions. Chilled Brine based condensers shall be used to prevent VOC emissions. Solvent traps shall be installed wherever necessary.

(x) All venting equipment shall have vapour recovery system. All the pumps and other equipment`s where there is a likelihood of HC leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipment, in case of a leakage will also be made. The company shall provide a well defined Leak Detection and Repair (LDAR) programme for quantification and control of fugitive emissions. The detectors sensitivity will be in ppm levels.

(xi) During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.

(xii) The company shall make adequate arrangement for control of odour nuisance from the plant premises.

(xiii) The adequate financial provisions shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes.

(xiv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

(xv) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

(xvi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

(xvii) Usage of PPEs by all employees/ workers shall be ensured.

(xviii) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).

(xix) The company shall adopt waste minimization /cleaner production techniques to reduce the pollution load and action plan in this regard submitted to the Ministry.

(xx) The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduced consumption of water.

B. GENERAL CONDITIONS

i. The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In *case* of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

iii. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.

iv. The gaseous emissions (NOx, SO2 and SPM) and Particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures *are* rectified to achieve the desired efficiency. Stack monitoring for SO2, NOx and SPM shall be carried.

v. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the up wind and downwind direction as well as where maximum ground level concentrations *are* anticipated.

vi. Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.

vii. The overall noise levels in and around the plant *area* shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

viii. The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.

ix. The company will undertake all relevant measures for improving the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration

x. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

xi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

xii. The project authorities shall earmark adequate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

xiii. The implementation of the project vis-a-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.

xiv. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any , were received while processing the proposal.

xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board.

xvi. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

xvii. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

7.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

9.0 Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.

10 .0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention &. Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003/ 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

P. Ahujarai

(Dr.P.L. Ahujarai)
Director

Copy to:

1. The Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar-382 010, Gujarat.
2. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File.

(Dr.P.L. Ahujarai)
Director

Annexure to the File no. J-11011/106/09 - IA.II (I)

Details of products and their production capacities are given below:

Sr. No.	Products	Production Capacity, MT/month			Remarks
		Existing	proposed	Total after expansion	
GROUP A					
1	Mancozeb	225	1837.5	2062.5	
2	Mancozeb (1375) + Maneb (687.5)	0	2062.5	2062.5	either of the product will be manufactured
3	Mancozeb (1375) + Zineb (687.5)	0	2062.5	2062.5	
4	Mancozeb (687.5) + Propineb (687.5)	0	1375	1375	
	Total Production capacity of Group A	**225**	**1837.5**	**2062.5**	
GROUP B					
1	Diethyl Thiophosphoryl Chloride (DETC)	300	250	550	either of the product will be manufactured
2	DMTC	180	1332.5	1512.5	
	Total Production capacity of Group B	**300**	**1212.5**	**1512.5**	
GROUP C					
1	DMTC Amide	275	962.5	1237.5	
	Total Production capacity of Group C	**275**	**962.5**	**1237.5**	
GROUP D					
1	PMIDA	0	2337.5	2337.5	All products to be manufactured
2	Glyphosate (Tech.)	120	1530	1650	
	Total Production capacity of Group D	**120**	**2217.5**	**2337.5**	
GROUP E					
1	Chlorpyriphos (Tech.)	150	125	275	
	Total Production capacity of Group E	**150**	**125**	**275**	
GROUP F					
1	Acephate (Tech.)	126	204	330	
	Total Production capacity of Group F	**126**	**204**	**330**	
GROUP G					
1	Monocrotophos	90	157.5	247.5	either of the product will be manufactured
2	Monocrotophos	0	123.75	123.75	
	Dicrotophos (Tech)	0	123.75	123.75	
	Total Production capacity of Group G	**90**	**157.5**	**247.5**	

GROUP H					
1	DDVP (Tech.)	82.5	55	137.5	
	Total Production capacity of Group 8	**82.5**	**55**	**137.5**	
GROUP I					
1	Phosphorous Trichloride (PCl_3)	950	3458.25	4408.25	
	Total Production capacity of Group I	**950**	**3458.25**	**4408.25**	
GROUP J					
1	Trimethyl Phosphite (TMP)	500	105	605	either of the product will be manufactured
2	Triethyl Phosphite (TEP)	300	195	495	
	Total Production capacity of Group J	**500**	**105**	**605**	
GROUP K					
1	Phosphorous Sulphochloride ($PSCl_3$)	400	425	825	
	Total Production capacity of Group K	**400**	**425**	**825**	
GROUP L					
1	Methamidafos (Tech.)	0	550	550	
	Total Production capacity of Group L	**0**	**550**	**550**	
GROUP M					
1	Phosphorous Acid	0	1100	1100	
	Total Production capacity of Group M	**0**	**1100**	**1100**	
GROUP N					
1	2-(4-Hydroxy phenoxy) Propionic Acid	0	53.63	53.63	either of the product will be manufactured
2	2,3-Difluoro-5-chloro pyridine	0	44.28	44.28	
3	Clodinafop propargyl	0	82.5	82.5	
4	Triclopyr Acid/Triclopyr Butotyl Ester (Tech.)	0	275	275	
5	Picloram	0	275	275	
6	Pretilachlor	0	275	275	
7	Bispyribac Sodium (Tech.)	0	110	110	
	Total Production capacity of Group N	**0**	**275**	**275**	
GROUP O					
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	0	71.78	71.78	either of these product will be manufactured
2	Fipronil	0	82.5	82.5	
3	Emmamectin Benzoate	0	41.25	41.25	
4	Difenoconazole	0	55	55	
5	**Triazophos (Tech.)**	**0**	**82.5**	**82.5**	

P. Ahujaan

	Total Production capacity of Group O	**0**	**82.5**	**82.5**	
GROUP P					
1	2-chloro-5-chloro methyl pyridine	0	685.58	685.58	all of these products will be manufactred
2	Nitro imino imidazolidine	0	339.08	339.08	
3	Imidacloprid (Tech.)	0	412.5	412.5	
4	Cyano Methyl Imidoate	0	83.33	83.33	
5	Acetamiprid	0	137.5	137.5	
	Total Production capacity of Group P	**0**	**1657.98**	**1657.98**	
GROUP Q					
14	Phosphorous Pentasulphide (P2S5)	300	-300	0	
	Total Production capacity of Group Q	**300**	**-300**	**0**	
	Total production capacity of all groups	**3255.18**	**16038.55**	**19293.73**	

Formulations products:

Sr. No.	FORMULATIONS	production capacity, MT/month		
		existing	proposed	Total after expansion
1	Mancozeb 80% WP	218.9	1981.1	2200
2	Mancozeb 75% WP/WDG	233.75	2103.75	2337.5
Liquid Formulations liquid FORMULATIONS				
1	Glyphosate 41% IPA	255.75	2631.75	2887.5
2	Glyphosate 62% IPA	169.675	2008.325	2178
3	Monocrotophos 36% SL	165	495	660
4	Acephate 75% SP	159.5	550	709.5
5	Chloropyriphos 20% EC	220	1100	1320
6	Mancozeb SC (420-600 gm/Ltr)	0	275	275
7	Mancozeb SE (420-500 gm/lit)	0	275	275
8	Mancozeb OS 600 gm/lit	0	275	275
9	Mancozeb (63%)+Carbendazim(12%)	0	137.5	137.5
10	Mancozeb (64%)+ Metalyxyl (8%)	0	137.5	137.5

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11	Mancozeb (64%)+ cymoxanil (8%)	0	137.5	137.5
12	Glyphosate 71% ammonium salt(prills)	0	385	385
13	Glyphosate 5% ammonium salt	0	550	550
14	Monocrotophos 40% SL (W/V)	0	220	220
15	Diclorovos 76% EC	0	165	165
16	Acephate 40% SL	0	137.5	137.5
17	Acephate 75% prills	0	55	55
18	Acephate 95% prills	0	55	55
19	Chloropyriphos 38.7% EC	0	137.5	137.5
20	Chloropyriphos 480 gm/lit EC	0	137.5	137.5
21	Chloropyriphos 50% EC	0	137.5	137.5
22	Chloropyriphos 50% + Cypermethrine 5% EC	0	137.5	137.5
23	Cypermethrine 10% EC	0	137.5	137.5
24	Cypermethrine 25% EC	0	137.5	137.5
25	Maneb 80% wp	0	742.5	742.5
26	Propineb 70% wp	0	770	770
27	Zineb 80% wp	0	742.5	742.5
28	Triclopyr Butotyl Ester 480gm/lit	0	82.5	82.5
29	Methamidophos 600 gm/lit SL	0	440	440
30	Imidacloprid 17.8% SL	0	715	715
31	Clodinofop Propargyl 15% WP	0	852.5	852.5
	Total	**1422.58**	**18844.93**	**20267.50**
LIST OF BY PRODUCTS				
	Ammonium Chloride Powder	751	157	908
	Or solution of 13 to 18% (byproduct)	5007 KL	1047 KL	6054 KL
	30 % Hydrochloric Acid	312	4337	4649
	Sodium Chloride	0	3669	3669
	TOTAL	**1063**	**8163**	**9226**

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TRUE COPY ADVOCATE

ANNEXURE-R-7

Monthly Report from Industry

Form No D2

Gujarat Pollution Control Board

244

March , 2023

1. Name & address of Industry : Coromandel International Limited,
SARIGAM GIDC ESTATE, SARIGAM ,-,
SARIGAM - 396155
DIST : Valsad-Sarigam, TAL : Umbergaon, SIDC : Sarigam

PCB ID : 24285

2. Phone No. : 02607135135

3. Date of commencement of Manufacturing process : 28/02/2009

4. CTEs No. & Date : CEE-105880,22/12/2024

5. CCA No . & Date of Expiry : AH-110281, 30/09/2021

6. Water Cess (with Interest) paid up to which Period : 2017-2018

7. Laboratory charges pending if any : 0

8. Water consumed during the month (by all sources)in KL : Meter Reading=0,Kilo Litre=35709

Water Cess Cooling Boiler/Dom/BIO Degrable/Non BIO Degrable : 16241 / 1287 / 17918 / 263

9. Electricity consumed in PRODUCTION : 2984291 **ETP/CETP :** 61533 **APCM :** 28210

9A. Stack attached to : Boiler,D.G. Sets

10. Fuel consumed during the month : H.S.D,Natural Gas

11. Products : ACEPHATE (TECHNICAL),MANCOZEB (TECHNICAL),MONOCROTOPHOS (TECHNICAL),PHOSPHOROUS TRICHLORIDE,PROPINEB 70% WP,TMP

12. Work of Control Measures In Progress : Nothing in Progress

13. Upgradation / Addition of PCM is Required : Nothing Suggested

14. HAZ Waste Disposal(in Metric Tonne): Land Filling Waste to TSDF=327.700,Co-Incineration Waste to other Industry=1301.035,

Type	Code	Name	Qty-Unit	Remark
FUE	HSD	H.S.D	1700.000-LTS	
FUE	GAS	Natural Gas	1260294.000----	scm
GAS		Boiler(NOx)	22.180----	ppm
GAS		Boiler(PM)	2.500----	mg/nm3
GAS		Boiler(SOx)	32.950----	ppm
GAS		Incinerator (Nox)	17.780----	ppm
GAS		Incinerator (PM)	11.080----	mg/nm3
GAS		Incinerator (Sox)	19.450----	ppm
PRD	25027	acephate (technical)	367.000-M.T	
PRD	25029	mancozeb (technical)	1887.000-M.T	
PRD	25037	monocrotophos(technical)	377.000-M.T	
PRD	25024	phosphorous trichloride	477.000-M.T	
PRD	48886	propineb 70% wp	150.000-M.T	
PRD	25025	tmp	372.000-M.T	

Online Manifest Prepared

MF ID-Date	Truck No-Date	TSDF Name	H.W Remark / Qty
2049962-29/03/2023	GJ16AV9235-29/03/2023		Process waste sent for co-processing. 27.880 MTS (29.1)
2049592-29/03/2023	GJ17XX1760-29/03/2023		Spent Solvent sent for recycling process. 9.180 MTS (29.4)
2049260-29/03/2023	GJ12AT8666-29/03/2023		Contaminated sand sent for landfill. 23.845 MTS (S10)
2048711-28/03/2023	GJ16AV9086-28/03/2023		Process waste sent for co-processing. 27.885 MTS (29.1)
2048689-28/03/2023	GJ12AU9419-28/03/2023		ETP Sludge sent for landfill. 24.520 MTS (35.3)
2048381-28/03/2023	GJ15AV2424-28/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic Waste) sent for recycling process. 1.350 MTS (33.13~liners)
2047750-27/03/2023	GJ19X8744-27/03/2023		Spent solvent sent for recycling. 6.915 MTS (29.4)
2047355-27/03/2023	GJ16AV9446-27/03/2023		Process waste sent for co-processing. 27.840 MTS (29.1)
2047371-27/03/2023	GJ15AV2424-27/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.900 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2046286-27/03/2023	GJ16AV4970-26/03/2023		Process waste sent for co-processing. 27.880 MTS (29.1)

2045221-25/03/2023	GJ16AW0439-25/03/2023		Process waste sent for co-processing. 27.680 MTS (29.1)
2045600-25/03/2023	GJ15AV2424-25/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.710 MTS (33.13~liners)
2045841-25/03/2023	GJ15XX0083-25/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 100.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2045836-25/03/2023	GJ07TT5374-25/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 140.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2045903-25/03/2023	GJ12AU9419-25/03/2023		ETP Sludge sent for landfill. 25.275 MTS (35.3)
2045043-25/03/2023	GJ16AV9031-24/03/2023		Process waste sent for co-processing. 27.370 MTS (29.1)
2044966-24/03/2023	GJ15AT2515-24/03/2023		Spent solvent sent for recycling process. 8.390 MTS (29.4)
2044324-24/03/2023	GJ15AV2424-24/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.940 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2044344-24/03/2023	GJ15AV2424-24/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.940 MTS (33.13~liners)
2044791-24/03/2023	GJ12AT8666-24/03/2023		Contaminated sand sent for landfill. 24.515 MTS (S10)
2043875-24/03/2023	GJ17XX1760-23/03/2023		Spent solvent sent for recycling process. 8.990 MTS (29.4)
2043872-24/03/2023	GJ16AV6698-23/03/2023		Process containing residual waste sent for co-processing. 31.700 MTS (29.2)
2043562-23/03/2023	GJ07TT5374-23/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 100.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2042633-22/03/2023	GJ16AV9028-22/03/2023		Process containing residual waste sent for co-processing. 27.870 MTS (29.2)
2042237-22/03/2023	GJ15AV7161-22/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.430 MTS (33.13~liners)
2042543-22/03/2023	GJ16AV9464-22/03/2023		Process containing residual waste sent for co-processing. 27.510 MTS (29.2)
2042526-22/03/2023	GJ16AV9365-22/03/2023		Process waste sent for co-processing. 28.125 MTS (29.1)
2041794-21/03/2023	GJ16AV9083-21/03/2023		Process waste sent for co-processing. 27.945 MTS (29.1)
2041756-21/03/2023	GJ16AW0395-21/03/2023		Process waste sent for co-processing. 28.175 MTS (29.1)

2041548-22/03/2023	GJ16AV9710-21/03/2023		Process containing residual waste sent for co-processing. 27.160 MTS (29.2)
2040728-20/03/2023	GJ12AU9419-20/03/2023		Contaminated sand sent for landfill. 26.100 MTS (S10)
2039983-20/03/2023	GJ07TT5374-20/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 100.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2040401-20/03/2023	GJ15AV2424-20/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 2.195 MTS (33.13~liners)
2039547-20/03/2023	GJ16AV9038-19/03/2023		Process waste sent for co-processing. 27.940 MTS (29.2)
2039529-20/03/2023	GJ16AW0458-19/03/2023		Process waste sent for co-processing. 28.080 MTS (29.1)
2038575-18/03/2023	GJ07TT5374-18/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 100.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2039022-18/03/2023	GJ16AV7784-18/03/2023		Process waste sent for co-processing. 27.540 MTS (29.1)
2038994-18/03/2023	GJ16AV9570-18/03/2023		Process containing residual waste sent for co-processing. 27.420 MTS (29.2)
2038441-18/03/2023	GJ16AW0226-18/03/2023		process waste sent for co-processing. 27.985 MTS (29.1)
2038378-18/03/2023	GJ16AV9956-18/03/2023		process waste sent for co-process. 28.090 MTS (29.1)
2038288-18/03/2023	GJ16AV9290-18/03/2023		Process waste sent for co-processing. 28.140 MTS (29.1)
2038264-18/03/2023	GJ16AW0340-18/03/2023		Process waste sent for co-processing. 28.125 MTS (29.1)
2038185-18/03/2023	GJ16AV9037-18/03/2023		Process waste sent for co-processing. 27.230 MTS (29.2)
2037977-17/03/2023	GJ17XX1584-17/03/2023		Spent solvent sent for recycling process. 9.410 MTS (29.4)
2037985-17/03/2023	GJ16AV9732-17/03/2023		Process waste sent for co-processing. 28.085 MTS (29.1)
2037960-17/03/2023	GJ12AU9419-17/03/2023		Contaminated sand sent for landfill. 24.280 MTS (S10)
2037785-17/03/2023	GJ12AT8666-17/03/2023		ETP sludge sent for landfill. 24.710 MTS (35.3)
2036897-17/03/2023	GJ16AW0316-16/03/2023		Process containing residual waste sent for co-processing. 28.085 MTS (29.2)
2036451-16/03/2023	GJ34T6969-16/03/2023		CONTAMINATED SAND SENT FOR LANDFILL. 30.235 MTS (S10)

2036660-17/03/2023	GJ16AV9446-16/03/2023		Process containing residual waste sent for co-processing. 28.450 MTS (29.2)
2035863-15/03/2023	GJ16AV9123-15/03/2023		Process waste sent for co-processing. 27.935 MTS (29.1)
2035837-15/03/2023	GJ16AV5758-15/03/2023		Process waste sent for co-processing. 31.275 MTS (29.1)
2035062-15/03/2023	GJ16AW0439-15/03/2023		Process waste sent for co-processing. 28.480 MTS (29.2)
2035631-15/03/2023	GJ15YY4170-15/03/2023		Spent solvent sent for recycling process. 7.895 MTS (29.4)
2034174-14/03/2023	GJ15AV2424-14/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 1.400 MTS (33.13~liners)
2034076-14/03/2023	GJ16AV9162-14/03/2023		Process residue waste for co-processing 27.980 MTS (29.2)
2034070-14/03/2023	GJ16AW0395-14/03/2023		Process containing residual waste sent for co-processing 27.720 MTS (29.2)
2034459-14/03/2023	GJ16AV6698-14/03/2023		Process containing residual waste sent for co-processing. 32.225 MTS (29.2)
2034483-14/03/2023	GJ07TT5374-14/03/2023		In the category of 33.1 & waste name category of 33.11 Empty decontaminated drums sent for recycling process. 140.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2033396-13/03/2023	GJ17XX1584-13/03/2023		Spent solvent sent for recycling process. 9.465 MTS (29.4)
2033171-13/03/2023	GJ15AV2424-13/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process. 2.235 MTS (33.13~liners)
2033476-13/03/2023	GJ12AT8666-13/03/2023		ETP sludge sent for landfill. 24.935 MTS (35.3)
2032434-12/03/2023	GJ16AV9363-12/03/2023		Process residue waste for co-processing 27.955 MTS (29.2)
2032380-12/03/2023	GJ16AV9583-12/03/2023		Process containing residual waste sent for co-processing 27.450 MTS (29.2)
2031967-11/03/2023	GJ16AV9982-11/03/2023		Process waste sent for co-processing. 27.960 MTS (29.1)
2031909-11/03/2023	GJ16AV9710-11/03/2023		Process containing residual waste sent for co-processing. 27.095 MTS (29.2)
2031530-11/03/2023	GJ17XX1760-11/03/2023		Spent solvent sent for recycling process. 8.590 MTS (29.4)
2031264-11/03/2023	GJ16AV9037-11/03/2023		Process waste sent for co-processing. 27.930 MTS (29.1)
2031088-10/03/2023	GJ12AT8666-10/03/2023		Contaminated sand sent for landfill. 24.510 MTS (S10)

2030815-10/03/2023	GJ12AU9419-10/03/2023		ETP sludge sent for landfill. 25.140 MTS (35.3)
2030993-10/03/2023	GJ15AV2424-10/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic Waste) sent for recycling process. 1.470 MTS (33.13~liners)
2030972-10/03/2023	GJ16AV7959-10/03/2023		Process containing residual waste sent for co-processing. 28.205 MTS (29.2)
2030003-09/03/2023	GJ16AV9732-09/03/2023		Process containing residual waste sent for co-processing. 28.490 MTS (29.2)
2029814-09/03/2023	GJ16AW0340-09/03/2023		Process waste sent for co-processing. 28.125 MTS (29.1)
2029360-08/03/2023	GJ16AV7784-08/03/2023		process waste sent for co-processing. 27.020 MTS (29.1)
2029175-07/03/2023	GJ16AU5132-07/03/2023		Process waste sent for co-processing. 28.160 MTS (29.1)
2028871-07/03/2023	GJ07TT5374-07/03/2023		In the category of 33.1 & waste name category of 33.11. Empty decontaminated drums sent for recycling process. 117.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
2028877-07/03/2023	GJ16AW0461-07/03/2023		Process waste sent for co-processing. 27.715 MTS (29.1)
2028489-06/03/2023	GJ16AV3975-06/03/2023		Process waste sent for co-processing. 30.350 MTS (29.1)
2027517-06/03/2023	GJ16AW0316-05/03/2023		Process waste sent for co-processing 28.650 MTS (29.1)
2027442-05/03/2023	GJ12AT8666-05/03/2023		ETP sludge sent for landfill. 24.700 MTS (35.3)
2027051-05/03/2023	GJ16AV4671-04/03/2023		Process waste sent for co-processing. 28.220 MTS (29.1)
2026718-04/03/2023	GJ16AV9570-04/03/2023		Process waste sent for co-processing. 28.345 MTS (29.1)
2026921-04/03/2023	GJ12AU9419-04/03/2023		Contaminated sand sent for landfill. 24.935 MTS (S10)
2026530-04/03/2023	GJ15AV7161-04/03/2023		In the category of 33.1 & waste name category of 33.13 Liners(Plastic waste) sent for recycling process 1.620 MTS (33.13~liners)
2025978-03/03/2023	GJ16AV9029-03/03/2023		Process waste sent for co-processing. 28.180 MTS (29.1)
2025933-03/03/2023	GJ19X8744-03/03/2023		Spent solvent sent for recycling process. 7.870 MTS (29.4)
2024545-02/03/2023	GJ17XX1584-02/03/2023		Spent solvent sent for recycling process. 7.745 MTS (29.4)

2014503- 02/03/2023	GJ07TT5374- 02/03/2023		In the category of 33.1 & waste name category of 33.11. Empty decontaminated drums sent for recycling process. decontaminated drums sent for recycling process. 140.000 MTS (33.11~Empty barrels/containers contaminated with hazardous chemicals /wastes)
1994191- 01/03/2023	GJ16AV4923- 01/03/2023		Process containing residual waste sent for co-processing. 26.990 MTS (29.2)
1993568- 01/03/2023	GJ16AV9583- 01/03/2023		Process waste sent for co-processing. 28.760 MTS (29.1)

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SVNIT

Clean Environment Research Centre
Department of Civil Engineering

OUTWARD
No. DCE/ e-4675
Dated : 21/3/23

1 Name & Address of the party : **Coromandel International Limited.**
Plot No. 2102, 2104/1,735, & 2112/2113
GIDC Estate Sarigam,
Ta: Umbergaon Dist. Valsad – 396155

2 Sampling by : Clean Environment Research Center, DoCE, SVNIT, Surat

3 Nature of the sample : Ambient Air

4 Protocol (Purpose) : Environment Audit (2nd Monitoring)

5 Date of Visit : 31/12/2022

Ambient Air Analysis Report

Sr. No	Parameters	Unit	Near Main Gate	Canteen	Near ETP	Near Power Plant	GPCB Permissible Limit	Method of Measurements
1	Suspended Particulate Matter (Size less than 10 µm) PM 10	µg/m^3	94.2	82.3	89.2	79.4	100	IS 5182 (Part-23)
2	Suspended Particulate Matter (Size less than 2.5 µm) PM 2.5	µg/m^3	53.7	39.6	45.1	42.6	60	CPCB guidelines for AAQM (Vol. I, NAAQMS/36/2012 -13)
3	Oxides of Sulphur	µg/m^3	21.2	13.5	18.6	26.3	80	IS 5182 (Part-2)
4	Oxides of Nitrogen	µg/m^3	41.5	29.7	33.3	43.7	80	IS 5182 (Part-6)
5	HCl	µg/m^3	13.3	15.9	19.9	11.8	200	USEPA 26A
6	Cl_2	µg/m^3	ND	ND	ND	ND	100	USEPA 26A
7	H_2S	µg/m^3	ND	ND	ND	ND	500	IS 11255 (Part 4)
8	HC	µg/m^3	ND	ND	ND	ND	160	USEPA 26A
9	Ammonia (NH_3)	µg/m^3	42.6	35.1	48.6	37.2	400	IS 11255 (Part 6)
10	HF	µg/m^3	ND	ND	ND	ND	60	IS 11255 (Part 7)
11	CS_2	µg/m^3	ND	ND	ND	ND	2000	IS 11255 (Part 4)
12	CO	µg/m^3	1.3	0.9	1.4	1.6	5000	CPCB-2013

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SVNIT

Clean Environment Research Centre
Department of Civil Engineering

1 Name & Address of the party : **Coromandel International Limited.**
Plot No. 2102, 2104/1,735, & 2112/2113
GIDC Estate Sarigam,
Ta: Umbergaon Dist. Valsad – 396155

2 Sampling by : Clean Environment Research Center, DoCE, SVNIT, Surat

3 Nature of the sample : Stack

4 Protocol (Purpose) : Environment Audit (2nd Monitoring)

5 Date of Visit : 31/12/2022 and 01/01/2023

Stack Analysis Report

Sr. No.	Stack	Parameter	UNIT	Results	Limits	TEST METOD
1	Boiler (Natural Gas)	Temperature of flue gas	°C	126	--	IS:11255 (Part-3)
		Carbon Dioxide as CO_2	%	7.60	--	IS:11255 (Part-3)
		Oxygen as O_2	%	11.80	--	IS:11255 (Part-3)
		Nitrogen as N_2	%	80.60	--	IS:11255 (Part-3)
		Velocity of flue Gas	m/sec	12.4	--	IS:11255 (Part-3)
		Particulate Matter	mg/Nm^3	20.3	150	IS 11255 (Part 1)
		Sulfur Dioxide as SO_2	ppm	7.6	100	IS 11255 (Part 2)
		Oxides of Nitrogen as NO_X	ppm	29.7	50	IS 11255 (Part 7)

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Stack Analysis Report

Sr. No	Stack	Parameter	UNIT	Results	Limits	TEST METOD
2	Trimethyl Phosphite (TMP) or Triethyl Phosphite (TEP)	NH_3	mg/Nm^3	25.3	30	IS 11255 (Part 6)
3	Monocrotophos (Tech)	HCl	mg/Nm^3	6.4	20	USEPA 26A
		Cl_2	mg/Nm^3	6.3	9	USEPA 26A
4	HCl Storage Tank	HCl	mg/Nm^3	5.6	20	USEPA 26A
		Cl_2	mg/Nm^3	5.4	9	USEPA 26A
5	Phosphorous Trichloride (PCl_3)	HCl	mg/Nm^3	4.2	20	USEPA 26A
		Cl_2	mg/Nm^3	4.1	9	USEPA 26A
		PCl_3	mg/Nm^3	2.1	9	USEPA 26A
6	Chlorine Shed	Cl_2	mg/Nm^3	4.8	9	USEPA 26A
7	Ammonium Chloride Recovery	PM	mg/Nm^3	37.6	150	IS 11255 (Part 1)
8	Mancozeb + Propineb Propineb reactor-01(14 KL)	CS_2	mg/Nm^3	14.3	180	IS 11255 (Part 4)
		PM	mg/Nm^3	23.7	50	IS 11255 (Part 1)
		SO_2	mg/Nm^3	12.8	40	IS 11255 (Part 2)
9.	Mancozeb + Propineb Spray Drier -3000 Kgs/ Hr (2 Nos.)	CS_2	mg/Nm^3	20.6	180	IS 11255 (Part 4)
		PM	mg/Nm^3	28.9	50	IS 11255 (Part 1)
		SO_2	mg/Nm^3	16.7	40	IS 11255 (Part 2)

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SVNIT

Clean Environment Research Centre
Department of Civil Engineering

1	Name & Address of the party	:	**Coromandel International Limited.** Plot No. 2102,2104/1,735, &2112/2113 Sarigam GIDC Estate, Sarigam,Pincode: 396155
2	Sampling by	:	Clean Environment Research Center, DoCE, SVNIT, Surat
3	Nature of the sample	:	Incinerator - Stack
4	Protocol (Purpose)	:	Environment Audit (2nd Monitoring)
5	Date of Visit	:	31/12/2022 and 01/01/2023

Incinerator Stack Analysis Report

Sr. No.	Stack	Parameter	UNIT	Results	Limits
1.	Liquid and Gas Incinerator -01	Moisture	%	13.25	--
		Temperature of Flue Gas	°C	64	--
		Velocity of flue Gas	m/s	7.48	--
		Carbon Dioxide as CO_2	%	7.8	--
		Oxygen as O_2	%	12.8	--
		Nitrogen as N_2	%	79.4	--
		Particulates matter	mg/Nm^3	38.9	50
		SO2	mg/Nm^3	78.9	200
		NOx (by PDA method)	mg/Nm^3	98.9	400
		HCl	mg/Nm^3	9.6	50
		Carbon Monoxide (CO)	mg/Nm^3	14.4	100
		Total Organic Carbon (TOC)	mg/Nm^3	ND	20
		Total Dioxins & Furans	Ng TEQ	ND	0.2
		Sb+As+Pb+Cu+Mn+Ni+V (And their compound)	mg/Nm^3	0.18	1.5
		HF	mg/Nm^3	1.12	--
		Cd+Th (and its compounds.)	mg/Nm^3	ND	--
		Hg (and its compounds)	mg/Nm^3	ND	--

ND = Not Detected

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Clean Environment Research Centre
Department of Civil Engineering

1 Name & Address of the party : **Coromandel International Limited.**
Plot No. 2102, 2104/1,735, & 2112/2113
GIDC Estate Sarigam,
Ta: Umbergaon Dist. Valsad - 396155

2 Sampling by : Clean Environment Research Center, DoCE, SVNIT, Surat

3 Nature of the sample : Waste Water

4 Protocol (Purpose) : Environment Audit (2nd Monitoring)

5 Date of Visit : 31/12/2022

Water Analysis Report

Sr. No.	Parameters	Unit	Results				Limit	Test Method
			ETP Inlet	Primary Outlet	Secondary Outlet	Final Outlet		
1	pH	--	8.06	9.09	6.98	7.15	6.5 to 8.5	IS 3025 (Part 11)
2	Temperature	°C	34.1	33.6	32.1	31.3	40	IS 3025 (Part 9)
3	Colour	pt-co	500	350	110	90	100	IS 3025 (Part 4)
4	Suspended Solids	mg/L	198	124	56	51	200	IS 3025 (Part 17)
5	Oil & Grease	mg/L	11.4	9.6	3.4	2.6	10	APHA(23rd Edition) 5520 B
6	Phenolic Compound as C_6H_5OH	mg/L	0.58	0.41	0.18	0.075	1	IS 3025 (Part 43)
7	Cyanides as CN	mg/L	ND	ND	ND	ND	0.2	APHA (23rd Edition) 4500 CN E
8	Fluorides as F	mg/L	0.75	0.65	0.60	0.56	2	APHA(23rd Edition) 4500F D
9	Sulphides as S	mg/L	8.6	5.2	1.2	0.80	2	APHA(23rd Edition) 4500 S2 F
10	Ammonical Nitrogen as N	mg/L	15.6	11.2	0.65	0.52	50	APHA(23rd Edition) 4500 S2 F
11	Arsenic as As	mg/L	ND	ND	ND	ND	0.2	APHA (23rd Edition) 3114 B
12	Total Chromium	mg/L	0.059	0.041	0.021	0.016	2	APHA (23rd Edition) 3111 B
13	Hexavalent Chromium as Cr^{+6}	mg/L	ND	ND	ND	ND	0.1	APHA(23rd Edition) 3500 Cr B
14	Copper as Cu	mg/L	ND	ND	ND	ND	3	APHA (23rd Edition) 3111 B

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15	Lead as Pb	mg/L	ND	ND	ND	ND	0.1	APHA (23rd Edition) 3111 B
16	Mercury as Hg	mg/L	ND	ND	ND	ND	0.01	APHA (23rd Edition) 3112 B
17	Nickel as Ni	mg/L	ND	ND	ND	ND	3	APHA (23rd Edition) 3111 B
18	Zinc as Zn	mg/L	3.61	2.44	0.94	0.86	6	APHA (23rd Edition) 3111 B
19	Cadmium	mg/L	ND	ND	ND	ND	2	APHA (23rd Edition) 3111 B
20	Iron as Fe	mg/L	1.90	1.46	0.95	0.52	3	APHA (23rd Edition) 3111 B
21	BOD (5 days at 20°C)	mg/L	386	292	112	15.6	300	IS 3025 (Part 44)
22	COD	mg/L	1331	1024	418	60.8	750	APHA (23rd Edition)5220 B
23	Chlorides as Cl	mg/L	709	509	419	409	600	IS 3025 (Part 32)
24	Sulphates as SO_4	mg/L	129	101	94.9	89.9	1000	IS 3025 (Part 24)
25	Total Dissolved Solids	mg/L	2016	1671	1449	986	2100	IS 3025 (Part 16)
26	Insecticides/Pesticides	mg/L	--	--	--	Absent	Absent	USEPA 508 1995/ USEPA 525.2 1995/ USEPA 532
27	Sodium Absorption Ratio	--	14.1	12.6	6.4	5.9	26	IS 11624 2015
28	Sodium Percentage	%	58.19	56.58	56.67	59.44	60	SOP/CHM/W/21
29.	Bio-assay test	%	--	--	--	92 % survival of fish after 96 hrs in 100 % sample	90% survival of fish after 96 hrs. in 100 % sample	OECD 203/IS: 6582-2001

*ND = Not Detected

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Clean Environment Research Centre
Department of Civil Engineering

1 Name & Address of the party : **Coromandel International Limited.**
Plot No. 2102,2104/1,735, &2112/2113
Sarigam GIDC Estate, Sarigam,Pincode: 396155

2 Sampling by : Clean Environment Research Center, DoCE, SVNIT, Surat

3 Nature of the sample : Sludge

4 Protocol (Purpose) : Environment Audit (2nd Monitoring)

5 Date of Visit : 31/12/2022

Solid/Hazardous Waste Report

Sr. No.	Parameters	Unit	Results		Test Method
			ETP Sludge	Organic Residue	
1	Organic compound	%	15.40	5.15	SOP/CHM/HW/10
2	Inorganic compound	%	41.76	46.73	SOP/CHM/HW/10
3	GCV	Kcal/kg	GCV Not observed by bomb calorimeter method	GCV Not observed by bomb calorimeter method	IS:1350 (P-2) 2017
4	Moisture	%	42.84	48.12	IS 2720 (Part 2)
5	COD	mg/kg	9	72406	SOP/CHM/HZW/5
6	BOD	mg/kg	2.32	17660	SOP/CHM/HZW/6
7	TSS	%	57.16	51.88	SOP/CHM/HZW/9
8	pH	--	9.48	6.95	USEPA 9045 D

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Noise Level Report

Sr. No.	Location	Noise level dB(A)	Test Method
1	Near DG Room	66.2	IS 9876 : 2013 / IS 9989 : 2014
2	Near ETP	68.4	
3	Near Main Gate	58.4	
4	Near Mencozeb Plant (New)	72.3	
5	Near Boiler	73.2	
6	Near Canteen	66.4	
7	Near Incinerator	69.8	

Jariwala 21/3/23

Dr. Namrata D Jariwala
Coordinator, Environmental Audit Cell
SVNIT, Surat- 395007, Gujarat.
Mo:91-94274-92963
E-mail: envaudit@svnit.ac.in

Christian 21/3/2023

Dr. R. A. Christian
I/C Environmental Engg. Lab

21.111.23

Forwarded through
Head, DoCE

TERMS AND CONDITIONS GOVERNING THE TEST REPORT ISSUED

1. Samples are drawn by Environmental Engineering Laboratory, DoCE, S.V.N.I.T., Surat, unless otherwise mentioned. The results are applicable only to the submitted sample. Endorsement of the products is neither inferred nor implied.
2. The test report shall not be reproduced in full or part without the written approval of the Environmental Engineering Laboratory, DoCE, S.V.N.I.T., Surat.
3. The test report in full or part shall not be used for promotional or publicity purpose without the written consent of Environmental Engineering Laboratory, DoCE, S.V.N.I.T. Surat.
4. Perishable samples will be destroyed after testing, others after 07 Days from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.
5. Any dispute subjected to Surat jurisdiction.
6. Any correction invalidates this test report.
7. S.V.N.I.T, Surat will not be responsible if any legal issue arises in future

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ANNEXURE-R-8

GUJARAT POLLUTION CONTROL BOARD
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
23222756
Website: www.gpcb.gov.in
https://gpcbxgn.gujarat.gov.in

REJECTION ORDER

GPCB ID : 24285

NO. GPCB / SAR / CCA / 24285 /603879 dated 20/10/2021

To,
Coromandel International Limited, Category: RED / LARGE

PLOT NO:2102, 2104/1,735,&2112/2113,
sarigam gidc estate, sarigam ,, ,
SARIGAM - 396155
Contact Person: Mr. Dinesh Chandra Patil - Associate VP& Unit Head, Mob:9909994167, Ph:02602780201
DIST: Valsad-Sarigam, TAL: Umbergaon, SIDC: Sarigam

Subject : CCA-AmmendmentRejection Order

Reference : Your application Inward No 191702 Dated 08/03/2021

In exercise of the power conferred by clause (b) of sub-section (1) of section 27 of the Water (Prevention and control of Pollution) Act,1974 and sub-section (4) of section 21 of the Air (Prevention and control of Pollution) Act , 1981 and Rule 7 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, framed under Environment (Protection) Act -1986.This Board is empowered to reject the Consolidated Consent and Authorization.

Your above referred application is hereby refused for the following reasons

1 1. As submitted; the by-product is selling out to trader..... is not convincing for trader instead of actual users.
2. You are unable to submit details of actual user regarding disposal of spent acid.
3. There is discrepancy in online data submitted on PARIVESH Portal & No Pollution increasing Certificate of Schedule-1 Auditor.
4. Presently Unit is not in compliance.

You shall not carry out any activity mentioned in as applied in above referred application without prior consent of this Board.

Please note that to operate an industrial plant without prior consent is a punishable offence as deemed fit under The Water Act, 1974, The Air Act-1981 and The Environment (Protection), 1986.

Hence you are directed to comply above reasons and re apply for obtaining valid CCA.

TRUE COPY ADVOCATE

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(M.V. PATEL, UNH - Sarigam)

ANNEXURE-R-9

GUJARAT POLLUTION CONTROL BOARD

Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
23222756
Website: www.gpcb.gov.in
https://gpcbxgn.gujarat.gov.in

REJECTION ORDER

GPCB ID : 24285

NO. GPCB / SAR / CCA / 24285 /679326 dated 29/07/2022

To,
Coromandel International Limited, Category: RED / LARGE

PLOT NO:2102, 2104/1,735,&2112/2113,
sarigam gidc estate, sarigam ,, ,
SARIGAM - 396155
Contact Person: Mr. Dinesh Chandra Patil - Associate VP& Unit Head, Mob:9909994167, Ph:02602780201
DIST: Valsad-Sarigam, TAL: Umbergaon, SIDC: Sarigam

Subject : CCA-RenewalRejection Order

Reference : Your application Inward No 203853 Dated 11/10/2021

In exercise of the power conferred by clause (b) of sub-section (1) of section 27 of the Water (Prevention and control of Pollution) Act,1974 and sub-section (4) of section 21 of the Air (Prevention and control of Pollution) Act , 1981 and Rule 7 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, framed under Environment (Protection) Act -1986.This Board is empowered to reject the Consolidated Consent and Authorization.

Your above referred application is hereby refused for the following reasons

1 1. Presently Unit is not in compliance.
2. You have not complied CCA-Amendment rejection order dated 20/10/2021.
3. Proposal for by-product which is not acceptable as per provisions of HWM Rule, 2016.

You shall not carry out any activity mentioned in as applied in above referred application without prior consent of this Board.

Please note that to operate an industrial plant without prior consent is a punishable offence as deemed fit under The Water Act, 1974, The Air Act-1981 and The Environment (Protection), 1986.

Hence you are directed to comply above reasons and re apply for obtaining valid CCA.



For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(M.V. PATEL, UNH - Sarigam)

ANNEXURE-R-10

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/08-2022-23/ID-24285

Date: 24/08/ 2022

To,

Mr. A.O.Trivedi
Regional Officer
Gujarat Pollution Control Board
Sarigam.

Subject: Submission of Re-apply application of Consolidated Consent & Authorization (CC&A) Renewal

Ref : CC&A Renewal Application Inward No.262830, dated 21.08.2022

Dear Sir,

This has reference to the above-mentioned subject, we hereby submitting the 2 sets of hardcopies along with the payment acknowledgement from the XGN portal and necessary annexures.

Kindly acknowledge the same.

With Best Regards,
For Coromandel International Limited

Mr. CH Santosh
General Manager and Unit Head.

C.C.: Sarigam' Unit Head- Gandhi Nagar, GPCB

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Forwarding & Undertaking Letter from Industry

Application for consent for establishing / operation the industrial plant / plants under Section 21 of the Air (prevention & Control of Pollution) Act, 1981

Important Note : This Document or its copy does "NOT" serve as a Supporting Document Proof of Industry's Submission of an Application for a NOC / Consent. This Letter does "NOT" ensure that the Application FEES has been paid.

Application Purpose : CC&A Renewal for validity period of 5 years AND Amendment in Consolidated Consent & Authorization (CC&A) for Hazardous Waste Mode of disposal

Print Date: 22/08/2022

PCB-ID : 24285
INWARD : 262830
Dt:21/08/2022

From : **Coromandel International Limited, Category: RED / LARGE**
PLOT NO:2102, 2104/1,735,&2112/2113,
sarigam gidc estate, sarigam „ -,
SARIGAM - 396155
Contact Person: Mr. Rahul Tyagi AGM-Environment, Mob:9265668642,
Ph:02607135135
DIST: Valsad-Sarigam, TAL: Umbergaon, SIDC: Sarigam

Scrutinized By: R.K. Maheta,SO(447)

To,
The Member Secretary,
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010

I / We here by Submitting application for CCA ,Inward No : 262830 ,Date : 21/08/2022 for COR(CCA-Re Apply).

Applying For : A,W,H Validity : 5 Years Grant By : CHR

Air Sector :20000~Large Scale Industry Water Consumption : 1078.000 klpd

Haz Sector : 5000~Large Scale Industry No of Plants : 6 Incenerator : 2

Investment	Air	Water	Hazardous
283.1584286 Crs	20000	40000	5000+32500
0 Rs	1 Years	1 Years	1 Years

Payable Fees : Air : 140000, Water : 40000, Haz : 37500

Paid Amount : 237500, DD No : YSBI1361171689, Dt: 8/20/2022, at SBI , ***

Query / Reply:

	I / We have Uploaded the following PDFs	Date	# Files	Size(kb)	#Page
1	PLI - PLI Policy	03/08/22	1	4485	48
2	SSI - SSI-IEM-C.A Certi / Investment Proofs	02/08/22	1	1760	6
3	PLL - Plan LayOut + Site Plan	02/08/22	1	2838	10
4	DIR - List of Directors / Partners	02/08/22	1	1986	11
5	000 - Any Specific Information Called for [in SCRUTINY]	22/12/21	1	74986	247
6	ACA - Adequacy Certi from Env. Auditor [ONLY NOC]	30/06/21	1	33493	106
7	UNT - Undertaking of Non Applicability of Air/Water/Haz	13/01/21	1	9061	32
8	BGR - Upload Bank Guarantee for Revocation	27/11/19	1	5963	19
9	MFG - Details of Mfg Processes & Diagrams	18/08/19	1	56681	387
10	NOA - Notarized Affidavit for Revocation Application	07/06/19	1	2346	4
11	MBO - Material balance without utilizing Hazardous waste	05/10/15	1	1307	8
12	INV - *** Pls ADD this file in SSI tag- Previous Cases	24/10/11	1	289	2
13	HW3 - *** N.A Now !!! (Details of HW - 2008 rules)	24/10/11	1	413	34
14	WAT - *** BreakUp of Water Uses & balance	24/10/11	1	442	33
15	RAW - *** Raw materials / Products with QTY-Month	24/10/11	1	483	56
16	TFS - Treatability/Feasiblity Study Report	27/02/10	1	35	8
17	PHT - *** Photos of Haz Waste Storage Facilities		0	-1	-1
18	EC1 - E.C Application Form-1		0	0	0
19	ECP - 1-2 Page Explaination For E.C on Letter-Pad		0	0	0
20	EIA - Executive Summary Statement		0	0	0

Company s SEAL

TRUE COPY ADVOCATE

1 (Through XGN)

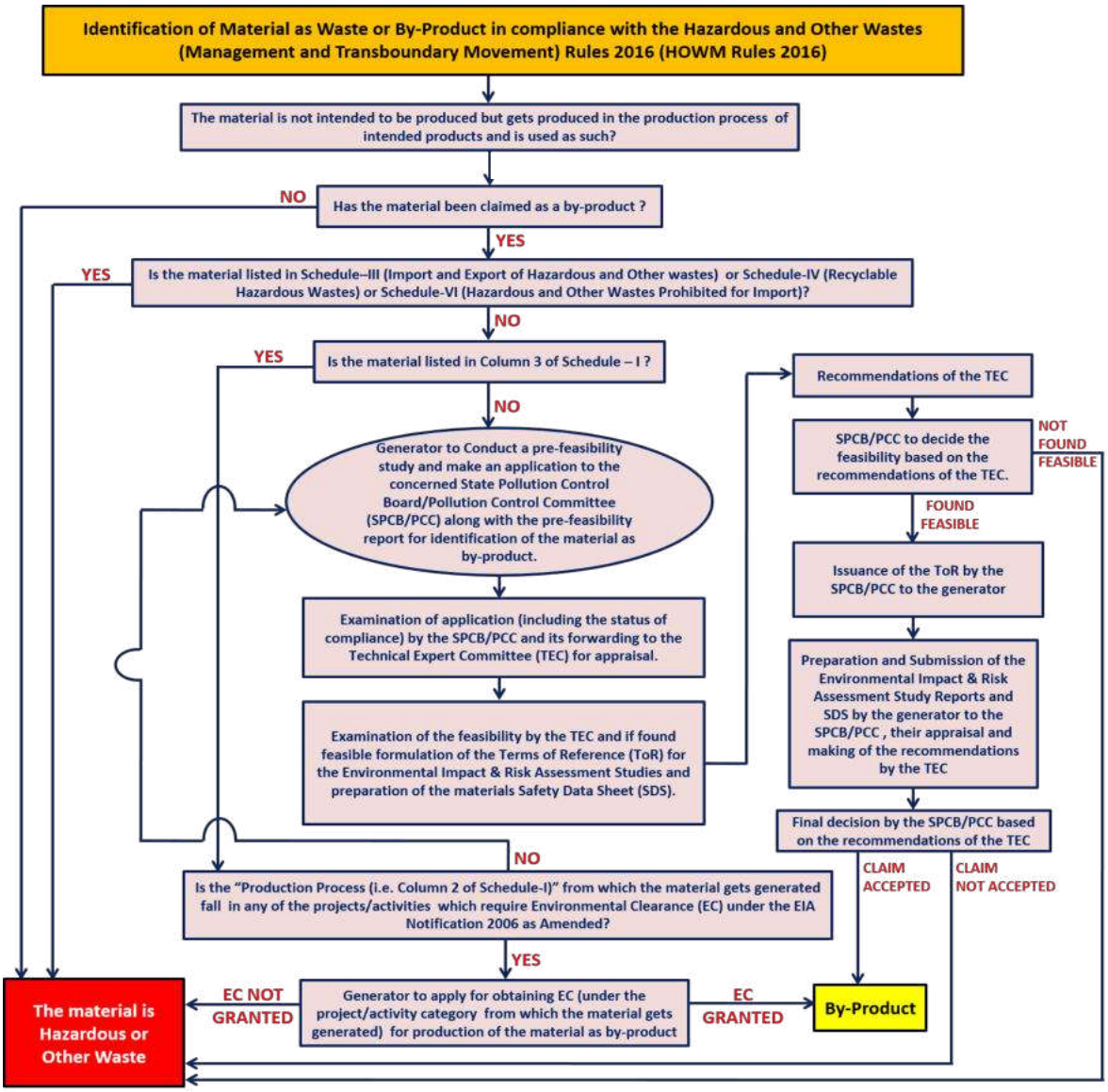
RECEIVED
G P C Board Sarigam
Sign. Dt. 24/08/2022

N I C

ANNEXURE-R-11

Framework on Identification of Materials Generated from Industrial Processes as Wastes or By-products

[Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016]



(September, 2019)

Central Pollution Control Board
(Ministry of Environment, Forest and Climate Change)
Parivesh Bhawan, East Arjun Nagar, Delhi- 110032

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1.0 Background

Industrial process may also generate waste(s) and by-product(s) besides products(s). The management of Hazardous and Other wastes in India is regulated as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016)

The "waste" is defined under Clause 3(1) (38) of the HOWM Rules, 2016 as follows:

Waste means materials that are not products or by-products, for which the generator has no further use for the purposes of production, transformation or consumption. The explanation incorporated further for the purposes of this clause states as follows:

(i) *Waste includes the materials that may be generated during, the extraction of raw materials, the processing of raw materials into intermediates and final products, the consumption of final products, and through other human activities and excludes residuals recycled or reused at the place of generation; and*

(ii) *By-product means a material that is not intended to be produced but gets produced in the production process of intended product and is used as such.*

The HOWM Rules are silent about the conditions in regard to the suitability of the "as such use" of the material that is not intended to be produced but gets produced in the production process of intended product for its identification as a "by-product". The distinction between when a material generated from a production process should be considered as a "by-product" and when it should be considered as a "waste" is required to be discern critically. In case a "waste" escapes as "by-product", it may get out of ambit of the aforesaid regulations of HOWM Rules and carry the risk of adverse impacts on human health and environment. On the other hand, if a "by-product" gets categorized as "waste", its generator will have the compulsion of complying with all requisite requirements prescribed under the said HOWM Rules by such generator.

This, therefore, requires formulation of criteria for identification of materials as "wastes" or "by-products".

This document has been prepared based on report submitted by Technical Committee (comprising of Dr. Ranveer Singh Mahwar, Former Additional Director, CPCB and Ms. Deepti Kapil, Scientist 'D', Waste Management- II Division, CPCB, Delhi) constituted by CPCB and technical inputs given by Sh. Bharat K Sharma, Additional Director, CPCB. The report has been

reviewed by CPCB and approval has also been accorded by Ministry of Environment, Forest & Climate Change, Govt. of India.

The preparation of this document is also in compliance with the orders dated 12/04/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of Original Application No. 804/2017: Rajiv Narayan & Anr. Vs Union of India & Ors wherein the directions of the Hon'ble Tribunal include preparation of guidelines or protocol on how to decide a material to be a "by-product".

The details of the methodology followed in the process; the findings of the global survey and review study done to get the definitions of wastes and by-products contained in the international regulations including the Basel Convention on the issue; an analysis of the HOWM Rules, 2016 and the related environmental legislation specially the Environment Impact Assessment (EIA) Notification 2006; the steps to be followed for identification of material as "waste" or "by-product"; and; Criteria for determining a material as "by-product"; Guiding factor for accepting a material as "by-product" are given in the subsequent paragraphs of this document.

This document would help in identification of material generated from industrial processes as "wastes" and "by-products" thereby resulting into effective enforcement of the HOWM Rules, 2016.

2.0 Methodology

The methodology followed by the committee includes extensive surveys and discussions for, (i) collection and review of the relevant provisions contained in the Basel Convention, the regulations of European Union (EU) and other countries; (ii) critical analysis of HOWM Rules, 2016 and the related environmental legislation of the country; (iii) the various essential aspect (such as feasibility, environmental and health impacts and risk analysis) needing assessments for identification of a material as a "waste" or a "by-product"; (iv) formulation of the criteria/steps to be followed in the process of deciding a material to be a "waste" or a "by-product" and (v) guiding factors for accepting a material as "by-product".

A summary note on the proposed preparation of these guidelines was also posted on the CPCB's website inviting comments from all interested. The comments received were reviewed and incorporated for the best possible inputs.

3.0 Global Scenario on Definitions of Wastes to By-product Relationship and Its Implications

The regulations of the different countries including EU and Basel were reviewed for the definition of wastes, by-products and related terms to explore the criteria that are followed for identification of waste and by-products. This was done to find how these definitions identify a material as 'waste' and how a material is declared as a 'by-product'.

The definitions as laid in the Basel Convention and other international agencies/countries are as follows:

Basel Convention - "Wastes" are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.

OECD-Waste refers to materials that are not prime products (that is, products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and of which he/she wants to dispose.

UNSD (United Nations Statistics Division)– Wastes are materials that are not prime products (that is products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and of which he/she wants to dispose.

Australia- There are a number of definitions of waste that are in use for a variety of purposes across Australia. In-fact, the same material has been defined and classified differently depending on the purpose of the classification, both within a jurisdiction and across jurisdictional borders of the country.

Japan- "waste" refers to refuse, bulky refuse, ashes, sludge, excreta, waste oil, waste acid and alkali, carcasses and other filthy and unnecessary matter, which are in solid or liquid state (excluding radioactive waste and waste polluted by radioactivity).

European Commission (EU)-

- Waste shall mean any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard.
- Production residue- a material that is not deliberately produced in a production process but may or may not be a waste.
- A production residue that fulfils the conditions of Article 5(1) of the EU's Waste Framework Directive (WFD) is a by-product. Bearing in mind that any substance or object can be either waste or non-waste, by-products are regarded by definition as non-waste. This means that

by-products should be subject, where applicable, to legislation which excludes waste from its scope.

- Article 5(1) WFD sets out the following four conditions that a production residue must meet in order to be considered a by-product:
  - ✓ Further use of the substance or object is certain.
  - ✓ The substance or object can be used directly without any further processing other than normal industrial practice.
  - ✓ The substance or object is produced as an integral part of a production process; and
  - ✓ Further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health-protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.
- A production residue is something other than the end product that the manufacturing process directly seeks to produce. Where the production of the material concerned is 'the result of a technical choice', it cannot be a production residue and is considered a product.

The survey revealed that there is a wide range of internationally accepted definitions for wastes, process residue and by- products. These include right from the definition of a waste as "material or an object which the holder decided to discard or intends or is required to discard" to a "material which is destined for storage in a secured landfill or incineration after its all possible use and recovery".

It is observed that most of the waste definitions deal with the existing waste. Such definitions seem to accept the fact that people/institutions throw things away, and therefore, the existing legislations appear to be concerned with the dilemma of 'what to do with it?' Another problem with most of these definitions is that they do not suggest that creating waste is an unsustainable option. It seems acceptable to discard something no longer wanted, or to create something with no eventual long-term use at all.

The global survey and review study indicate that the existing definitions are not capable of constructing a system, the application of which can clearly provide the description of the about the type of materials that are not intended to be produced but gets produced in the production processes can be used "as such" without any further processing.

The EU scenario, however, appears to show an emerging recognition that the wastes collected for recycling purposes should be defined as secondary raw materials. It also states that "A by-product or residual product does not constitute a waste if it is destined for direct re-use in its existing form and if the use of a residue as a substitute or ingredient is as environmentally sound as the material it is replacing".

The EU regulations have laid conditions for a material that is not deliberately produced in production process to be a by-product and not a waste. The conditions include the feasibility of the material for its intended use as by-product as well as ensuring of the absence of any adverse impact on the environmental, health and other risks in the process. These conditions have, therefore, been taken into consideration for the preparation of this framework.

4.0 Definitions of Waste and By-product in the HOWM Rules 2016 – An Analysis

4.1 Definitions

4.1.1 Hazardous Waste

The Rules 3(1)(17) defines hazardous waste as : any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances, and shall include - (i) waste specified under column (3) of Schedule-I; (ii) waste having equal to or more than the concentration limits specified for the constituents in class A and class B of Schedule-II or any of the characteristics as specified in class C of Schedule-II; and (iii) wastes specified in Part A of Schedule-III in respect of import or export of such wastes or the wastes not specified in Part A but exhibit hazardous characteristics specified in Part C of Schedule-III.

4.1.2 Other Waste

The Rule 3(1)(23) defined "other wastes" as wastes specified in Part B and Part D of Schedule-III for import or export and includes all such waste generated indigenously within the country.

4.1.3 Waste

The Rule Section 3(1)(38) defines "Waste" as materials that are not products or by-products, for which the generator has no further use for the purposes of production, transformation or consumption. There is an explanation included in this clause which states that the (i) Waste includes the materials that may be generated during, the extraction of raw materials, the processing of raw materials into intermediates and final products, the consumption of final products, and through other human activities and excludes residuals recycled or reused at the place of generation; and (ii) by-product means a material that is not intended to be produced but gets produced in the production process of intended product and is used as such.

It may be noted here that the wastes are also materials that are never intended to be produced but get produced in the production processes of the intended products and the HOWM Rules 2016 permit identification of only that material as by-product which can be used "as such" without any further processing. **Also, the definition of the by-product given under Rule 3(1)(38) does not specify anything about "as such" as an identification "notwithstanding anything contained in the rest of the provisions of the HOWM Rules 2016 or any other Rules notified under**

Environment (Protection) Act 1986". This implies that the identification of a material as 'waste' or as 'by-product' under this Rule is to be permitted only if such an identification does not involve anything inconsistent with the rest of the provisions of the HOWM Rules 2016 and only after ensuring compliance to the concerned other Rules notified under the Environment (Protection) Act 1986.

4.2 Transboundary Movement of Wastes and Compliance to the Basel Convention

The Hazardous and Other Wastes listed in Schedule-III (Import and Export of Hazardous and Other wastes) and Schedule-VI (Hazardous and Other Wastes Prohibited for Import) of the HOWM Rules 2016 are part of the Annexure-VIII and Annexure-IX of the Basel Convention on the Transboundary Movement of Hazardous Wastes.

The Rule 12(7) of the HOWM Rules allows export of the wastes that are prohibited for import (Schedule-VI) with the permission of Ministry of Environment, Forest and Climate Change. Infact, each of the wastes listed in Schedule-III and Schedule-VI has a specific Basel Number for the purpose of its identification for tracking of its transboundary movement. The Govt of India being a party to the Basel Convention requires these materials to remain identified as wastes for maintaining alignment with the compliance requirements of this convention.

4.3 Recyclable Wastes

The Rule 3(1) 25 defines "recycling" as reclamation and processing of hazardous or other wastes in an environmentally sound manner for the originally intended purpose or for other purposes.

There are a total of 20 commonly recyclable wastes listed in Schedule-IV of the HOWM Rules 2016. The classification of these wastes as recyclable itself implies that they are not suitable for use "as such" in any of the industrial processes and hence cannot be identified as by-products.

4.4 Utilization of Hazardous and Other Wastes as Resource

The Rule 9 (1) of the HOWM permits utilisation of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process) after obtaining the authorisation from the concerned SPCB/CPCB as per the procedure prescribed therein.

This implies that the suitability of the waste for its utilization as a resource is limited to the uses permitted under this Rule without any change in its present status of its identification in the HOWM Rules 2016.

4.5 Schedule-I, Schedule-II and Identification of by-products

4.5.1 Schedule-I

There are a total of 128 types of hazardous wastes generated from 38 different industrial processes listed in the Schedule-I of HOWM Rules. A comparison of this list with the projects/activities prescribed in the Environment Impact Assessment Notification, 2006 shows that the establishment or any change in the activities of the 28 of these 38 processes requires obtaining of Environmental Clearance (EC) from the Prescribed Authority. A total of 99 types of wastes are generated from these 28 processes. The rest of the 10 processes generate 29 types of wastes. This implies that the consideration for any of the type waste that gets generated from the any of the process appearing in the Schedule-I of HOWM Rules and also covered in the projects/activities listed the EIA Notification, as "by-product" requires the generator to seek Environment Clearance from the concerned Prescribed Authority for such a production.

4.5.2 Schedule-II

This schedule classifies a waste to be hazardous wastes into three classes namely Class A, Class B and Class C.

The Class A is based on leachable concentration limits [Toxicity Characteristic Leaching Procedure (TCLP) or Soluble Threshold Limit Concentration (STLC)]. There are a total of 79 constituents (A1 to A79) for which limits of the leachable concentrations have been specified, the exceeding of any of more which means the waste is a hazardous.

The Class B is based on Total Threshold Limit Concentration (TTLC). There are only two constituents (B1 and B2) and their respective TTLC limits specified in this class which if exceeded will mean the waste to be hazardous.

The schedule also requires that the hazardous constituents to be analysed in the waste shall be relevant to the nature of the industry and the materials used in the process.

The Class C classification is based on the hazardous Characteristics of the wastes. A waste that contains any of the 50 constituents listed therein will be considered as hazardous if the waste exhibits any of the 13 characteristics (C1 to C13) listed in this schedule. The 13 characteristics are, Flammable (C1), Corrosive (C2),Reactive or explosive (C3), Toxic (C4), Substances or Wastes liable to spontaneous combustion(C5), Substances or Wastes which, in contact with water emit flammable gases (C6), Oxidizing (C7), Organic Peroxides (C8), Poisons(acute) (C9),Infectious (C10), Liberation

of toxic gases in contact with air or water(C11), Eco-toxic (C12) and Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above (C13).

4.6 Relevance to Identification of By-product

It is evident from the analysis of the definitions provided in the HOWM Rules 2016 that any material that is not intended to be produced but gets produced in any of the process of production of the intended products may get remain as a 'waste' or as a 'by-product'.

A clear and consistent distinction between when a material obtained after a production process should be considered as a 'by-product' and when it should be considered as 'waste' is of great concern that will significantly influence the enforcement of HOWM Rules 2016.

It is also to be noted here that various inorganic salts, acids, bases, etc. are commonly sold as by-products and used directly without any further processing in various ancillary industries. However, such acids, salts, etc. need to be examined with respect to contaminations, if any, which may have impact on human health and environment and depending upon level of presence or absence of such contaminations, such acids, salts, etc. are required to be categorized as by-product or waste. For instance, generator of spent sulphuric acid from dye & dye intermediates or other chemical manufacturing processes may claim the same as `by-product' arguing that it contains 30-70% sulphuric acid and can be used in Single Super Phosphate (SSP) production but such usage may have adverse impact on soil, water bodies or plant since the spent acid may contain harmful organic compounds, metals, halogen, etc. (depending upon process of spent acid generation) which could be embedded in SSP though in trace level but continuous use of such SSP in agriculture over the years may result in adverse impact on soil, flora, fauna, etc. Hence, such spent acid cannot be declared as by-product and need to be regulated as waste and its utilization as resource recovery, if any, also requires to be regulated by way of preparing SOP/guidelines under Rule 9 of the HOWM Rules, 2016. SPCBs/PCCs are required to discern whether a given material is a waste or by-product. Without this clarity, there is a possibility that the provision of "by-product" in the hazardous waste rules may be misused by hazardous waste generators to escape from the stringent provisions of the rules.

Thus, **the identification of any material as by-product on the other hand will means that the material has been found as a suitable resource in its all the possible end use scenarios and also to the extent that its regulation under the HOWM Rules 2016 is not required except in case of the by-product so identified become surplus or expired or an off**

specification material requiring disposal as per the provisions of these Rules. This means that the by-product so identified has to be as good as a product in the context of the Feasibility, the Environmental Impact and the Risks involved in its all possible end use scenarios.

5.0 Essential Aspects Involved in the Identification of Materials as Wastes or By-products

(i) Materials that are not intended to be produced but get produced in any of the processes of production of the intended products will invariably contain a variety of hazardous constituents depending upon the nature of the industry and the materials used in the process in which they get produced.

(ii) The materials that are not intended to be produced have no control of their quality. Infact, the quality will be highly dependent even on the level best management practices followed in the production system. This uncertain quality is expected to deteriorate even further in case such materials get identified as by-products which mean their coming out from being regulated under the HOWM Rules 2016 and other concerned National and International environmental legislation that are applicable to the wastes.

(iii) The use "as such" of such a material may lead a complete change in characteristics including hazardous constituents contained in it. The constituents which are marginally leachable may become completely soluble and even get vaporised resulting into contamination of not only the products made from its use but also into an increased and/or additional release of contaminants in air, water, soil, working environment. This may also result into a total change in the characteristics of the wastes that are generated in its end use process. The use "as such" of such a material may also result into a non-hazardous waste becoming a hazardous waste and/or recyclable waste becoming a non-recyclable waste in the end use process industry.

(iv) The use of such materials may also result into products which may become unfit for use in the food and pharmaceutical industry.

(v) The use of such a material as substitute of the products already in use may have an adverse impact on the overall economy of the entire process depending upon the production, demand and supply of the products it is replacing and the presence of multiple constituents in the materials that are not intended to be produced. For instance, the use "as such" of the spent HCl (that is generated in the metal surface treatment processes) will not only mean the risk of the HCl produced from the Chlor-Alkali Industry becoming surplus. Moreover, the spent HCl generated from metal surface treatment contains a number of

heavy metals which even if assumed to end up as waste in the process of its use will mean a waste with high level of these heavy metals.

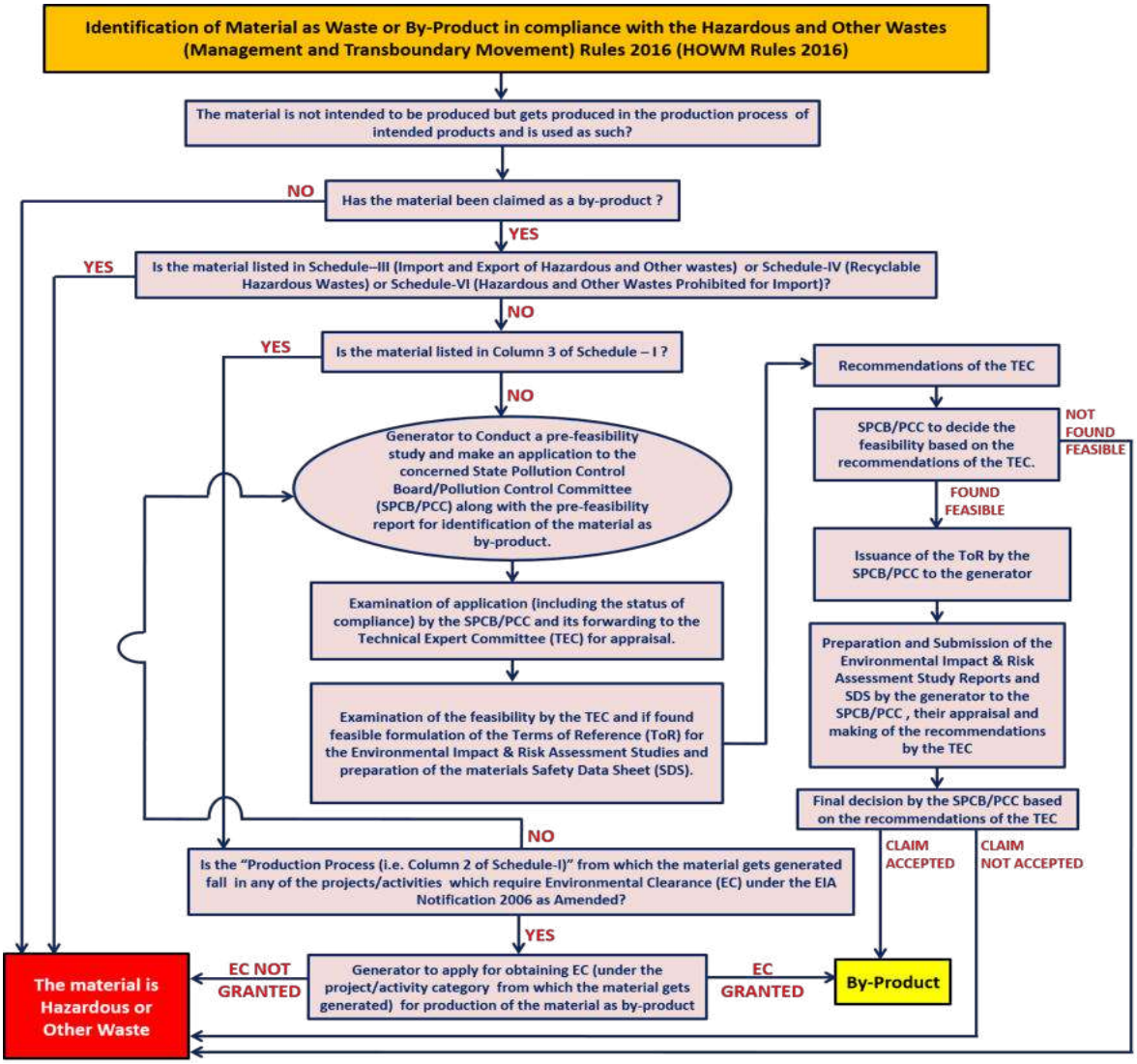
(vi) A complete knowledge of the Life Cycle of the constituents present in such materials is a must. This means ensuring availability of the credible data/information on the composition of such materials and the fate of each of the constituent contained in it during its use "as such" process.

(vii) It can be therefore safely concluded that consideration of any such material for its identification as 'by-product' should be based on conducting of a prefeasibility study first and if found feasible conducting of the Environmental Impact and Risk Assessment studies for confirmation of the absence of any adverse impacts and risks in the end use of the material as substitute in any other process.

6.0 Criteria for Identification of material as waste or by-product

6.1 Overall Criteria Flow Chart

The overall process for identification of material as 'by-product is shown in the figure given below:



Note:

(i) Any material which was identified as hazardous waste under the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 will remain as Hazardous or Other Waste under the HOWM Rules 2016 unless the material is identified as a by-product following the above criteria.

(ii) The by-products identified through the criteria elaborated above will be applicable and enforceable only after suitable grant/amendment in Environmental Clearance, if applicable, and also, the grant

/amendment in consent under Water and Air Acts for the industry/activity/project. Till such time the original classification of the waste alongwith prescribed disposal mechanism stands for compliance.

(iii) The identification of a material as 'waste' or 'by-product' is to be done on case to case basis for the material that is claimed as by-product.

6.2 Steps to be followed

Step-1

Examine the production process and find out whether the material is "intended to be produced" or "not intended to be produced but gets produced". If the material produced is an intended production it is deemed to be a "**product**". If the material is not intended to be produced but gets produced in the production process and is being claimed as a by- product go to STEP-2.

Step-2

Check the classification of the material claimed as by- product as per the HOWM Rules 2016 and find out whether the material is listed in Schedule-III (Import and Export of Hazardous and Other wastes) or Schedule-IV (Commonly Recyclable Hazardous Wastes) or Schedule-VI (Hazardous and Other Wastes Prohibited for Import) of these rules. If the material is appearing in the aforesaid Schedules, it is deemed to be **"a hazardous or other waste"**. In case the material does not appear in any of these three Schedules go to next step.

Step-3

Check whether the material claimed as by- product is listed in Column 3 of Schedule-I of the HOWM Rules 2016. In case it is not listed in the Column 3 of this Schedule go to Step-4A and if listed in this schedule go to Step-5.

Step-4A

The generator to conduct a pre-feasibility study covering all possible end uses of material claimed as by-product and make an application to the concerned State Pollution Control Board/Pollution Control Committee

(SPCB/PCC) in the form prescribed[1] by the SPCB/PCC for this purpose along with the pre-feasibility report for identification of the material as by-product. The aspects to be covered (but not limited to) in the pre-feasibility study are given in **Appendix-I**.

Step-4B

The concerned SPCB/PCC to examine the application including the validity and status of the compliance of the conditions of the Consents, Authorization etc and forward the application to the Technical Expert Committee (TEC)[2]** for the appraisal of the feasibility of the material's identification as by-product. The generator along with the consultant/agency[3] engaged by him is required to make a presentation before the TEC. In case the pre-feasibility study is found feasible, the TEC may formulate the Terms of Reference (TOR) for conducting the Environmental Impact and Risk Assessment Studies and preparation of the material's Safety Data Sheet (SDS) by the generator (The OSHA- Hazard Communication Standard for Safety Data Sheets is attached at **Appendix-III** for reference). Based on the recommendations of the TEC, SPCB/PCC may take appropriate decision/ further action.

Step-4C

The SPCB may examine the recommendations of the TEC and communicate the generator accordingly for rejection of the claim or issuance of the TOR for conducting the Environmental Impact and Risk Assessment Studies and submission of the reports. The aspects to be covered (but not limited to) in these studies are given in **Appendix-II**.

Step -4D

The Submission of the Environmental Impact & Risk Assessment Study Reports and the Safety Data Sheet by the generator to the SPCB/PCC, their appraisal and making of recommendations by the TEC in regard to identification of the material as by-product. The generator along with the consultant engaged by him is required to present the details of the studies

[1] The SPCB/PCC may prepare an application format based on Form -1 provided in the EIA notification 2006, by incorporating the need and the type of the information and documents that may be needed for the purpose of identification of materials as waste or by-product.

[2] To be constituted by the SPCB/PCC or SPCB/PCC may assign this additional scope to the existing Technical Committee constituted for obtaining "No Increase in Pollution Load" certificate / permission from the State Pollution Control/Pollution Control Committee for cases of change in product mix without change in quantity and pollution load w.r.t. notification number S.O.3518(E) notified under the Environment (Protection) Act, 1986.

[3] Accredited by the National Accreditation Board for Education and Training (NABET), Quality Council of India

conducted and the findings and the SDS before the TEC. SPCB/PCC based on the recommendations of the TEC may take appropriate decision/ further action in this regard.

Step-4E

Final decision by the SPCB/PCC based on the recommendations of the TEC. In case the claim is accepted, the material gets identified as "**by-product**" and if not accepted it remains a "**hazardous or other waste**". In case of the material's identification as by-product, SPCB/PCC may ask the generator to obtain the revised consents and authorization accordingly.

Step-5

If the material claimed as by-product is listed in Column 3 of Schedule-I of the HOWM Rules, 2016, check whether the process from which its gets generated i.e Column 2 of Schedule-I falls in any of the projects or activities which require Environment Clearance (EC) under the EIA Notification 2006. In case listed in the EIA notifications, go to Step-6 else go to Step-4A.

Step-6

The generator may apply (under the project/activity category from which the material gets generated) to the concerned authority for obtaining the EC for the production of the material as by-product. The studies to be conducted for this purpose should include the aspects given in **Appendix-I** and **Appendix-II** and preparation of the material's Safety Data Sheet. In case the EC is granted the material may be identified as a "**by-product**". In case EC is not granted the material remains a "**hazardous or other waste**".

7.0 Guiding factors for accepting a material as "by-product"

Guiding factors for accepting a material as "by-product" would vary depending on the materials being generated and its intended use. However, following are general (but not limited to) criteria for accepting a material as "by-product":

(i) The material fits into the definition of "by-product" as defined under clause 3(1)(38) of the HOWM Rules, 2016.
(ii) Various constituents/contaminants and their concentration in the material are known.
(iii) The material doesn't require special purification/pre-processing when compared with the raw material which is intended to be substituted by the material.
(iv) The material meets BIS specification or other prescribed standards of the product intended to be substituted by material.
(v) Consumption of the material is known and there is sufficient and established demand for such consumptions.
(vi) Consumption of the material does not cause adverse impact on effluent emission/waste generation at the process where the same is intended to be used.
(vii) The constituents/contaminants present in the material do not have environmental impact and risk at its intended end use.
(viii) It doesn't have adverse impact on the market of the product which is intended to be substituted by the material.

The guiding factors may be considered by SPCBs/PCCs while accepting a material as "by-product". In the event of accepting a material as by-product, the SPCB/PCC shall also stipulate conditions w.r.t. handling and end use including Material Safety Data Sheet (MSDS) and the by-product shall be handled and managed as per the conditions stipulated by the SPCB/PCC.

8.0 Concluding Remarks

A material that is not intended to be produced but gets produced in the production process of intended product will remain as Hazardous and Other waste in the HOWM Rules 2016 unless it is identified as a by-product following the criteria given in these guidelines to confirm that the material's use "as such" is feasible in the country, does NOT involve any adverse impact on the environmental and risk of hazards, and its Safety Data Sheet is prepared and submitted by the generator of the material.

The by-products identified through the process elaborated in the present document will be applicable and enforceable only after suitable grant/amendment in EC, if applicable, and also, the grant /amendment in consent under Water and Air Acts for the industry/activity/project. Till such time the material or by-product shall be categorized as waste and managed accordingly. Further, quantity and end use of such by-product shall be specified in the amended EC/Consent.

Reference Links:

(1) Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008
http://cpcb.nic.in/displaypdf.php?id=aHdtZC9taHRydWxlczIwMDgucGRm

(2) Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
http://www.iwma.in/HWM%20Rules.pdf

(3) EIA Notification 2006
http://environmentclearance.nic.in/writereaddata/EIA_notifications/2006_09_14_EIA.pdf

(4) EIA Amendment Notification 2009
http://sikenvis.nic.in/writereaddata/S_O%203067-2009.pdf

(5) Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
https://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf

(6) National definition of waste- All Regions/Countries, Parties of the Basel Convention
http://www.basel.int/Portals/4/Basel%20Convention/docs/natreporting/2009/compI/2009-question-2a.pdf

(7) OECD – Glossary of Statistical Terms
https://stats.oecd.org/glossary/detail.asp?ID=2896

(8) UNEP- What is waste - A Multitude of Definitions and Approaches
http://www.grid.unep.ch/waste/html_file/06-07_what_waste.html

(9) Basel Convention Country Fact Sheet
http://archive.basel.int/natreporting/2006/cfs/japan.doc

(10) Waste definitions and classifications- Report on Issues, Opportunities and Information Gaps
http://www.environment.gov.au/system/files/resources/d05aa2d3-be01-44f3-904b-04dd09e9b0a1/files/waste-classification-gaps-part1.pdf

(11) Environment Agency (EU) End-of-waste and by-product hazard and risk assessment
https://s3-eu-west-1.amazonaws.com/is-it-waste/risk-guidance.pdf

(12) Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste
http://ec.europa.eu/environment/waste/framework/pdf/guidance_doc.pdf

(13) COMMUNICATION FROM THE COMMISSION on the implementation of the circular economy package: options to address the interface between chemical, product and waste legislation
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SC0020&from=EN

(14) The health and environmental impacts of hazardous wastes- Impact Profiles
http://www.environment.gov.au/system/files/resources/bc0e52ba-8f78-4ce1-83b4-4910f4a1f0e9/files/hazardous-waste-impacts.pdf

(15) Guidance on the preparation of safety Data Sheets -The United Nations Economic Commission for Europe (UNECE)
https://www.unece.org/fileadmin/DAM/trans/danger/publi/ghs/ghs_rev07/English/07e_annex4.pdf

(16) Hazard Communication Standard: Safety Data Sheets
https://www.osha.gov/Publications/OSHA3514.html

(17) Hazard Communication Standard: Safety Data Sheets
https://www.osha.gov/Publications/OSHA3514.pdf

(18) What is a Material Safety Data Sheet (MSDS)- University of Regina, Canada
https://www.uregina.ca/hr/hsw/assets/docs/pdf/Laboratory-Safety/Material-Safety-Data-Sheet.pdf

Appendix-I

Aspects to be covered (but not limited to) in the pre-feasibility study[4]

(1) Annual quantity of the claimed by-product generation

(2) Composition of the claimed by-product and the observed maximum concentration of each of the constituents contained in it (please refer Schedule-II for identification of the constituents concerning the material).

(3) The product which the claimed by-product is expected to substitute and its end use process.

(4) Composition of the product presently in use in regard to the concentration of each of the constituent identified under item (2) above.

(5) Acceptability of the claimed by-product's composition compared to product presently in use specially, in terms of products that are being produced in the process where the claimed by product is proposed to be used.

(6) Impact on the type of the hazardous wastes that are being generated in the process where the claimed by product is proposed to be used. This to be specially seen from the point that the use of claimed by-product may have a negative impact on the usefulness of the hazardous or other waste (that is presently getting generated in the end use process) as resource or energy recovery.

(7) Present status of the demand and supply of the product (which would be partially or fully substituted by the claimed by-product, as the case may be) presently in use.

(8) Impact on the market of the product as a result of the substitution by the claimed by-product.

(9) Scope for the substitution of the product currently in use especially in case the product itself is not the primary product of the industry where it gets produced. To make it clear here that the HCl is mainly produced as a secondary material in the production of caustic soda in the country. Any substitution of its use with the spent HCl will therefore mean the fresh HCl becoming surplus in the caustic Soda Industry and requiring treatment for disposal.

(10) Cost of upgrading (if required) the pollution control measures presently in place specially in the context of their need up gradation for compliance to the conditions of the consent and Authorization.

[4] To be conducted by an agency accredited by the National Accreditation Board for Education and Training (NABET), Quality Council of India.

(11) The overall impact of using the claimed by-product in the process where a fresh product is currently in use in the country in terms of the quality of the products that are being produced and the wastes which get generated.

Appendix-II

Aspects to be covered (but not limited to) in the Environmental Impact and Risk Analysis Studies[5]

(1) Annual quantity of the claimed by-product generation

(2) Composition of the claimed by-product and the observed maximum concentration of each of the constituents contained in it (please refer Schedule-II for identification of the constituents concerning the material).

(3) Impact of the use of the claimed by-product on the process (where it is intended to be used) with regard to the release of contaminants in the air, water, soil and work zone environment.

(4) Impact on generation of hazardous and other wastes from the proposed process, where the claimed by-product is intended to be used.

(5) Need of making changes in the existing air/water consents and authorization, where the claimed by-product is intended to be used.

(6) Impact on the adequacy of pollution control measures presently in place specially in the context of their need up gradation in compliance, where the claimed by-product is intended to be used.

(7) Expected impacts on the environment and human health, where the claimed by-product is intended to be used. This should be done on the lines of the EIA studies that are done for the new projects and the identification of the environmental and health management plans required to be added.

(8) Analysis of Risks involved in the end use of the material/product derived by using claimed by-product and identification of the additional requirements in the management plans

(9) The overall environment and human health impact of using the claimed by-product in the process where a fresh product (which would be partially or fully substituted by the claimed by-product) is currently in use and the risks involved in doing so.

(10) Justification of the acceptability of the findings.

[5] All the studies mentioned above should be conducted by an agency accredited by the National Accreditation Board for Education and Training (NABET), Quality Council of India, for this type of studies

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OSHA® BRIEF

Hazard Communication Standard: Safety Data Sheets

The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This brief provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). In addition, OSHA requires that SDS preparers provide specific minimum information as detailed in Appendix D of 29 CFR 1910.1200. The SDS preparers may also include additional information in various section(s).

Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

A description of all 16 sections of the SDS, along with their contents, is presented below:

Section 1: Identification

This section identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier. The required information consists of:

- Product identifier used on the label and any other common names or synonyms by which the substance is known.
- Name, address, phone number of the manufacturer, importer, or other responsible party, and emergency phone number.
- Recommended use of the chemical (e.g., a brief description of what it actually does, such as flame retardant) and any restrictions on use (including recommendations given by the supplier).

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Section 2: Hazard(s) Identification

This section identifies the hazards of the chemical presented on the SDS and the appropriate warning information associated with those hazards. The required information consists of:

- The hazard classification of the chemical (e.g., flammable liquid, category[1]).
- Signal word.
- Hazard statement(s).
- Pictograms (the pictograms or hazard symbols may be presented as graphical reproductions of the symbols in black and white or be a description of the name of the symbol (e.g., skull and crossbones, flame).
- Precautionary statement(s).
- Description of any hazards not otherwise classified.
- For a mixture that contains an ingredient(s) with unknown toxicity, a statement describing how much (percentage) of the mixture consists of ingredient(s) with unknown acute toxicity. Please note that this is a total percentage of the mixture and not tied to the individual ingredient(s).

Section 3: Composition/Information on Ingredients

This section identifies the ingredient(s) contained in the product indicated on the SDS, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed. The required information consists of:

Substances

- Chemical name.
- Common name and synonyms.
- Chemical Abstracts Service (CAS) number and other unique identifiers.
- Impurities and stabilizing additives, which are themselves classified and which contribute to the classification of the chemical.

Mixtures

- Same information required for substances.
- The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are:
  - Present above their cut-off/concentration limits or
  - Present a health risk below the cut-off/concentration limits.
- The concentration (exact percentages) of each ingredient must be specified except concentration ranges may be used in the following situations:
  - A trade secret claim is made,
  - There is batch-to-batch variation, or
  - The SDS is used for a group of substantially similar mixtures.

Chemicals where a trade secret is claimed

- A statement that the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.

[1] Chemical, as defined in the HCS, is any substance, or mixture of substances.

Section 4: First-Aid Measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical. The required information consists of:

- Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion).
- Description of the most important symptoms or effects, and any symptoms that are acute or delayed.
- Recommendations for immediate medical care and special treatment needed, when necessary.

Section 5: Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:

- Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation.
- Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns.
- Recommendations on special protective equipment or precautions for firefighters.

Section 6: Accidental Release Measures

This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard. The required information may consist of recommendations for:

- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing.
- Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing.
- Methods and materials used for containment (e.g., covering the drains and capping procedures).
- Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up).

Section 7: Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals. The required information consists of:

- Precautions for safe handling, including recommendations for handling incompatible chemicals, minimizing the release of the chemical into the environment, and providing advice on general hygiene practices (e.g., eating, drinking, and smoking in work areas is prohibited).
- Recommendations on the conditions for safe storage, including any incompatibilities. Provide advice on specific storage requirements (e.g., ventilation requirements).

Section 8: Exposure Controls/Personal Protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure. The required information consists of:

- OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.
- Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system).
- Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face, skin or respiratory protection needed based on hazards and potential exposure).
- Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material).

Section 9: Physical and Chemical Properties

This section identifies physical and chemical properties associated with the substance or mixture. The minimum required information consists of:

- Appearance (physical state, color, etc.);
- Odor;
- Odor threshold;
- pH;
- Melting point/freezing point;
- Initial boiling point and boiling range;
- Flash point;
- Evaporation rate;
- Flammability (solid, gas);
- Upper/lower flammability or explosive limits;
- Vapor pressure;
- Vapor density;
- Relative density;
- Solubility(ies);
- Partition coefficient: n-octanol/water;
- Auto-ignition temperature;
- Decomposition temperature; and
- Viscosity.

The SDS may not contain every item on the above list because information may not be relevant or is not available. When this occurs, a notation to that effect must be made for that chemical property. Manufacturers may also add other relevant properties, such as the dust deflagration index (Kst) for combustible dust, used to evaluate a dust's explosive potential.

Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into three parts: reactivity, chemical stability, and other. The required information consists of:

Reactivity

- Description of the specific test data for the chemical(s). This data can be for a class or family of the chemical if such data adequately represent the anticipated hazard of the chemical(s), where available.

Chemical stability

- Indication of whether the chemical is stable or unstable under normal ambient temperature and conditions while in storage and being handled.
- Description of any stabilizers that may be needed to maintain chemical stability.
- Indication of any safety issues that may arise should the product change in physical appearance.

Other

- Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or polymerize, which could release excess pressure or heat, or create other hazardous conditions. Also, a description of the conditions under which hazardous reactions may occur.
- List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions).
- List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the chemical could react to produce a hazardous situation.
- List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or heating. (Hazardous combustion products should also be included in Section 5 (Fire-Fighting Measures) of the SDS.)

Section 11: Toxicological Information

This section identifies toxicological and health effects information or indicates that such data are not available. The required information consists of:

- Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact). The SDS should indicate if the information is unknown.
- Description of the delayed, immediate, or chronic effects from short- and long-term exposure.
- The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose)) - the estimated amount [of a substance] expected to kill 50% of test animals in a single dose.
- Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.
- Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

Section 12: Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment. The information may include:

- Data from toxicity tests performed on aquatic and/or terrestrial organisms, where available (e.g., acute or chronic aquatic toxicity data for fish, algae, crustaceans, and other plants; toxicity data on birds, bees, plants).
- Whether there is a potential for the chemical to persist and degrade in the environment either through biodegradation or other processes, such as oxidation or hydrolysis.
- Results of tests of bioaccumulation potential, making reference to the octanol-water partition coefficient (K_{ow}) and the bioconcentration factor (BCF), where available.
- The potential for a substance to move from the soil to the groundwater (indicate results from adsorption studies or leaching studies).
- Other adverse effects (e.g., environmental fate, ozone layer depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and/or global warming potential).

Section 13: Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS. The information may include:

- Description of appropriate disposal containers to use.
- Recommendations of appropriate disposal methods to employ.
- Description of the physical and chemical properties that may affect disposal activities.
- Language discouraging sewage disposal.
- Any special precautions for landfills or incineration activities.

Section 14: Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea. The information may include:

- UN number (i.e., four-figure identification number of the substance)[2].
- UN proper shipping name[2].
- Transport hazard class(es)[2].
- Packing group number, if applicable, based on the degree of hazard[2].
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)).
- Guidance on transport in bulk (according to Annex II of MARPOL 73/78[3] and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)).
- Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises (indicate when information is not available).

[2] Found in the most recent edition of the United Nations Recommendations on the Transport of Dangerous Goods.

[3] MARPOL 73/78 means the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended.

Section 15: Regulatory Information (non-mandatory)

This section identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS. The information may include:

- Any national and/or regional regulatory information of the chemical or mixtures (including any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission regulations).

Section 16: Other Information

This section indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes. Other useful information also may be included here.

Employer Responsibilities

Employers must ensure that the SDSs are readily accessible to employees for all hazardous chemicals in their workplace. This may be done in many ways. For example, employers may keep the SDSs in a binder or on computers as long as the employees have immediate access to the information without leaving their work area when needed and a back-up is available for rapid access to the SDS in the case of a power outage or other emergency. Furthermore, employers may want to designate a person(s) responsible for obtaining and maintaining the SDSs. If the employer does not have an SDS, the employer or designated person(s) should contact the manufacturer to obtain one.

References

OSHA, 29 CFR 1910.1200(g) and Appendix D.

United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.

These references and other information related to the revised Hazard Communication Standard can be found on OSHA's Hazard Communication Safety and Health Topics page, located at: http://www.osha.gov/dsg/hazcom/index.html.

Disclaimer: This brief provides a general overview of the safety data sheet requirements in the Hazard Communication Standard (see 29 CFR 1910.1200(g) and Appendix D of 29 CFR 1910.1200). It does not alter or determine compliance responsibilities in the standard or the Occupational Safety and Health Act of 1970. Since interpretations and enforcement policy may change over time, the reader should consult current OSHA interpretations and decisions by the Occupational Safety and Health Review Commission and the courts for additional guidance on OSHA compliance requirements. Please note that states with OSHA-approved state plans may have additional requirements for chemical safety data sheets, outside of those outlined above. For more information on those standards, please visit: http://www.osha.gov/dcsp/osp/statestandards.html.

This is one in a series of informational briefs highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.

OSHA® Occupational Safety and Health Administration

U.S. Department of Labor
www.osha.gov (800) 321-OSHA (6742)

DSG BR-3514 2/2012



ANNEXURE-R-12

MOM of 5th Expert Committee Meeting for Identification of Material as Byproduct

Discussions and deliberation on each agenda item were carried out as under:

Sr. No.	Applications
1.	**M/s. Coromandel International Limited, Sarigam GIDC Dist : Vapi (GPCB ID: 24285)** Unit has applied for considering Ammonium Chloride powder, Sodium Sulphate powder, Ammonium Sulphate powder as By-product. Earlier unit had made proposal for consideration Sodium Chloride powder as byproduct and now unit has withdrawn this proposal as per letter dated 30/05/2022. Earlier, this case was discussed in 4th expert committee meeting held on dated 25/03/2022 and following were the recommendations of the committee. 1. Unit shall submit details for applicability of wastes in schedules of HWM Rules and as per the criteria and decision matrix elaborated in CPCB's guideline published in September 2019 on "Framework on Identification of Materials Generated from Industrial Processes as Wastes or By-product" revised presentation for all four applications shall be submitted. 2. Unit shall submit analysis of chemical of concerns as well as TCLP analysis of key constitutents mentioned under Schedule II ofthe HOWM Rules especially Ammonia by any NABL/MoEF approved laboratory for the material which is to be claimed as By-product. 3. Unit shall submit clarification about source of organic content in condensate MEE. 4. Unit shall clearly mention the source of samples referred into the presentation. 5. As discussed, it is understood that all four materials for which unit has asked to consider as By-product are generated during Incineration. As the characteristics of compounds is not consistent and is required to assess the efficiency of the incinerator. Now, unit has submitted compliances of the each point with analysis reports. The representative of the unit made a detailed presentation. The unit's representative explained the source of generation and its characteristics. The deliberations made are as under:

MOM of 5th Expert Committee Meeting for Identification of Material as Byproduct

Application:-1 Ammonium Chloride Powder (NH_4Cl)

Ammonium Chloride Powder (NH_4Cl) is generated during highly exothermicreaction of mixtures of Ethanol/methanol, HNP solvent with catalyst, and PCl3 and NH3.The suspended ammonium chloride is dissolved in process water under continuous stirring and the dissolver mass is then sent to separator. The mixture of organic layer containing TEP (Tri ethyl Phosphite) /TMP (Tri Methyl Phosphite) and other layer containing Ammonium Chloride gets separated. The organic layer containing TEP/TMP is sent to series of purification/distillation columns, while the layer containing NH_4Cl is sent to Multiple effect evaporator (MEE) to concentrate followed by filtration, drying & packing.

Application:-2 Sodium Sulphate Powder (Na_2SO_4)

In the production of Macozeb, Sodium Sulphate Powder (Na_2SO_4) is recovered as by-product. In this process, Carbon Disulphide, Ethylene Diamine and Sodium Hydroxide in water to form the Di Sodium salt of Ethylene Bis Dithio Carbamate Hexahydrate (DBH). Disodium salt of Ethylene Bis DBHis reacted with manganese Sulphate to form manganese salt of Bis Dithio Carbamate + Sodium Sulphate. After separation in agitated neutche filter, Manganese salt of Bis Dithio Carbamate is further react with ZnSO4 and produce Mancozeb slurry, which spray dried in vacuum to produce macozeb powder. Sodium Sulphate filter mass is send to MEE for concentration, filtration, drying & packing.

Application:-3 Ammonium Sulphate Powder ($(NH_4)_2SO_4$)

Ammonium Sulphate Powder ((NH4)2SO4) is generated during reaction of Carbon Disulphide, Propylene Diamine and Ammonia Solution (15% Solution) in water to form the PBH. PBH reacts with Zinc Sulphate to convert into Propineb & ammonium Sulphate (Precipitation mass). Precipitated propineb mass filter through vacuum filter and dry by spray dried. Ammonium sulphate solution from filtration transfer to MEE for concentration, Filtration, Drying & Packing.

It is also discussed that, in view of CPCB's guidelines "Framework on Identification of Materials Generated from Industrial Processes as Wastes or By-product, the committee unanimously opined that said products cannot be considered as by-product looking to the source of generation and characteristics of the products. However, in line with MoEF&CC letter dated:.23/02/2023 regarding consideration of spent HCl generated from CPW as co-product/by-product, it is to be supplied to end users with specific conditions. Considering, the same unit is advised to apply with necessary details as under for reconsideration.

Following details are to be submitted for re-consideration application.

1. Unit shall submit details of prospective utilizers/end users of all above three materials along with their quality requirement.
2. Unit shall submit details of end users of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder and in no case it should be sell to traders.
3. Upon submission of details of end users to whom Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder to be supplied, SPCB shall verify downstream industries for their capacity & characteristics of utilization.
4. Unit shall submit comparison sheet of Analysis report of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder V/s BIS product standard of the same.

The unit shall apply for reconsideration with above details. The existing application of unit is hereby disposed accordingly.

TRUE COPY
ADVOCATE

ANNEXURE-R-13

O/C

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

July 21, 2023

PCB ID: 24285

To,
Unit Head - Hazardous Waste Cell
Gujarat Pollution control Board
Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

Subject : **Request for Reconsideration of Application - to consider materials i.e. Ammonium Chloride Powder (NH4Cl), Sodium Sulphate Powder (Na2SO4) & Ammonium Sulphate Powder ((NH4)2 SO4) as a By-Products.**

Ref : **MOM of the 5th Expert Committee Meeting for Identification of Material as By product Dated – 11/04/2023**

Dear Sir/Madam,

This has reference to the above. We, **M/s. Coromandel International Limited** are located at Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate, Sarigam, Taluka Umbergaon, Dist. Valsad - 396155, Gujarat.

This is in continuation to 5th Expert Committee meeting held dated 11.04.2023 for identification of material generated from industrial process as waste or by-product as per CPCB guideline "Framework on Identification of Material generated from Industrial processes as Waste or by-Product". We hereby submit our reasoning along with supportive documents as mentioned below.

Sr. No.	Documents/Details Required	Required Documents/Details
1.	Unit shall submit details of prospective utilizers/end users of all above three materials along with their quality requirement. 	• Details of Prospective utilizers/end users of three by-products i.e., Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder along with their quality requirement are attached at **Annexure – 1** • Each prospective utilizers/end user of by-product has provided to us the acceptance letter regarding the required By-product quality for each by-product. • Acceptance Letters are attached at **Annexure – 2**
2.	Unit shall submit details of end users of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder and in no case it should be sell to traders.	• We assure that we will not sell our by-products to any trader except end users. • Refer **Annexure -1** for details of prospective utilizers/end users of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder • Apart from this, we have established Memorandums of Understanding (MOUs) with each prospective utilizers/end user, wherein

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		they have agreed not to engage in further trading of any by-products purchased from CIL. • CIL commits to identify more utilizers / end users for three By-products, on-board them as per the guidelines listed by the GPCB from time to time. • All MOUs & CC&A copies of respective utilizers / end users are attached at **Annexure – 3**
3.	Upon submission of details of end users to whom Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder to be supplied, SPCB shall verify downstream industries for their capacity & characteristics of utilization.	• Our prospective utilizers/end users also have the valid CC&A of SPCB to operate the plant. We have informed the utilizers/end user regarding the verification by SPCB for their capacity and characteristics of utilization and all of them have been agreed to comply the SPCB directions accordingly.
4.	Unit shall submit comparison sheet of Analysis report of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder V/s BIS product standard of the same.	• Comparison sheet of Analysis report of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder V/s BIS product standard is attached at **Annexure – 4.**

We request your good office not to dispose of our application and to keep the continuity of our application for reconsideration. We also request you to provide your perusal, reconsider our application and issue us the approval at the earliest.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

CC:

1. **The Unit Head - Sarigam**
   Gujarat Pollution control Board
   Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

2. The Regional Officer – Sarigam
   Gujarat Pollution Control Board
   Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

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1-2-10, Sardar Patel Road,
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E : info@coromandel.murugappa.com
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ANNEXURE – 1: Details of Prospective utilizers/end users of three by-products

By Product - Ammonium Chloride Powder

CIL CCA Quantity Yearly: **13398 MT/Annum**
CIL CCA Quantity Monthly: **1116.5 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	Modeshweri Chemical Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch	2500 MT/Month	
2	M/s. Florence Industries Plot No: 10006/B, GIDC Industrial Estate Ankleshwar, Dist.: Bharuch	500 MT/Month	

Quality requirement for Sr. No. 1:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

Quality requirement for Sr. No. 2:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

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By Product - Sodium Sulphate Powder

CIL CCA Quantity Yearly: **19779 MT/Annum**
CIL CCA Quantity Monthly: **1648.25 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	M/s. Chemifs Chemical Pvt. Ltd. Plot No: 1313, NCWI Zone, GIDC Sarigam, Taluko – Umbergaon, District – Valsad 396 155	2000 MT/Month	
2	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch	1000 MT/Month	

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

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By Product – Ammonium Sulphate Powder

CIL CCA Quantity Yearly: **8370 MT/Annum**
CIL CCA Quantity Monthly: **697.5 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	M/s. Modeshweri Chemical Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch	1000 MT/Month	
2	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch	1000 MT/Month	

Quality requirement for Sr. No. 1:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

Quality requirement for Sr. No. 2:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

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Shri Ganeshay Namah

Modheshwari Chemicals

Manufacturers & Dealers of Inorganic Chemicals

Plot No. A-1/1511, G.I.D.C. Estate, Ankleshwar - 393 002. Dist. Bharuch.
Ph. : (M) 93775 12003
Email : modheshwarichemicals@yahoo.co.in Web : www.modheshwari.in

Date: 21/07/2023

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Chloride**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

For Modheshwari Chemical

MODHESHWARI CHEMICALS

Proprietor/ Authorised Signatory

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FLORENCE INDUSTRIES

Mfg.: Pigments, Dyes & Inorganic Chemicals

Plot No. 10006/B, Opp. Shiv chemical, Dhirajcane Road, Ext.
Near BEIL Company, G.I.D.C., Ankleshwar - 393 002. Ph. : 02646 - 221822
Mob. : 98258 91305 / 93274 31341 E-mail : florenceindustries@yahoo.in

To,

Coromandel International Ltd.

Sarigam, Gujarat

Date : 21/07/2023

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product**Ammonium Chloride**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

For Florence Industries

FLORENCE INDUSTRIES

Authorized Signature

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CHEMIFS CHEMICAL PVT LTD

Date: 17/07/2023

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by product **Sodium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

For Chemifs Chemical Pvt. Ltd.

Authorized Signatur

CHEMIFS CHEMICAL PVT. LTD. SARIGAM

Factory Office - Plot No.1313, NCWI Zone, GIDC, Sarigam-396155, Tal- Umbergaon, Dist Valsad, Gujarat (Ind.)
Reg. Office - 203, Platinum CHS Limited, Near Brand Factory, Mira Bhayander Road, Mira Road, Thane, Mumbai-401107
CIN Number: U24239MH2020PTC336541 E-mail: info@chemifs.com Phone No.: +91 85918 22770, +91 260 296 7307

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PREET DYES & CHEMICALS

PLOT NO.3026, PHASE III,GIDC, PANOLI – 394116 DIST: BHARUCH

Date: 17/07/2023

To,

Coromandel International Ltd.

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Sodium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

For Preet Dyes and Chemicals

PREET DYES & CHEMICALS PANOLI

Auth. Sign.

Authorized Signatory

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Shri Ganeshay Namah
Modheshwari Chemicals
Manufacturers & Dealers of Inorganic Chemicals
Plot No. A-1/1511, G.I.D.C. Estate, Ankleshwar - 393 002. Dist. Bharuch.
Ph. : (M) 93775 12003
Email : modheshwarichemicals@yahoo.co.in Web. : www.modheshwari.in

Date: 17/07/2023

To,

Coromandel International Ltd.

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

For Modheshwari Chemicals

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

Authorized Signature

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PREET DYES &CHEMICALS

PLOT NO.3026, PHASE III,GIDC, PANOLI – 394116 DIST : BHARUCH

Date: 17/07/2023

To,

Coromandel International Ltd.

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

For Preet Dyes and Chemicals

PREET DYES & CHEMICALS Auth. Sign. PANOLI

Authorized Signatory

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IN-GJ69615291868927V

INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

सत्यमेव जयते

Certificate No.	:	**IN-GJ69615291868927V**
Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654231176635 61V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	MODHESHWARI CHEMICALS
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY GOVERNMENT OF INDIA
J. M. PATEL
VALSAD DISTRICT
GUJARAT STATE
REGD. NO.
5470/03

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023

JD 0013365242

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- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Modheshwari Chemicals Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the **Ammonium Chloride Powder (NH4Cl)** generated from the manufacturing activities of the COMPANY for in-house utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Chloride Powder (NH4Cl)	By-product	13398 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Chloride	2500 MT/Month

BUYER shall purchase, collect, store, and utilize Ammonium Chloride Powder (NH4Cl) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Chloride Powder (NH4Cl) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions:

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA 29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2023

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For CORROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s Modheshwari Chemicals

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

Authorized Signatory

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GOVERNMENT OF INDIA NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

GOVERNMENT OF INDIA NOTARY JAYANTILAL M. PATEL Dist. Valsad (Guj.) REGD. NO. 5470/08

Book No. 03
Page No. 125
Serial No. 4789
Date 29 MAY 2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152
GPCB

By R.P.A.D.

CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A – Amendment)
CCA AMENDMENT NO: AWH -121872

NO: GPCB/ANK/CCA-878(1)/ID-15358/_____ **DT:____/10/2022**

To,
M/s. MODHESHWARI CHEMICALS,
PLOT NO: A-1/1511,
GIDC ESTATE ANKLESHWAR,
DIST-BHARUCH.

SUB: Amendment in Consolidated Consent & Authorization (CC&A) under various Environmental Acts/ Rules.
REF: (1) Your application No. 261648 dated 20/08/2022.
(2) CCA No. AWH - 110286 dated: 10/11/2020. (CCA Renewal)
(3) CTE – Amendment No. CTE - 117880 dated: 02/07/2022.

Sir,

This has reference to the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** under the provisions of the various Environmental Act/ Rules, which stands amended as under.

The Validity of this order will be up to 30/09/2025.

1. **The list of proposed products to be manufactured shall be as follows:**

Sr. No.	Products	Quantity (MT/Month)		
		Existing	Proposed	Total
1	Ammonium Chloride	500	2000	2500
2	Ammonium Sulphate	50	950	1000
3	Etchant Formulation	300	---	300

2. **Specific conditions:**
   a) Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.
   b) Unit shall maintain ZLD.
   c) Unit shall use fresh raw material only.
   d) Unit shall sell out their hazardous waste to authorized endusers who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MoU with such authorized endusers and submit MoU.
   e) All the efforts shall be made to send hazardous waste to cement industry for Co- processing first & there after it shall be disposed through other option.
   f) Unit shall follow spent solvent management guideline framed by board and shall make MoU with outside distillation units, if any. Also submit the prescribed forms as per guideline.

Outward No: 68620, 18/11/2022

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g) Unit shall strictly follow the Solid Fuel guideline framed by Board and shall install APCM as per guideline.

h) Unit shall strictly follow the Fly Ash Notification for disposal of generated ash.

i) Unit shall comply with additional condition for CPA/SPA areas as per GPCB office order dated: 11/11/2019.

[A] Additional conditions under Air Act:

a) Unit shall adhere to stringent air pollutants standards i.e. 80 % of existing flue gas and process emission standards in the CPA.

Flue gas Emission Standards

Parameters	Existing	Revised norms (80% of Existing)
PM	150 mg/Nm3	120 mg/Nm3
SO2	100 PPM	80 PPM
NOx	50 PPM	40 PPM

b) Following air pollution control measures shall be provided for the flue gas emission sources like Boiler, Thermic Fluid Heaters etc. (As Applicable) (For solid fuel based utilities)

Stipulated APCM in Red category industrial units of CPA

Steam generation capacity (in TPH)	Type of APCM
Less than 1	Multi Cyclone
1 to <3	Multi Cyclone + Water Scrubber
3 to <6	Bag filter + Water Scrubber
≥ 6	ESP+ Water Scrubber

c) Unit shall provide at least two stage scrubbing system of appropriate media for the control of the process gas emission.

d) Unit shall install and commission Continuous Emission Monitoring System- CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/ CPCB server (In case of large and medium red category industries)

e) All common facilities shall install CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/CPCB server to the Stacks provided with Common Multiple Effect Evaporator (CMEE), Common Spray Dryer, Common incinerator etc.

f) The unit shall adhere to Sector specific guidelines/ SOP published by GPCB / CPCB from time to time for effective fugitive emission control. (like guidelines for: Stone crushing units, Coal handling units, spent solvent handling and management, spent acid management, Decontamination of drums, containers etc.)

g) Unit shall take adequate measures to control odour nuisance from the industrial activities which may include measures like- use of masking agent with atomizer system (water curtain), closed / automatic material handling system, containment of the odour vulnerable areas etc.

h) Unit shall not use Pet-coke, furnace oil, LSHS as a fuel.

i) Unit shall adopt sectoral Best Available Technology-BAT (Like Use of Induction Furnace, Electric Arc Furnace instead of Cupola furnace in foundry industry, Caustic Recovery System in Cotton Textile units etc.)

j) Unit shall provide green belt of 40% of the plot area, using concept of the social forestry and development of green belt outside project premises in adjacent areas.

Outward No: 85620/16/10/2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152
GPCB

k) Unit shall provide Wall to Wall carpeting in vehicle movement areas within premises to avoid dusting.

[B] Additional conditions under the Water Act:

a) Unit shall only use treated effluent for preparation of lime and other slurry in ETP. No fresh water shall be utilized in ETP.
b) In the case, if the Industry is not a member of CETP and domestic waste water generation is more than 10 KLPD, industry shall install STP of adequate capacity and treated sewage shall be reused / recycled to the maximum extent.
c) In case of Large and Medium Red Category industry, the unit shall install system for continuous monitoring of effluent quality / quantity as per CPCB guidelines for relevant parameters (like pH, Flow, Temperature, TOC/COD, NH3-N etc.) and shall be connected to GPCB server. In case, if the industry is a member of CETP, unit shall install flow meter.
d) If the water consumption of the unit is more than 50 KLPD, Unit shall submit detailed water harvesting plan (off site).
e) The unit shall explore Techno-Economic feasibility of Zero Liquid Discharge (ZLD) and if feasible, ZLD should be adopted.

[C] Additional conditions under the Hazardous Waste Management Rules:

a) Unit shall strictly carry out handling, storage and disposal of fly-ash, slag, red-mud, de-inking sludge etc. (High Volume- Low Effect Wastes) as per prevailing guidelines and its disposal at designated locations approved by the Board.
b) Industry shall dispose its hazardous wastes through co-processing, pre-processing to the extent possible prior its disposal to incineration/ landfill as per provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
c) Industry shall strictly comply with all the measures specified in guidelines for spent solvent management, spent acid management, and other guidelines/directions published from time to time by GPCB and/or CPCB, etc.
d) Unit shall carry out transportation of hazardous wastes through GPS mounted vehicles only.

[D] Other General Conditions:

a) Unit shall submit report of compliance of the conditions of EC every year to the Board prepared by third party.
b) Unit shall enhance CER fund allocation to at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.

3. CONDITION UNDER THE WATER ACT:

3.1 The condition No 3.3 for Water Consumption under Water Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Water (Qty: KL/day)	Water consumption		
	Existing	Proposed	Total
Domestic	2	1	3
Industrial	2.2	8	10.2
Total	**4.2**	**9**	**13.2**

Outward No:686620, 18/07/2023

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3.2 The condition No. 3.1 & 3.2 for Wastewater Generation under Water Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Water (Qty: KL/day)	Wastewater Generation		
	Existing	Proposed	Total
Domestic	2	1	3
Industrial	--	1.3	1.3
Total	2	2.3	4.3

3.3 Mode of disposal of wastewater:

a) Proposed 1.3 KLD generated effluent from industrial sector shall be mixed with fresh water and reused within plant premises. Hence, unit shall maintain ZLD

b) 3 KLD domestic sewage shall be disposed off through septic tank/soak pit system as per previous CCA conditions.

4. CONDITIONS UNDER THE AIR ACT:

4.1 The condition No. 4.1 for Fuel Consumption under Air Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Sr. No.	Name of fuel	Quantity		
		Existing	Proposed	Total
1	Briquette	900 Kg/day	450 Kg/day	1350 Kg/day
2	Natural Gas	2000 NM^3/hr	1000 NM^3/hr	3000 NM^3/hr

4.2 The condition No. 4.2 for Flue gas stacks under Air Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
	Existing				
1	Fluid Bed Dryer (300 Kg/Hr.)	9	--	PM SO_2 NOx	150 mg/NM^3 100 ppm 50 ppm
	Proposed				
1	Boiler (1.5 TPH)	13	Cyclone Separator followed by water Scrubber	PM SO_2 NOx	120 mg/NM^3 80 ppm 40 ppm
2	Hot Air Generator (1 Lakh Kcal/hr.)	13	--		
3	Dryer [2 MT/hr]	--	--	Water Vapour	--

Outward No: 686620, 18/10/2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152
GPCB

4.3 There shall be no process gas emission from proposed changes.

4.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /M³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_x)	50	80
4.	Oxides of Nitrogen (NO_x)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.6 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition as above.

5 CONDITIONS UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016

5.1 Unit shall comply with provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016.

5.2 The condition No. 6.2 under authorization for Hazardous & other wastes of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Sr. No.	Name of Haz. Waste	Cate. Num.	Quantity /Year			Facility
			Exi.	Pro.	Total	
1	Discarded Containers bags / Liners	33.1	32 MT	42 MT	74 MT	Collection, Storage, Decontamination, Transportation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility / recycler or send back to supplier.
2	Inorganic Sludge	B36	60 MT	320 MT	380 MT	Collection, Storage, Transportation and Disposal by send it to the TSDF - BEIL.

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6 All other conditions of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** will remain same.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Arun G. Patel)
ENVIRONMENT ENGINEER

Outward No:686620,18/10/2022

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INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

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Certificate No.	:	**IN-GJ69614829022408V**
Certificate Issued Date	:	24-May-2023 01:50 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654203462748 92V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	FLORENCE INDUSTRIES
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

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સૂચના

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- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

J. M. VALSAD GUJAR REG 547

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Florence Industries Plot No: 10006/B, GIDC Industrial Estate Ankleshwar, Dist.: Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the **Ammonium Chloride Powder (NH4Cl)** generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Chloride Powder (NH4Cl)	By-product	13398 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Chloride	500 MT/Month

BUYER shall purchase, collect, store and utilize Ammonium Chloride Powder (NH4Cl) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Chloride Powder (NH4Cl) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

For FLORENCE INDUSTRIES

Proprietor

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

For FLORENCE INDUSTRIES

Proprietor

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's	BUYER's
For M/s Coromandel International Limited	For M/s Florence Industries
For COROMANDEL INTERNATIONAL LIMITED AUTHORISED SIGNATORY	For FLORENCE INDUSTRIES Proprietor
Authorized Signatory	Authorized Signatory

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NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Area Dist. Valsad (Guj.) REGD. NO. 5470/08 GOVERNMENT OF INDIA

Book No. 03
Page No. 125
Serial No. 4787
Date 29 MAY 2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A)
CCA NO: AWH- 103950

NO: GPCB/ANK/CCA: 1255(1)/ID-31707/52-5995 **DT: 1/11/2019**

In exercise of the power conferred under Section-25 of the Water (Prevention and Control of Pollution) Act-1974, under Section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 6(2) of the Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016, framed under the E(P)Act-1986.

And whereas Board has received consolidated application dated **26/08/2019** and inward no. **161706** for the consolidated consent and authorization **(CC & A)** of this Board under the provisions / rules of the aforesaid Acts, Consolidated Consent & Authorization is hereby granted as under.

CONSOLIDATED CONSENT AND AUTHORISATION:
(Under the provisions / rules of the aforesaid Environmental Acts)

To,
M/s. FLORENCE INDUSTRIES,
PLOT NO:10006/B,
GIDC ESTATE ANKLESHWAR,
DIST-BHARUCH.

1. **Consent Order No. : AWH-103950 date of Issue 07/09/2019,**
2. The consent under Water Act -1974, Air Act - 1981 and Authorization under Environment (Protection) Act, 1986 **shall be valid up to 26/08/2024** to operate industrial plant to manufacture following products:

Sr. No.	Products		Quantity (MT/Month)
1	Calcium Nitrate	OR	500
2	Ammonium Nitrate	OR	
3	Calcium Chloride	OR	
4	Ammonium Chloride	OR	
5	Manganese Sulphate	OR	
6	Potassium Nitrate	OR	
7	Zinc Chloride		

SPECIFIC CONDITIONS:-

a. Unit shall maintain ZLD.
b. Unit shall use fresh raw material only.
c. Unit shall not carryout any activity / production without prior permission that attracts EIA Notification dated 14/09/2006 amended from time to time.

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3. CONDITION UNDER THE WATER ACT:

3.1 The quantity of total water consumption shall not exceed 0.625 KL/Day as per below break up as mentioned in form D submitted for consent application under the Water Act- 1974.

a) Industrial: 0.125 KL/Day
b) Domestic: 0.5 KL/Day

3.2 The quantity of total waste water generation shall not exceed 0.4 KL/Day as per below break up as mentioned in form D submitted for consent application under the Water Act- 1974.

a) Industrial: Nil
b) Domestic: 0.4 KL/Day

3.3 Sewage shall be disposed off through septic tank/ soak pit system.

3.4 There shall be no discharge of the industrial effluent which will be generated from the manufacturing process and other ancillary industrial operations. Hence the unit shall strictly adhere to zero liquid discharge (ZLD).

3.5 Unit shall be required to make adequate storage facilities to store the effluent by providing acid proof brick lined impervious tanks/HDPE tanks.

3.6 Unit shall make fixed arrangement in Effluent Treatment Plant. Unit shall not keep any by-pass line or system or loose or flexible pipe line in ETP.

3.7 Magnetic flow meters shall be installed at the inlet & outlet of effluent collection tanks/ ETP to measure the quantity of effluent.

3.8 Unit shall affix of water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act – 1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the unit until the contrary is proved.

3.9 The underground drainage connection given by the GIDC for discharge of industrial effluent shall be disconnected & the outlet shall be sealed, if unit have.

3.10 In no circumstances the effluent either treated or untreated shall be discharged into underground drainage pipeline of GIDC, storm water drain or anywhere else.

3.11 Unit shall provide adequate / safe effluent sampling facility for the effluent being stored in final collection / discharge tank of ETP/STP.

3.12 Unit shall put up at the entrance a board displaying the name of unit, particulars of the products/ process, the name of proprietor/partners /directors of the unit, the electricity consumer number as on the record of DGVCL.

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3.13 Unit shall have to display on-line data outside the main factory gate with regard to and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises.

3.14 Unit shall have to keep accurate records of quality & quantity of effluent on day-to-day basis. Separate logbook shall be maintained for recording the data & shall be made available for inspection as & when asked.

3.15 Unit shall keep accurate records of quantity of production of each product, quantity of water consumption, quantity of effluent generated and consumption of electricity on day to day basis and required to submit the complied record of each month to GPCB on or before fifth day of the succeeding month.

3.16 In case of incinerators or MEE, the flow measuring devices for mother liquor/ toxic effluent/ Non-biodegradable effluent, light diesel oil, Furnace oil, etc. i.e. fuel used for combustion, air used for combustion shall be separately provided. Incinerator temperature recording devices as well as gaseous flow measuring devices for scrubber shall also be provided. These data of temperature & flow should be recorded every day & submitted to GPCB on monthly basis.

3.17 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

3.18 Leachate from the hazardous solid waste, if any shall also be connected into a collection tank through leachate collection facilities and shall be treated along with industrial effluent and unit shall maintain ZLD.

3.19 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environment safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell / Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalising environmental issued. These Cells also coordinate the exercise of environmental audit and preparation of environmental statements.

3.20 The Environmental audit shall be carryout yearly, if applicable. The environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

3.21 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 5 meters width is developed.

3.22 In case of change of ownership/ management the name and address of the new ownership/ partners/ directors/ proprietor should immediately be intimate to the Board. Also any change in equipment or working conditions as mentioned in the consents form/ order should immediately be intimated to this Board.

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3.23 The Board reserves the right to review and/or revoke the consent and / or make modifications in the conditions which it seems fit in accordance with provisions of Water Act-1974.

4. **CONDITIONS UNDER THE AIR ACT:**

4.1 The following shall be used as fuel:

Sr. No.	Name of fuel	Quantity
1.	Agro waste/Briquettes	500 kg/Day

4.1.1 The flue gas emission through stack shall conform to the following standards:

Stack No.	Stack attached to	Stack Height in Meter (From G.L.)	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
1.	Boiler	11			
2.	Furnace (1 nos.)- Evaporators (3 nos.) (2 KL each)	11	---	PM SO2 NOx	150 mg/NM³ 100 ppm 50 ppm

4.2 There shall be no process gas emission from the manufacturing process and any other ancillary industrial operation through various stacks/ vent of reactors, process, vessel from plant premises.

4.3 The concentration of the following parameters in the ambient air within the premises of the unit shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /m³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_x)	50	80
4.	Oxides of Nitrogen (NO_x)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.4 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified as above.

4.5 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified as above.

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4.6 Unit shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

4.7 Unit shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

4.8 All efforts shall be made to control VOC emissions and odor problem, if any.

5. **AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (See rule 6(2)).**

5.1 Number of authorization: **AWH-103950 date of Issue 07/09/2019.**

5.2 **M/s. FLORENCE INDUSTRIES** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **PLOT NO:10006/8, GIDC ESTATE ANKLESHWAR, DIST: BHARUCH.**

A. **Reception of Hazardous & other wastes by unit:**

Sr. No.	Name of Waste	Category Number	Quantity in Year	Facility
1	Discarded container/bags	33.3	100 nos. 100 nos.	Collection, Storage, Decontamination, Transportation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility / recycler or send back to supplier

5.3 The authorization is granted to operate a facility as above.

5.4 The authorization shall be in force for a period up to 26/08/2024.

5.5 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6. **TERMS AND CONDITIONS OF AUTHORISATION:**

6.1 The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

6.2 The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.

6.3 The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.

6.4 Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

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6.5 The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6.6 The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

6.7 It is the duty of the authorised person to take prior permission of the Gujarat Pollution Control Board to close down the facility.

6.8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

6.9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

6.10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.

6.11 The importer or exporter shall bear the cost of import or export and mitigation of damages if, any.

6.12 An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016.

6.13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

6.14 Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

6.15 Unit shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No. 657 of 1995 dated 14th October 2003.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(A.V.SHAH)
SR. ENVIRONMENT ENGINEER

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PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By: RPAD

No.GPCB/HAZ-R(9)-62/ 473285 Date: 23 OCT 2018

To,
Shri Bharat K Sharma,
Additional Director &Divisional Head,
Hazardous Waste Management Division-II,
Central Pollution Control Board,
'Parivesh Bhawan', East Arjun Nagar
Delhi – 110032

Sub: Proposal for utilization of hazardous waste under Rules 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules-2016 (Rule-11 of HWR- 2008) -regarding.
Ref: Application of the unit dated 10/10/2018.

Respected Sir,

In context to the above mentioned subject, as per Rule 9 of Hazardous and Other Waste (M&TM), Rules 2016, where standard operating procedures or guidelines are not available for specific utilization of hazardous waste, the approval has to be sought from CPCB. Such applications are required to routed through concern SPCB at CPCB.

In view of the same **M/s. Florence Industries.**, at **Plot No.10006/B, GIDC Ind. Estate, Ankleshwar, Dist: Bharuch** has proposed to utilize "**Ammonium Sulphate Solution @ 8400 MTPA & Ammonium Sulphate Powder @ 3600 MTPA**, generating from various chemicals industries for utilization in manufacturing of Ammonium Sulphate and **Ammonium Chloride Solution @ 6240 MTPA & Ammonium Chloride Powder @ 2700 MTPA**" generating from various chemicals industries for utilization in manufacturing of Ammonium Chloride. The application of the unit is endorsed herewith for your information and further necessary action please.

Thanking you.

For and on behalf of
Gujarat Pollution Control Board,

(D. M. Thaker)
Environment Engineer
Unit Head Hazardous waste cell

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INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

सत्यमेव जयते

Certificate No.	:	IN-GJ69818479678265V
Certificate Issued Date	:	24-May-2023 01:52 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654269333392728V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	CHEMIFS CHEMICALS PVT LTD
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY GOVERNMENT OF INDIA
J. M. PATEL
VALSAD DISTRICT
GUJARAT STATE
REGD. NO. 5470/08

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

Snehal R. Nayak ACC Sarigam

SRNayak

JD 0013365246

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NOTARY

સૂચના

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રની વિગતો www.shcilestamp.com દ્વારા અથવા સ્ટોક હોલ્ડિંગની "ઈસ્ટેમ્પિંગ" મોબાઈલ એપ્લિકેશન અથવા સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર (જેની વિગતો www.stockholding.com પર ઉપલબ્ધ છે) પર જઈ ને ચકાસી શકાય છે.

- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.

- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Chemifs Chemical Pvt. Ltd. Plot No: 1313, NCWI Zone, GIDC Sarigam, Taluko – Umbergaon, District – Valsad 396 155

THAT

As a part of this MOU, BUYER has agreed to purchase the Sodium Sulphate (Na2SO4) Powder generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Sodium Sulphate (Na2SO4) Powder	By-product	19779 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Sodium Sulphate	2000 MT/Month

BUYER shall purchase, collect, store and utilize Sodium Sulphate (Na2SO4) Powder receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Sodium Sulphate (Na2SO4) Powder (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For Chemifs Chemical Pvt. Ltd.
Authorized Signatory

For COROMANDEL INTERNATIONAL LIMITED
AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For Chemifs Chemical Pvt. Ltd.
K. B. Rao
Authorized Signatory

For COROMANDEL INTERNATIONAL LIMITED
AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Chemifs Chemical Pvt. Ltd.

For Chemifs Chemical Pvt. Ltd.

Authorized Signatory

Authorized Signatory

NOTARY NOTARIAL

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Area Dist. Valsad (Gu) REGD. NO. 5470/08 GOVERNMENT OF INDIA

Book No. 03
Page No. 125
Serial No. 4790
Date 29 MAY 2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

GPCB

BY RPAD

"CTE-Amendment"
(CTE-123325)

NO: GPCB/CCA-SRG-707(2)/ID 77384/ 611930 Date: 30 / 12 /2022

TO,
M/s. Chemil's Chemical Private Limited
Plot No: 1313, NCWI Zone,
GIDC Sarigam,
Tal: Umbergaon, Dist: Valsad – 396 155

SUB: Consent to Establish (NOC) under Section 25 of Water Act 1974, Section 21 of Air Act 1981 and EPA-1986.

REF: Your CTE-Amendment application Inward ID No: 265609 dated 15/11/2022.

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish-Amendment for increasing the Production capacity at existing location at Plot No: 1313, NCWI Zone, GIDC Sarigam, Tal: Umbergaon, Dist: Valsad-396 155 for following items:

1. The order shall be valid up to 14/11/2029.
2. The list of the product to be manufacture is as below:

Sr. No.	Products	Existing Quantity (MT/Month)	Proposed Quantity (MT/Month)	Total Quantity (MT/Month)
1	Poly Aluminium Chloride Soln (10-12%)	2000 MT	2000 MT	2000 MT
2	Poly Aluminium Chloride (PAC) Powder	200 MT	00	200 MT
3	Aluminium Tri Chloride (By way of mixing & Blending) PAC Solution powder	750 MT	00	750 MT
PROPOSED NEW PRODUCTS				
4	Ammonium Sulphate	00	300 MT	300 MT
5	Sodium Sulphate	00	2000 MT	2000 MT
6	Magnesium Sulphate	00	100 MT	100 MT
7	Manganese Sulphate	00	100 MT	100 MT
8	Zinc Sulphate	00	100 MT	100 MT
9	Potassium Sulphate	00	200 MT	200 MT
10	Ferrous Sulphate	00	300 MT	300 MT

Above Product no. 4 to 10, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.

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11	Calcium Chloride	00	1000 MT	1000 MT
12	Ammonium Chloride	00	1000 MT	1000 MT
13	Potassium Chloride	00	500 MT	500 MT
14	Aluminium Chloride	00	300 MT	300 MT
Above existing Product no.1 proposed additional 2000 MT & New Product no. 11 to 14, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.				
15	Sodium Sulphate	00	250 MT	250 MT
16	Sodium Bi-Sulphite	00	300 MT	300 MT
17	Di-Calcium Phosphate	00	300 MT	300 MT
Above Product no. 12 to 14, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.				

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

- Industry shall use fresh Raw Material & fresh Acid for the production of proposed products.

3. **CONDITIONS UNDER WATER ACT 1974:**

3.1 Source of Water:- GIDC Water Supply

3.2 The quantity of total water consumption shall not exceed **17 KL/Day** after CTE-amendment as per below break up after CTE-Amendment;

a) Industrial: **15 KL/Day.**

b) Domestic: **2 KL/Day.**

3.3 The quantity of total of waste water generation shall not exceed **6.1 KL/Day** after CTE-amendment as per below break up

a) Industrial: **4.7 KL/Day.**

b) Domestic: **1.4 KL/Day.**

3.4 Out of 4.7 KL/day, 0.7 KL/day effluent generated from Boiler Blow down shall be reuse for making Alkali Media in Scrubber, 1 KL/day recycled effluent generated from existing scrubber shall be reuse in process and remaining 3 KL/day effluent shall be treated in to ETP & treated wastewater shall be discharged in to CETP Sarigam.

Trade Effluent

3.5 The quality of industrial effluent shall confirm to the following standards: (Whichever is applicable)

PARAMETERS	CETP inlet Norms
pH	6.5 to 8.5
Temperature	40° C
Colour (pt.co. scale) in units	100 units
Suspended Solids	100 mg/l

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

GPCB

PARAMETERS	CETP inlet Norms
Oil and Grease	10 mg/l
BOD (3 days at 27° C)	400 mg/l
COD	1000 mg/l
Chlorides	600 mg/l
Sulphate	1000 mg/l
Ammonical Nitrogen	50 mg/l
Phenolic Compounds	1 mg/l
Arsenic	0.2 mg/l
Total Chromium	2 mg/l
Hexavelent Chromium	0.1 mg/l
Copper	3 mg/l
Lead	0.1 mg/l
Mercury	0.01 mg/l
Nickel	3 mg/l
Zinc	5 mg/l
Cadmium	2 mg/l
Tot Dissolved Solids	2100 mg/l

- All efforts shall be made to remove colour & unpleasant odour as far as practicable.

3.6 The final treated effluent confirming to the above standards shall be discharged into CETP, Sarigam for further treatment and disposal.

3.7 The applicant shall make the arrangement for holding the effluent for 48 hrs. in case of failure of / non operation of CETP, Sarigam Clean Initiative.

3.8 Industry shall provide fixed pipelines network with flow meter for conveyance of treated effluent & maintain records in this regard.

3.9 Domestic wastewater shall not be disposed through soak pit/septic tank.

3.10 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

4. CONDITIONS UNDER AIR ACT 1981:

4.1 Following shall be used as fuel:

Sr. No.	Utility	Fuel	Existing Quantity	Proposed Quantity	Total Quantity
1	Boiler	Natural Gas	145 m3/hr	0	145 m3/hr.
2	Spray Dryer	Natural Gas	110 m3/hr	0	110 m3/hr.

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4.2 The applicant shall install & operate comprehensive adequate air pollution control system in order to achieve prescribed norms.

4.3 The flue gas emission through stack attached to stack shall conform to the following standards

Sr. No	Stack attached to	Stack height in meter	APCM	Parameters	Permissible limit
1	Boiler (2 TPH)	11	Adequate Stack Height	PM SO_2 NOx	150 mg/Nm^3 100 ppm 50 ppm
2	Spray Dryer (100 kg/Hr.)	11	Venturi Scrubber		

4.4 The process emission through Various Stacks/Vent of reactor, Process, Vessel shall Conform to the following standards:

Sr. No	Stack attached to	Stack height in meter	APCM	Parameters	Permissible limit
1	Glass Lined Reactor 3Nos. (Cap.15 MT & 2 nos. having cap. 12 MT)	11 (Common)	Common Water Scrubber + alkali scrubber	Acid Mist	50 mg Nm3
2	Brick Lined Reactor (2 Nos of Cap. 14 MT each)				

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:-

PARAMETERS	PERMISSIBLE LIMIT	
	Annual	24 Hrs Average
Particulate Matter-10 (PM 10)	60 Microgram/m3	100 Microgram/m^3
Particulate Matter- 2.5 (PM 2.5)	40 Microgram/m3	60 Microgram/m^3
SO2	50 Microgram/m3	80 Microgram/m^3
NOx	40 Microgram/m3	80 Microgram/m^3

5. **CONDITIONS UNDER HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDRY MOVEMENT) RULES, 2016 :**

(Applicant shall have to comply with provisions of Hazardous and other Wastes (Management &Transboundry Movement) Rules, 2016)

5.1 Industry shall provide adequate collection, storage, treatment & transportation system in accordance with the nature, quantity & compatibility of hazardous waste and shall

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

offer their hazardous waste only to authorized operator of the ultimate disposal facility.

5.2 Applicant shall comply all the directives issued by Honorable Courts, notifications issued by Ministry of Environment & Forest, Department of Environment & Forest, Central Pollution Control Board and other competent authorities time to time.

5.3 Applicant shall comply all the guidelines published by Ministry of Environment & Forest, Department of Environment & Forest, Central Pollution Control Board and other competent authorities time to time.

5.4 Industry shall also comply following directives issued by the Supreme Court of India dated.14.10.2003.

5.5 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No.657 of 1995 dated 14th October 2003.

5.6 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.

5.7 The applicant shall obtain membership of common TSDF site for disposal of Haz. Waste as categorized in Hazardous and other wastes (Management & Transboundry Movement) Rules-2016 as amended from time to time.

5.8 The applicant shall provide temporary storage facilities for each type of Haz. Waste as per Hazardous and other wastes (Management & Transboundry Movement) Rules-2016 as amended from time to time.

6. **GENERAL CONDITION:**

6.1 Adequate plantation shall be carried out all along the periphery of the industrial premises and a green belt of adequate width is to be developed.

6.2 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

6.3 The applicant shall however, not without the prior consent to operate of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986.

6.4 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M: 75 dB (A)

Between 10 P.M. and 6 A.M.: 70 dB (A)

6.5 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

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6.6 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property ,in that case they are obliged to pay the compensation as determined by the competent authority.

6.7 In case of any unauthorized discharge outside the factory premises, it would be considered as violation under the Water Act 1974.

6.8 Applicant is required to comply with Public Liability Insurance Act-1991.

6.9 Management of Solid Waste generated from industrial activities shall be as per Solid Waste Management Rules-2016 (solid waste as defined in Rules-3(46)).

6.10 As per provision of Rules-18 of Solid Waste Management Rules-2016 all industrial unit using fuel and located within 100 km from the refused derived fuel requirement by refused derived fuel so produced.

For and on behalf of
Gujarat Pollution Control Board

(M. V. Patel)
Environment Engineer

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IN-GJ69616691154466V

INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

सत्यमेव जयते

Certificate No.	:	**IN-GJ69616691154466V**
Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654257845406 20V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	PREET DYE CHEM
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/00 GOVERNMENT OF INDIA

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023 SRNayak

JD 0013365244

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- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.

- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Sodium Sulphate (Na2SO4) Powder generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
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The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
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NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5476/08 GOVERNMENT OF INDIA

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

PREET DYES & CHEMICALS PANOLI Auth. Sign.

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

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12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

DYES & CHEMICALS Auth. Sign PANOLI

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NOTARY
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COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Preet Dyes and Chemicals

PREET DYES & CHEMICALS Auth. Sign. PANOLI

Authorized Signatory

NOTARY NOTARIAL

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
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GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Dist. Valsad (Guj.) Area REGD. NO. 5470/08 GOVERNMENT OF INDIA

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Serial No. 4788
Date 29 MAY 2023

E-Stamp Certificate No.: IN-GJ69616691154466U

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GPCB

...T POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

Consent to Establish (NOC) - Amendment
CTE AMENDMENT NO: CTE -115403

NO: GPCB/ANK/CCA-1590(1)/ID-33646/ **DT:___/12/2021**

To,
M/s. PREET DYES & CHEMICALS,
PLOT NO: 3026,
GIDC ESTATE PANOLI,
DIST-BHARUCH.

SUB: Amendment in Consent to Establish (NOC) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.
REF: (1) Your NOC application No. 198900 dated **21/07/2021(for CTE-Expansion).**
(2) CCA No. AWH - 105350 dated: 06/02/2020.

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants **Consent to Establish (NOC)** for **Proposed changes** in an industrial plant/activities at **PLOT NO: 3026, GIDC ESTATE PANOLI, DIST: BHARUCH** to manufacture the products.

The Validity of this order will be up to 20/07/2028.

1. The list of proposed products to be manufactured shall be as follows:

Sr. No.	Products	Quantity (MT/Month)		
		Existing	Proposed	Total (After Expansion)
1	Sodium Sulphate	100	--	100
2	Acid Orange-7	11	--	11
3	Acid Red-88			
4	Acid Red-18			
5	Acid Yellow-36			
6	Acid Blue-113			
7	Acid Black-1			
8	Direct Orange-26			
9	Direct Red-31			
10	Direct Yellow-4			
11	Direct Violet-9			
12	Direct Green-8			
13	Direct Black-29			
14	Reactive Yellow- 7 (Yellow M-GR)			
15	Reactive Blue-4 (Brilliant Blue M-R)			

Outward No: 609930 Dt: 18/12/2021

Clean Gujarat Green Gujarat
ISO 9001:2008 & ISO 14001:2004 Certified Organisation
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16	Benzidine Yellow-13 G (Pigment Yellow)			
17	Pigment Lake Red-C			
18	Sulphanilic Acid			
19	Salicylic Acid			
20	Hydrazobenzene			
21	Pulverization of Sodium Sulphate	--	1000	1000
22	Pulverization of Ammonium Sulphate	--	1000	1000

2. **Specific conditions:**

a. **Unit shall maintain ZLD.**

b. **Unit shall use fresh raw material only.**

c. **Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.**

d. **Unit shall sell out their hazardous waste to authorized endusers who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MoU with such authorized endusers and submit MoU.**

e. **All the efforts shall be made to send hazardous waste to cement industry for Co-processing first & there after it shall be disposed through other option.**

f. **Unit shall follow spent solvent management guideline framed by board and shall make MoU with outside distillation units, if any. Also submit the prescribed forms as per guideline.**

3. **CONDITION UNDER THE WATER ACT:**

3.1 There shall be no change in water consumption, wastewater generation and their mode of disposal from proposed changes.

4. **CONDITIONS UNDER THE AIR ACT:**

4.1 There shall be no change in fuel consumption & flue gas emission from proposed changes.

4.2 The condition No. 4.3 for Process gas stacks under Air Act of the CCA order No: **AWH-105350, issued vide letter no. GPCB/ ANK/CCA-1590(1)/ID-33646/553914, dated 06/02/2020** is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
	Proposed				
1	Pulverizes (Sodium, Sulphate & Ammonium sulphate)	--	Balloon Bags	--	--

Outward No: 609930, 28/12/2022

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

4.3 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /M³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_x)	50	80
4.	Oxides of Nitrogen (NO_x)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.4 Stack monitoring facilities like porthole, platform/ ladder etc., shall be provided with stacks/vents chimney in order to facilitate sampling of gases being emitted into the atmosphere.

4.5 All measures for the control of environmental pollution shall be provided before commencing production.

5. CONDITIONS UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016:

5.1 Unit shall comply with provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016.

5.2 Unit shall obtain authorization under Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016 for increase/ decrease in Hazardous & other waste quantity / category.

6. All other Conditions of CCA order No: AWH-105350, issued vide letter no. GPCB/ ANK/CCA-1590(1)/ID-33646/553914,dated:06/02/2020 shall remain unchanged.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(M.P. Solanki)
Dy. ENVIRONMENT ENGINEER

Outward No:609930, 28/12/2021

Clean Gujarat Green Gujarat
ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation
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सत्यमेव जयते

INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

Certificate No.	:	IN-GJ69616083427623V
Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654239553740 54V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	MODHESHWARI CHEMICALS
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY ★ J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 ★ GOVERNMENT OF INDIA

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ★ ACC ★ Sarigam

SRNayak

29 MAY 2023

JD 0013365243

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- Any alteration to this certificate renders it invalid and would constitute a criminal offence.
- Kindly contact Stock Holding Branch / Centre in case of discrepancy.
- For information related to e-Stamping you may write to us on our email id estamp.ahmedabad@stockholding.com or visit our Branch/Centre.

સૂચના

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રની વિગતો www.shcilestamp.com દ્વારા અથવા સ્ટોક હોલ્ડિંગની "ઈસ્ટેમ્પિંગ" મોબાઈલ એપ્લિકેશન અથવા સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર (જેની વિગતો www.stockholding.com પર ઉપલબ્ધ છે) પર જઈ ને ચકાસી શકાય છે.
- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.
- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Modheshwari Chemicals Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Ammonium Sulphate (NH4)2SO4 (Powder) generated from the manufacturing activities of the COMPANY for in-house utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Sulphate (NH4)2SO4 (Powder)	By-product	8370 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Sulphate	1000 MT/Month

J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/03 GOVERNMENT OF INDIA NOTARY

BUYER shall purchase, collect, store, and utilize Ammonium Sulphate (NH4)2SO4 (Powder) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Sulphate (NH4)2SO4 (Powder) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions:

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

JAVANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

NOTARY GOVERNMENT OF INDIA J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

JAYANTILAL M. PATEL NOTARY VALSAD DISTRICT GOVT. OF INDIA 29 MAY 2023

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s Modheshwari Chemicals

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

Authorized Signatory

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NOTARIAL NOTARIAL NOTARIAL NOTARIAL NOTARIAL

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Area Dist. Valsad (Guj.) REGD. NO. 5470/08 GOVERNMENT OF INDIA

Book No. 03
Page No. 125
Serial No. 4788
Date 29 MAY 2023

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Government of Gujarat

Certificate of Stamp Duty

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Certificate No.	:	**IN-GJ69617644877209V**
Certificate Issued Date	:	24-May-2023 01:52 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654270289332l3V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	PREET DYE CHEM
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023

JD 0013365245

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સૂચના

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- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.

- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Ammonium Sulphate (NH4)2SO4 (Powder) generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

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The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For CORONANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

DYES & CHEMICALS PANOLI

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2023

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15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Preet Dyes and Chemicals

PREET DYES & CHEMICALS Auth. Sign. PANOLI

Authorized Signatory

NOTARY NOTARIAL

J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 NOTARY GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Area Dist. Valsad (Guj.) REGD. NO. 5470/08 GOVERNMENT OF INDIA

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ANNEXURE – 4: Quality Comparison of by-product with BIS Standard

Ammonium chloride				
Sr. No.	Parameter	Unit	BIS Standards (Technical Grade) IS 1113 (1965) – Reaffirmed 2003	CIL Result from NABL Accredited Laboratory
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5	99.2
2	Moisture, percent by weight, Max	%	1	0.68
3	Iron (as Fe), percent by weight, Max	%	0.01	0.005
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3	0.17
5	Matter insoluble in water, percent by weight, Max	%	0.2	0.09

Sodium Sulphate				
Sr. No.	Parameter	Unit	BIS Standards (Grade B) IS 255 (1982) - Reaffirmed 1999	CIL Result from NABL Accredited Laboratory
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98	98.78
2	Matter insoluble in water, Percent by mass, Max	%	0.5	0.14
3	Chloride (as NaCl), Percent by mass, Max	%	2	0.22
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02	0.016
5	Iron (as Fe), Percent by mass, Max	%	0.002	0.019
6	Loss on Drying, percent by mass, Max @ 105	%	1	0.37
7	pH (of 10 percent solution)	%	7.5 to 8	7.8

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Ammonium Sulphate				
Sr. No.	Parameter	Unit	BIS Standards (Type 1) IS 12478 – 1988 - Reaffirmed 1999	CIL Result from NABL Accredited Laboratory
1	Assay, percent by mass, Min (Ammonium sulphate as (NH4)2SO4)	%	96.7	96.9
2	Moisture, percent by mass, Max	%	1	0.81
3	Free acidity as (H2SO4), percent by mass, Max	%	0.7	0.31
4	Water insoluble, percent by mass, Max	%	To pass the test	Pass
5	Iron (as Fe), percent by mass, Max	%	0.2	0.04
6	Arsenic, percent by mass	mg/kg	0.01	0.002



ANNEXURE-R-14

CCA Renewal Application & By-product Consideration Application Chronology		
Sr. No.	**Date**	**Activity on Application**
1.	08-03-2021	• Applied for the CC&A Amendment (for product mix change) application, Inward No. 191702 • Rejected vide letter NO. GPCB / SAR / CCA / 24285 /603879 dated 20/10/2021.
2.	21-09-2021	• Applied for CC&A renewal application.
3.	29-11-2021	Application was inward. • For getting CCA renewal, board insisted CIL to provide undertaking stating that all four by-products to be categorized into HZW. • CIL denied and gently stated that, by-product consent application was inward to board and seeking its approval. • After ten days visited GPCB HO and queried on the statuses of the application. Informed it is still with document controller.
4.	21-12-2021	• Met MS and urged him gently to fasten By-Product consent application process.
5.	29-01-2022	• Unit has given its presentation to CPCB & GPCB committee meant for validating By-Product consent.
6.	11-02-2022	• Total six queries were raised by the committee and CIL responded with appropriate supporting documents
7.	25-03-2022	• Second Presentation given to Technical Expert Committee for By-Products consideration Application.
8.	30-03-2022	• Total five queries were raised by the committee and CIL responded with appropriate supporting asked in second technical presentation documents
9.	29-04-2022	• CIL approached to SVNIT to carry out the MEE facilities efficiency tests and conducted analysis of by products and submitted the report to GPCB.
10.	29-07-2022	• GPCB **rejected CCA-renewal application** vide letter number GPCB/SAR/CCA/ID:24285/679326
11.	30-07-2022	• 2 notice of directions (679471, 679542) and 1 show cause notice came from GPCB, Gandhinagar

Sr. No.	Date	Activity on Application
12.	01-08-2022	• Compliance report of notice of direction (679471) and show cause notice (679472) has been submitted
13.	02-08-2022	• **CCA renewal application** has been **re-applied**. Inward no: 262830
14.	04-08-2022	• Compliance report of notice of direction (679542) was submitted.
15.	21-08-2022	• CCA renewal application has been accepted by Sarigam RO and put up to the HO for scrutiny.
16.	24-01-2023	• Unit head given chance of hearing vide letter no. GPCB/CCA-SRG-229(40)/ID-24285/701880 for our ongoing application,
17.	25-01-2023	• CIL submitted response CIL has submitted response with required supporting documents
18.	11-04-2023	• Third Presentation given to Technical Expert Committee for By-Products consideration Application.
19	17-07-2023	• Received Final Minutes of Meeting of the 5th Expert Committee Meeting (Third Presentation) for identification of material as Byproduct via mail
20	20-07-2023	• Received chance of hearing letter from GPCB in continuation of CCA-Renewal Re-applied Application (Inward no: 262830)
21	24-07-2023	• Response of MOM points and Chance of hearing letter have been submitted
22.		• Currently Application is under scrutiny at HO staff. • Follow up with board and committee is ongoing.



ANNEXURE-R-15

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

GPCB

BY RPAD

No: GPCB/CCA-SRG-229(40)/ID -24285/ Date:

To,
M/s. Coromandel International Limited
PLOT NO: 2102, 2104/1, 735 & 2112/2113,
GIDC Sarigam,
TAL: Umbergaon
DIST: Valsad 396 155

SUB: Chance of Hearing

Ref: 1. CCA-Renewal application vide inward no. 262830 dated 21/08/2022
2. Minutes of meeting of the 5th Expert Committee meeting for indentified of material as by-products

In context to the above subject & reference, you are hereby to inform that your CCA-Renewal application is incomplete with respect to following details;

1. As your application for consider Ammonium Chloride powder (NH4Cl), Sodium Chloride (NaCl) powder, Sodium Sulphate (Na2So4) powder and Ammonium Sulphate ((NH4)2SO4) powder as a by-product is disposed by committee. Thus, your proposal to consider by-product not acceptable as per provisions of HWM rules 2016. Your CCA application is pending since long and you have not submitted any proposal to consider above items as Hazardous waste and the details of management of the same as per Rules. Kindly clarify, why your CCA-renewal application should not be rejected.
2. Submit details of actual user of Spent HCL 30% and Acetic Acid 30%.

Reply within 3 days, failing to which your application will be rejected.

For and on behalf of
Gujarat Pollution Control Board

(R. B. Trivedi)
Environment Engineer

TRUE COPY ADVOCATE

Outward No:748310,20/07/2023

ANNEXURE-R-16

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

July 21, 2023 PCB ID: 24285

To,

Unit Head - Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382 010, Gujarat

Subject : Submission of clarification and details in continuation of CC&A Re-apply (Renewal) Application

Ref :
- **CC&A Re-apply (Renewal) Application Inward No.262830, dated 21.08.2022.**
- **MOM of the 5th Expert Committee Meeting for Identification of Material as By product Dated – 11/04/2023.**
- **GPCB Letter no. GPCB/CCA-SRG-229(40)/ID-24285/748310 dated 20.07.2023.**

Dear Sir/Madam,

This has reference to the above. We are hereby submitting clarification and details in continuation of CC&A Re-apply (Renewal) Application.

Sr. No.	Clarification Required	Required Clarification
1.	As your application for consider Ammonium Chloride powder (NH4Cl), Sodium Chloride (NaCl) powder, Sodium Sulphate (Na2SO4) powder and Ammonium Sulphate (NH4)2SO4 powder as a by-product is disposed by committee. Thus, your proposal to consider by-product not acceptable as per provisions of HWM rules 2016. Your CCA application is pending since long and you have not submitted any proposal to consider above items as Hazardous waste and the details of management of the same as per Rules. Kindly clarify, why your CCA-renewal application should not be rejected. RECEIVED G P C Board Sarigam Sign 24/07/2023	We would like to inform you that, our existing by-product application has been disposed by committee, however committee has advised us to apply with necessary details in line with MOEF&CC letter dated:23/02/23 regarding consideration of spent HCl generated from CPW as co-product/ by-products, to be supplied to end users with specific conditions. Considering, the same unit is advised to apply with necessary details for reconsideration. The details of re-consideration application are furnished as **Annexure-A** In view of the above development, you may consider the following 4 chemicals provisionally towards hazardous waste, subject to final decision of By-product committee, and issue us the CCA renewal accordingly. However, we reserve our rights to approach authority to consider as a by-product. In the interim, till the final decision of the Committee is taken basis our submission dated 21/07/23, please grant us permission to send the material to

Coromandel International Limited
Crop Protection Division
Plot No. 3102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House,
T : +91 40 27846032 E : info@coromandel.murugappa.com W : www.coromandel.murugappa.com

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000997

<table>
<tr>
<td></td>
<td></td>
<td>utilizers/end users listed below:
<table>
<tr><th>S. No</th><th>By-Product</th><th>End User</th></tr>
<tr><td>1</td><td>Ammonium chloride</td><td>M/s. Modeshweri Chemical.
M/s. Florence Industries</td></tr>
<tr><td>2</td><td>Ammonium Sulphate</td><td>M/s. Modeshweri Chemical.
M/s. Preet Dyes and Chemicals</td></tr>
<tr><td>3</td><td>Sodium Sulphate</td><td>M/s. Chemifs Chemical Pvt.Ltd.
M/s. Preet Dyes and Chemicals</td></tr>
</table>
We will provide undertaking that we will send the material to above listed Utilizers / End users.</td>
</tr>
<tr>
<td>2.</td>
<td>Submit details of actual user of spent HCl 30 % and Acetic Acid 30 %.</td>
<td>Details of actual user of spent HCl 30 % is enclosed as Annexure-B and Acetic Acid 30 %. is sent to co-processing RSPL-Panoli & remaining quantity sent to common incinerator facility of Detox India Pvt. Ltd., Dahej. Membership Certificate of RSPL-Panoli & common incinerator facility of Detox India Pvt. Ltd., Dahej are enclosed as Annexure-C.</td>
</tr>
</table>

We would like to present ourselves for a hearing in person at your office on 24th July 2023 (Monday) to present our case.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

Copy:

Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155, Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000092

July 21, 2023 PCB ID: 24285

To,
Unit Head - Hazardous Waste Cell
Gujarat Pollution control Board
Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

Subject : **Request for Reconsideration of Application - to consider materials i.e. Ammonium Chloride Powder (NH4Cl), Sodium Sulphate Powder (Na2SO4) & Ammonium Sulphate Powder ((NH4)2 SO4) as a By-Products.**
Ref : **MOM of the 5th Expert Committee Meeting for Identification of Material as By product Dated – 11/04/2023**

Dear Sir/Madam,

This has reference to the above. We, **M/s. Coromandel International Limited** are located at Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate, Sarigam, Taluka Umbergaon, Dist. Valsad - 396155, Gujarat.

This is in continuation to 5th Expert Committee meeting held dated 11.04.2023 for identification of material generated from industrial process as waste or by-product as per CPCB guideline "Framework on Identification of Material generated from Industrial processes as Waste or by-Product". We hereby submit our reasoning along with supportive documents as mentioned below.

Sr. No.	Documents/Details Required	Required Documents/Details
1.	Unit shall submit details of prospective utilizers/end users of all above three materials along with their quality requirement.	• Details of Prospective utilizers/end users of three by-products i.e., Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder along with their quality requirement are attached at **Annexure – 1** • Each prospective utilizers/end user of by-product has provided to us the acceptance letter regarding the required By-product quality for each by-product. • Acceptance Letters are attached at **Annexure – 2**
2.	Unit shall submit details of end users of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder and in no case it should be sell to traders.	• We assure that we will not sell our by-products to any trader except end users. • Refer **Annexure -1** for details of prospective utilizers/end users of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder • Apart from this, we have established Memorandums of Understanding (MOUs) with each prospective utilizers/end user, wherein

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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		they have agreed not to engage in further trading of any by-products purchased from CIL. • CIL commits to identify more utilizers / end users for three By-products, on-board them as per the guidelines listed by the GPCB from time to time. • All MOUs & CC&A copies of respective utilizers / end users are attached at **Annexure – 3**
3.	Upon submission of details of end users to whom Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder to be supplied, SPCB shall verify downstream industries for their capacity & characteristics of utilization.	• Our prospective utilizers/end users also have the valid CC&A of SPCB to operate the plant. We have informed the utilizers/end user regarding the verification by SPCB for their capacity and characteristics of utilization and all of them have been agreed to comply the SPCB directions accordingly.
4.	Unit shall submit comparison sheet of Analysis report of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder V/s BIS product standard of the same.	• Comparison sheet of Analysis report of Ammonium Chloride Powder, Sodium Sulphate Powder, Ammonium Sulphate Powder V/s BIS product standard is attached at **Annexure – 4.**

We request your good office not to dispose of our application and to keep the continuity of our application for reconsideration. We also request you to provide your perusal, reconsider our application and issue us the approval at the earliest.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

CC:

1. **The Unit Head - Sarigam**
   Gujarat Pollution control Board
   Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

2. The Regional Officer – Sarigam
   Gujarat Pollution Control Board
   Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

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ANNEXURE – 1: Details of Prospective utilizers/end users of three by-products

By Product - Ammonium Chloride Powder

CIL CCA Quantity Yearly: **13398 MT/Annum**
CIL CCA Quantity Monthly: **1116.5 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	Modeshweri Chemical Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch	2500 MT/Month	
2	M/s. Fiorence Industries Plot No: 10006/B, GIDC Industrial Estate Ankleshwar, Dist.: Bharuch	500 MT/Month	

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

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By Product - Sodium Sulphate Powder

CIL CCA Quantity Yearly: **19779 MT/Annum**
CIL CCA Quantity Monthly: **1648.25 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	M/s. Chemifs Chemical Pvt. Ltd. Plot No: 1313, NCWI Zone, GIDC Sarigam, Taluko – Umbergaon, District – Valsad 396 155	2000 MT/Month	
2	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch	1000 MT/Month	

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

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By Product – Ammonium Sulphate Powder

CIL CCA Quantity Yearly: **8370 MT/Annum**
CIL CCA Quantity Monthly: **697.5 MT/Month**

Sr. No.	Name and Address	CCA Quantity of Utilizer	Quality requirement
1	M/s. Modeshweri Chemical Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch	1000 MT/Month	
2	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch	1000 MT/Month	

Quality requirement for Sr. No. 1:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

Quality requirement for Sr. No. 2:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

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Modheshwari Chemicals

Manufacturers & Dealers of Inorganic Chemicals

Plot No. A-1/1511, G.I.D.C. Estate, Ankleshwar - 393 002. Dist. Bharuch.
Ph. (M) 93775 12003
Email : modheshwarichemicals@yahoo.co.in Web : www.modheshwari.in

Date: 21/07/2023

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject: Acceptance of By-Product based on Quality Requirements

Dear Sir

We hereby confirm our agreement to accept your company's by-product **Ammonium Chloride** provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates [as $(NH_4)_2SO_4$], percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

For Modheshwari Chemical

MODHESHWARI CHEMICALS

Proprietary/Authorised Signatory

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FLORENCE INDUSTRIES

Mfg.: Pigments, Dyes & Inorganic Chemicals

Plot No. 10006/B, Opp. Shiv chemical, Dhirajcane Co. Road, Ent. 23
Near BEIL Company, G.I.D.C., Ankleshwar - 393 002 Ph. : 02646 - 221822
Mob. : 98258 91305 / 93274 31341 E-mail : florenceindustries@yahoo.in

To,

Coromandel International Ltd.

Sarigam, Gujarat

Date : 21/07/2023

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Chloride**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5
2	Moisture, percent by weight, Max	%	1.0
3	Iron (as Fe), percent by weight, Max	%	0.01
4	Sulphates (as (NH4)2SO4), percent by weight, Max	%	0.3
5	Matter insoluble in water, percent by weight, Max	%	0.2

For Florence Industries

FLORENCE INDUSTRIES

Authorised Signature

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CHEMIFS CHEMICAL PVT LTD

Date: 17/11/2021

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by product **Sodium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	92.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

For Chemifs Chemical Pvt. Ltd.

CHEMIFS CHEMICAL PVT. LTD. SARIGAM

Authorized Signatur

Factory Office - Plot No.1313, NCWI Zone, GIDC, Sarigam-396155, Tal- Umbergaon, Dist Valsad, Gujarat (Ind.)
Reg. Office - 203, Platinum CHS Limited, Near Bread Factory, Mira Bhayander Road, Mira Road, Thane, Mumbai-401107
CIN Number: U24239MH2020PTC338541 E-mail: info@chemifs.com Phone No. +91 25119 20770, +91 260 296 7307

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PREET DYES & CHEMICALS

PLOT NO.3026, PHASE III,GIDC, PANOLI – 394116 DIST: BHARUCH

Date: 17/07/2023

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject: Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Sodium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98.0
2	Matter insoluble in water Percent by mass, Max	%	0.5
3	Chloride (as NaCl), Percent by mass, Max	%	2.0
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02
5	Iron (as Fe), Percent by mass, Max	%	0.002
6	Loss on Drying, percent by mass, Max @ 105	%	1.0
7	pH (of 10 percent solution)	%	7.5-8.0

For Preet Dyes & Chemicals

PREET DYES & CHEMICALS PANOLI

Authorised Signatory

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Shri Ganeshji Nama

Modheshwari Chemicals

Manufacturers & Dealers of Inorganic Chemicals

Plot No. A-1/1511, G I D C. Estate, Ankleshwar - 393 002. Dist. Bharuch

Ph. : (M) 93775 12003

Email : modheshwarichemicals@yahoo.co.in Web : www.modheshwari.in

Date: 17/07/2023

To,

Coromandel International Ltd.

Sarigam, Gujarat

Subject : Acceptance of By-Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Sulphate**, provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as (NH4)2SO4]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H2SO4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

For Modheshwari Chemicals

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

Authorized Signature

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PREET DYES &CHEMICALS

PLOT NO.3026, PHASE III,GIDC, PANOLI – 394116 DIST : BHARUCH

Date: 17/07/2023

To,

Coromandel International Ltd

Sarigam, Gujarat

Subject : Acceptance of By Product based on Quality Requirements

Dear Sir,

We hereby confirm our agreement to accept your company's by-product **Ammonium Sulphate** provided it meets the following quality requirements. We believe that incorporating this by-product into our processes will bring significant benefits to our operations.

Quality Requirements:

Sr. No.	Parameter	Unit	Acceptance Limit
1	Assay, percent by mass, Min [Ammonium sulphate as $(NH_4)_2SO_4$]	%	96.7
2	Moisture, percent by mass, Max	%	1.0
3	Free acidity as (H_2SO_4), percent by mass, Max	%	0.70
4	Water insoluble, percent by mass, Max	%	To pass the test
5	Iron (as Fe), percent by mass, Max	%	0.20
6	Arsenic, percent by mass	mg/kg	0.01

For Preet Dyes & Chemicals

Auth. Sign.

Authorized Signatory

PREET DYES & CHEMICALS PANOLI

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INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

Certificate No.	:	**IN-GJ89615291868927V**
Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654231176635 61V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	MODHESHWARI CHEMICALS
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY * GOVERNMENT OF INDIA * J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

Snehal R. Nayak * ACC * Sarigam

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

JD 0013365242

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- For information related to e-Stamping you may write to us on our email id estamp.ahmedabad@stockholding.com or visit our Branch/Centre.

સૂચના

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રની વિગતો www.shcilestamp.com દ્વારા અથવા સ્ટોક હોલ્ડિંગની "ઈસ્ટેમ્પિંગ" મોબાઈલ એપ્લિકેશન અથવા સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર (જેની વિગતો www.stockholding.com પર ઉપલબ્ધ છે) પર જઈ ને ચકાસી શકાય છે.
- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.
- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Modheshwari Chemicals Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the **Ammonium Chloride Powder (NH4Cl)** generated from the manufacturing activities of the COMPANY for in-house utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Chloride Powder (NH4Cl)	By-product	13398 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Chloride	2500 MT/Month

BUYER shall purchase, collect, store, and utilize Ammonium Chloride Powder (NH4Cl) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Chloride Powder (NH4Cl) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions:

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/02 GOVERNMENT OF INDIA

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietar / Authorised Signatory

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA 29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2023

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s Modheshwari Chemicals

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

Authorized Signatory

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ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Book No. 03
Page No. 125
Serial No. 4789
Date 29 MAY 2023

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GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

By R.P.A.D.

CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A – Amendment)
CCA AMENDMENT NO: AWH -121872

NO: GPCB/ANK/CCA-878(1)/ID-15358/_____ **DT:____/10/2022**

To,
M/s. MODHESHWARI CHEMICALS,
PLOT NO: A-1/1511,
GIDC ESTATE ANKLESHWAR,
DIST-BHARUCH.

SUB: Amendment in Consolidated Consent & Authorization (CC&A) under various Environmental Acts/ Rules.
REF: (1) Your application No. 261648 dated 20/08/2022.
(2) CCA No. AWH - 110286 dated: 10/11/2020. (CCA Renewal)
(3) CTE – Amendment No. CTE - 117880 dated: 02/07/2022.

Sir,

This has reference to the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** under the provisions of the various Environmental Act/ Rules, which stands amended as under.

The Validity of this order will be up to 30/09/2025.

1. **The list of proposed products to be manufactured shall be as follows:**

Sr. No.	Products	Quantity (MT/Month)		
		Existing	Proposed	Total
1	Ammonium Chloride	500	2000	2500
2	Ammonium Sulphate	50	950	1000
3	Etchant Formulation	300	---	300

2. **Specific conditions:**
   a) Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.
   b) Unit shall maintain ZLD.
   c) Unit shall use fresh raw material only.
   d) Unit shall sell out their hazardous waste to authorized endusers who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MoU with such authorized endusers and submit MoU.
   e) All the efforts shall be made to send hazardous waste to cement industry for Co- processing first & there after it shall be disposed through other option.
   f) Unit shall follow spent solvent management guideline framed by board and shall make MoU with outside distillation units, if any. Also submit the prescribed forms as per guideline.

Outward No: 68/GPCB/18/11/2022

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g) Unit shall strictly follow the Solid Fuel guideline framed by Board and shall install APCM as per guideline.

h) Unit shall strictly follow the Fly Ash Notification for disposal of generated ash.

i) Unit shall comply with additional condition for CPA/SPA areas as per GPCB office order dated: 11/11/2019.

[A] Additional conditions under Air Act:

a) Unit shall adhere to stringent air pollutants standards i.e. 80 % of existing flue gas and process emission standards in the CPA.

Flue gas Emission Standards		
Parameters	Existing	Revised norms (80% of Existing)
PM	150 mg/Nm3	120 mg/Nm3
SO2	100 PPM	80 PPM
NOx	50 PPM	40 PPM

b) Following air pollution control measures shall be provided for the flue gas emission sources like Boiler, Thermic Fluid Heaters etc. (As Applicable) (For solid fuel based utilities)

Stipulated APCM in Red category industrial units of CPA	
Steam generation capacity (in TPH)	Type of APCM
Less than 1	Multi Cyclone
1 to <3	Multi Cyclone + Water Scrubber
3 to <6	Bag filter + Water Scrubber
≥ 6	ESP+ Water Scrubber

c) Unit shall provide at least two stage scrubbing system of appropriate media for the control of the process gas emission.

d) Unit shall install and commission Continuous Emission Monitoring System- CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/ CPCB server (In case of large and medium red category industries)

e) All common facilities shall install CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/CPCB server to the Stacks provided with Common Multiple Effect Evaporator (CMEE), Common Spray Dryer, Common incinerator etc.

f) The unit shall adhere to Sector specific guidelines/ SOP published by GPCB / CPCB from time to time for effective fugitive emission control. (like guidelines for: Stone crushing units, Coal handling units, spent solvent handling and management, spent acid management, Decontamination of drums, containers etc.)

g) Unit shall take adequate measures to control odour nuisance from the industrial activities which may include measures like- use of masking agent with atomizer system (water curtain), closed / automatic material handling system, containment of the odour vulnerable areas etc.

h) Unit shall not use Pet-coke, furnace oil, LSHS as a fuel.

i) Unit shall adopt sectoral Best Available Technology-BAT (Like Use of Induction Furnace, Electric Arc Furnace instead of Cupola furnace in foundry industry, Caustic Recovery System in Cotton Textile units etc.)

j) Unit shall provide green belt of 40% of the plot area, using concept of the social forestry and development of green belt outside project premises in adjacent areas.

Outward No: 8620/2019/20

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152
GPCB

k) Unit shall provide Wall to Wall carpeting in vehicle movement areas within premises to avoid dusting.

[B] Additional conditions under the Water Act:

a) Unit shall only use treated effluent for preparation of lime and other slurry in ETP. No fresh water shall be utilized in ETP.

b) In the case, if the Industry is not a member of CETP and domestic waste water generation is more than 10 KLPD, industry shall install STP of adequate capacity and treated sewage shall be reused / recycled to the maximum extent.

c) In case of Large and Medium Red Category industry, the unit shall install system for continuous monitoring of effluent quality / quantity as per CPCB guidelines for relevant parameters (like pH, Flow, Temperature, TOC/COD, NH3-N etc.) and shall be connected to GPCB server. In case, if the industry is a member of CETP, unit shall install flow meter.

d) If the water consumption of the unit is more than 50 KLPD, Unit shall submit detailed water harvesting plan (off site).

e) The unit shall explore Techno-Economic feasibility of Zero Liquid Discharge (ZLD) and if feasible, ZLD should be adopted.

[C] Additional conditions under the Hazardous Waste Management Rules:

a) Unit shall strictly carry out handling, storage and disposal of fly-ash, slag, red-mud, de-inking sludge etc. (High Volume- Low Effect Wastes) as per prevailing guidelines and its disposal at designated locations approved by the Board.

b) Industry shall dispose its hazardous wastes through co-processing, pre-processing to the extent possible prior its disposal to incineration/ landfill as per provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

c) Industry shall strictly comply with all the measures specified in guidelines for spent solvent management, spent acid management, and other guidelines/directions published from time to time by GPCB and/or CPCB, etc.

d) Unit shall carry out transportation of hazardous wastes through GPS mounted vehicles only.

[D] Other General Conditions:

a) Unit shall submit report of compliance of the conditions of EC every year to the Board prepared by third party.

b) Unit shall enhance CER fund allocation to at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.

3. CONDITION UNDER THE WATER ACT:

3.1 The condition No.3.3 for Water Consumption under Water Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Water (Qty: Kl./day)	Water consumption		
	Existing	Proposed	Total
Domestic	2	1	3
Industrial	2.2	8	10.2
Total	**4.2**	**9**	**13.2**

Outward No:686620, 18/07/2023

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3.2 The condition No. 3.1 & 3.2 for Wastewater Generation under Water Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Water (Qty: KL/day)	Wastewater Generation		
	Existing	Proposed	Total
Domestic	2	1	3
Industrial	--	1.3	1.3
Total	2	2.3	4.3

3.3 Mode of disposal of wastewater:

a) Proposed 1.3 KLD generated effluent from industrial sector shall be mixed with fresh water and reused within plant premises. Hence, unit shall maintain ZLD

b) 3 KLD domestic sewage shall be disposed off through septic tank/soak pit system as per previous CCA conditions.

4. CONDITIONS UNDER THE AIR ACT:

4.1 The condition No. 4.1 for Fuel Consumption under Air Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Sr. No.	Name of fuel	Quantity		
		Existing	Proposed	Total
1	Briquette	900 Kg/day	450 Kg/day	1350 Kg/day
2	Natural Gas	2000 NM^3/hr	1000 NM^3/hr	3000 NM^3/hr

4.2 The condition No. 4.2 for **Flue gas stacks** under Air Act of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
	Existing				
1	Fluid Bed Dryer (300 Kg/Hr.)	9	--	PM SO_2 NOx	150 mg/NM^3 100 ppm 50 ppm
	Proposed				
1	Boiler (1.5 TPH)	13	Cyclone Separator followed by water Scrubber	PM SO_2 NOx	120 mg/NM^3 80 ppm 40 ppm
2	Hot Air Generator (1 Lakh Kcal/hr.)	13	--		
3	Dryer (2 MT/hr)	--	--	Water Vapour	--

Outward No: 686620, 18/10/2020

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010.
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4.3 There shall be no process gas emission from proposed changes.

4.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /M³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_2)	50	80
4.	Oxides of Nitrogen (NO_2)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.6 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition as above.

5 CONDITIONS UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016

5.1 Unit shall comply with provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016.

5.2 The condition No. 6.2 under authorization for Hazardous & other wastes of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** is amended and shall now be read as under.

Sr. No.	Name of Haz. Waste	Cate. Num.	Quantity /Year			Facility
			Exi.	Pro.	Total	
1	Discarded Containers bags / Liners	33.1	32 MT	42 MT	74 MT	Collection, Storage, Decontamination, Transportation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility / recycler or send back to supplier.
2	Inorganic Sludge	B36	60 MT	320 MT	380 MT	Collection, Storage, Transportation and Disposal by send it to the TSDF - BEIL.

Outward No: 686620, 18/10/2022

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6 All other conditions of the CCA order No: **AWH-110286, issued vide letter no. GPCB/ANK/CCA-878(1)/ID-15358/572946, dated 10/11/2020** will remain same.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Arun G. Patel)
ENVIRONMENT ENGINEER

Outward No:686620, 18/10/2022

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Certificate of Stamp Duty

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Certificate No.	:	IN-GJ69614829022408V
Certificate Issued Date	:	24-May-2023 01:50 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654203462748 92V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	FLORENCE INDUSTRIES
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY GOVERNMENT OF INDIA J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023

JD 0013365241

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- Any alteration to this certificate renders it invalid and would constitute a criminal offence.
- Kindly contact Stock Holding Branch / Centre in case of discrepancy.
- For information related to e-Stamping you may write to us on our email id estamp.ahmedabad@stockholding.com or visit our Branch/Centre.

સૂચના

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રની વિગતો www.shcilestamp.com દ્વારા અથવા સ્ટોક હોલ્ડિંગની "ઈસ્ટેમ્પિંગ" મોબાઈલ એપ્લિકેશન અથવા સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર (જેની વિગતો www.stockholding.com પર ઉપલબ્ધ છે) પર જઈ ને ચકાસી શકાય છે.
- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.
- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Florence Industries Plot No: 10006/B, GIDC Industrial Estate Ankleshwar, Dist.: Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the **Ammonium Chloride Powder (NH4Cl)** generated from the manufacturing activities of the COMPANY for Inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Chloride Powder (NH4Cl)	By-product	13398 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Chloride	500 MT/Month

BUYER shall purchase, collect, store and utilize Ammonium Chloride Powder (NH4Cl) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Chloride Powder (NH4Cl) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

For FLORENCE INDUSTRIES

Proprietor

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

For FLORENCE INDUSTRIES

Proprietor

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2023

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s Florence Industries

For FLORENCE INDUSTRIES

Proprietor

Authorized Signatory

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NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Aren Dist. Valsad (Guj.) REGD. NO. 5470/08 GOVERNMENT OF INDIA

Book No. 03
Page No. 125
Serial No. 4787
Date 29 MAY 2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R P A D

CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A)
CCA NO: AWH- 103950

NO: GPCB/ANK/CCA- 1255(1)/ID-31707/52595 **DT: 4/11/2019**

In exercise of the power conferred under Section-25 of the Water (Prevention and Control of Pollution) Act-1974, under Section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 6(2) of the Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016 framed under the E(P)Act-1986

And whereas Board has received consolidated application dated **26/08/2019** and inward no. **161706** for the consolidated consent and authorization **(CC & A)** of this Board under the provisions / rules of the aforesaid Acts, Consolidated Consent & Authorization is hereby granted as under.

CONSOLIDATED CONSENT AND AUTHORISATION:
(Under the provisions / rules of the aforesaid Environmental Acts)

To,
M/s. FLORENCE INDUSTRIES,
PLOT NO:10006/B,
GIDC ESTATE ANKLESHWAR,
DIST-BHARUCH.

1. **Consent Order No. : AWH-103950 date of Issue 07/09/2019.**
2. The consent under Water Act -1974, Air Act - 1981 and Authorization under Environment (Protection) Act, 1986 **shall be valid up to 26/08/2024** to operate industrial plant to manufacture following products:

Sr. No.	Products		Quantity (MT/Month)
1	Calcium Nitrate	OR	500
2	Ammonium Nitrate	OR	
3	Calcium Chloride	OR	
4	Ammonium Chloride	OR	
5	Manganese Sulphate	OR	
6	Potassium Nitrate	OR	
7	Zinc Chloride		

SPECIFIC CONDITIONS:-

a. Unit shall maintain ZLD.
b. Unit shall use fresh raw material only.
c. Unit shall not carryout any activity / production without prior permission from MoEF&CC, FIA Notification dated 14/09/2006 amended from time to time.

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3. **CONDITION UNDER THE WATER ACT:**

3.1 The quantity of total water consumption shall not exceed 0.625 KL/Day as per below break up as mentioned in form D submitted for consent application under the Water Act- 1974.

a) Industrial: 0.125 Kl /Day
b) Domestic: 0.5 KL/Day

3.2 The quantity of total waste water generation shall not exceed 0.4 KL/Day as per below break up as mentioned in form D submitted for consent application under the Water Act- 1974.

a) Industrial: Nil
b) Domestic: 0.4 KL/Day

3.3 Sewage shall be disposed off through septic tank/ soak pit system.

3.4 There shall be no discharge of the industrial effluent which will be generated from the manufacturing process and other ancillary industrial operations. Hence the unit shall strictly adhere to zero liquid discharge (ZLD).

3.5 Unit shall be required to make adequate storage facilities to store the effluent by providing acid proof brick lined impervious tanks/HDPE tanks.

3.6 Unit shall make fixed arrangement in Effluent Treatment Plant. Unit shall not keep any by-pass line or system or loose or flexible pipe line in ETP.

3.7 Magnetic flow meters shall be installed at the inlet & outlet of effluent collection tanks/ ETP to measure the quantity of effluent.

3.8 Unit shall affix of water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act – 1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the unit until the contrary is proved.

3.9 The underground drainage connection given by the GIDC for discharge of industrial effluent shall be disconnected & the outlet shall be sealed, if unit have.

3.10 In no circumstances the effluent either treated or untreated shall be discharged into underground drainage pipeline of GIDC, storm water drain or anywhere else.

3.11 Unit shall provide adequate / safe effluent sampling facility for the effluent being stored in final collection / discharge tank of ETP/STP.

3.12 Unit shall put up at the entrance a board displaying the name of unit, particulars of the products/ process, the name of proprietor/partners /directors of the unit, the electricity consumer number as on the record of DGVCL.

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GUJARAT POLLUTION CONTROL BOARD
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3.13 Unit shall have to display on-line data outside the main factory gate with regard to kind and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises.

3.14 Unit shall have to keep accurate records of quality & quantity of effluent on day-to-day basis. Separate logbook shall be maintained for recording the data & shall be made available for inspection as & when asked.

3.15 Unit shall keep accurate records of quantity of production of each product, quantity of water consumption, quantity of effluent generated and consumption of electricity on day to day basis and required to submit the compiled record of same (month) to GPCB on or before fifth day of the succeeding month.

3.16 In case of incinerators or MEE, the flow measuring devices for mother liquor/ toxic effluent/ Non-biodegradable effluent, light diesel oil, Furnace oil, etc. i.e. fuel used for combustion, air used for combustion shall be separately provided. In-house temperature recording devices as well as gaseous flow measuring devices for scrubber shall also be provided. These data of temperature & flow should be recorded every day & submitted to GPCB on monthly basis.

3.17 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

3.18 Leachate from the hazardous solid waste, if any shall also be connected into a collection tank through leachate collection facilities and shall be treated along with industrial effluent and unit shall maintain ZLD.

3.19 The Environmental Management Unit/Cell shall be set-up to ensure implementation of and monitoring of environment safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell / Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for interfacing environmental issues. These Cells also continue the exercise of environmental audits and preparation of environmental statements.

3.20 The Environmental audit shall be carryout yearly, if applicable. The environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

3.21 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 5 meters width is developed.

3.22 In case of change of ownership/ management the name and address of the new ownership/ partners/ directors/ proprietor should immediately be intimate to the Board. Also any change in equipment or working conditions as mentioned in the consents form/ order should immediately be intimated to this Board.

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3.23 The Board reserves the right to review and/or revoke the consent and / or make modifications in the conditions which it seems fit in accordance with provisions of Water Act-1974.

4. **CONDITIONS UNDER THE AIR ACT:**

4.1 The following shall be used as fuel:

Sr. No.	Name of fuel	Quantity
1.	Agro waste/Briquettes	500 kg/Day

4.1.1 The flue gas emission through stack shall conform to the following standards:

Stack No.	Stack attached to	Stack Height in Meter (From G.L.)	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
1.	Boiler	11			
2.	Furnace (1 nos.)- Evaporators (3 nos.) (2 KL each)	12	---	PM SO2 NOx	150 mg/Nm³ 100 ppm 50 ppm

4.2 There shall be no process gas emission from the manufacturing process and any other ancillary industrial operation through various stacks/ vent of reactors, process, vessels from plant premises.

4.3 The concentration of the following parameters in the ambient air within the premises of the unit shall not exceed the limits specified hereunder:

Sr. No.	Parameters	Permissible Limit (microgram /m³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_2)	50	80
4.	Oxides of Nitrogen (NO_2)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.4 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified as above.

4.5 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified as above.

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4.6 Unit shall provide eartholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

4.7 Unit shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

4.8 All efforts shall be made to control VOC emissions and odor problem, if any.

5. **AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (See rule 6(2)).**

5.1 Number of authorization: **AWH-103950 date of issue 07/09/2019.**

5.2 **M/s. FLORENCE INDUSTRIES** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **PLOT NO:10006/B, GIDC ESTATE ANKLESHWAR, DIST: BHARUCH.**

A. **Reception of Hazardous & other wastes by unit:**

Sr. No.	Name of Waste	Category Number	Quantity in Year	Facility
1	Discarded container/bags	33.3	100 nos. 100 nos.	Collection, Storage, Decontamination, Transportation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility / recycler or send back to supplier

5.3 The authorization is granted to operate a facility as above.

5.4 The authorization shall be in force for a period up to 26/09/2024.

5.5 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act, 1986.

6. **TERMS AND CONDITIONS OF AUTHORISATION:**

6.1 The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

6.2 The authorization or its renewal shall be produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.

6.3 The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.

6.4 Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this authorization.

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6.5 The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all the specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6.6 The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

6.7 It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.

6.8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

6.9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

6.10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.

6.11 The importer or exporter shall bear the cost of import or export and mitigation of damages if, any.

6.12 An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules 2016.

6.13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

6.14 Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

6.15 Unit shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No. 657 of 1995 dated 14th October 2003.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(A.V.SHAH)
SR. ENVIRONMENT ENGINEER

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Website : www.gpcb.gov.in

GPCB

By: RPAD

No.GPCB/HAZ-R(9)-62/ 173285 Date: 23 OCT 2018

To,
Shri Bharat K Sharma,
Additional Director &Divisional Head,
Hazardous Waste Management Division-II,
Central Pollution Control Board,
'Parivesh Bhawan', East Arjun Nagar
Delhi – 110032

Sub: Proposal for utilization of hazardous waste under Rules 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules-2016 (Rule-11 of HWR- 2008) -regarding.
Ref: Application of the unit dated 10/10/2018.

Respected Sir,

In context to the above mentioned subject, as per Rule 9 of Hazardous and Other Waste (M&TM), Rules 2016, where standard operating procedures or guidelines are not available for specific utilization of hazardous waste, the approval has to be sought from CPCB. Such applications are required to routed through concern SPCB at CPCB.

In view of the same **M/s. Florence Industries.,** at **Plot No.10006/B, GIDC Ind. Estate, Ankleshwar, Dist: Bharuch** has proposed to utilize **"Ammonium Sulphate Solution @ 8400 MTPA & Ammonium Sulphate Powder @ 3600 MTPA,** generating from various chemicals industries for utilization in manufacturing of Ammonium Sulphate and **Ammonium Chloride Solution @ 6240 MTPA & Ammonium Chloride Powder @ 2700 MTPA"** generating from various chemicals industries for utilization in manufacturing of Ammonium Chloride. The application of the unit is endorsed herewith for your information and further necessary action please.

Thanking you,

For and on behalf of
Gujarat Pollution Control Board

(D. M. Thaker)
Environment Engineer
Unit Head Hazardous waste cell

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Certificate No.	:	IN-GJ69818479678265V
Certificate Issued Date	:	24-May-2023 01:52 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654289333927 28V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	CHEMIFS CHEMICALS PVT LTD
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY GOVERNMENT OF INDIA
J. M. PATEL
VALSAD DISTRICT
GUJARAT STATE
REGD. NO. 5470/08

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

Snehal R. Nayak ACC Sarigam

JD 0013365246

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NOTARY

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- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.
- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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NOTARY GOVERNMENT OF INDIA J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Chemifs Chemical Pvt. Ltd. Plot No: 1313, NCWI Zone, GIDC Sarigam, Taluko – Umbergaon, District – Valsad 396 155

THAT

As a part of this MOU, BUYER has agreed to purchase the Sodium Sulphate (Na2SO4) Powder generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Sodium Sulphate (Na2SO4) Powder	By-product	19779 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Sodium Sulphate	2000 MT/Month

BUYER shall purchase, collect, store and utilize Sodium Sulphate (Na2SO4) Powder receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Sodium Sulphate (Na2SO4) Powder (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For Chemifs Chemical Pvt. Ltd.
Authorized Signatory

For COROMANDEL INTERNATIONAL LIMITED
AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For Chemifs Chemical Pvt. Ltd.
Authorized Signatory

For COROMANDEL INTERNATIONAL LIMITED
AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Chemifs Chemical Pvt. Ltd.

For Chemifs Chemical Pvt. Ltd.

Authorized Signatory

Authorized Signatory

NOTARY NOTARIAL

NOTARY ★ J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/03 ★ GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY ★ JAYANTILAL M. PATEL Area Dist. Valsad (GJ) REGD. NO. 5470/03 ★ GOVERNMENT OF INDIA

Book No. 03
Page No. 125
Serial No. 4790
Date 29 MAY 2023

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

BY RPAD

"CTE-Amendment"
(CTE-123325)

NO: GPCB/CCA-SRG-707(2)/ID 77384/ 67019 30 Date: 30 / 12 /2022

TO,
M/s. Chemil's Chemical Private Limited
Plot No: 1313, NCWI Zone,
GIDC Sarigam,
Tal: Umbergaon, Dist: Valsad – 396 155

SUB: Consent to Establish (NOC) under Section 25 of Water Act 1974, Section 21 of Air Act 1981 and EPA-1986.

REF: Your CTE-Amendment application Inward ID No: 265609 dated 15/11/2022.

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish-Amendment for increasing the Production capacity at existing location at Plot No: 1313, NCWI Zone, GIDC Sarigam, Tal: Umbergaon, Dist: Valsad-396 155 for following items:

1. The order shall be valid up to 14/11/2029.
2. The list of the product to be manufacture is as below:

Sr. No.	Products	Existing Quantity (MT/Month)	Proposed Quantity (MT/Month)	Total Quantity (MT/Month)
1	Poly Aluminium Chloride Soln (10-12%)	2000 MT	2000 MT	2000 MT
2	Poly Aluminium Chloride (PAC) Powder	200 MT	00	200 MT
3	Aluminium Tri Chloride (By way of mixing & Blending) PAC Solution powder	750 MT	00	750 MT
PROPOSED NEW PRODUCTS				
4	Ammonium Sulphate	00	300 MT	300 MT
5	Sodium Sulphate	00	2000 MT	2000 MT
6	Magnesium Sulphate	00	100 MT	100 MT
7	Manganese Sulphate	00	100 MT	100 MT
8	Zinc Sulphate	00	100 MT	100 MT
9	Potassium Sulphate	00	200 MT	200 MT
10	Ferrous Sulphate	00	300 MT	300 MT

Above Product no. 4 to 10, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.

Clean Gujarat Green Gujarat
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11	Calcium Chloride	00	1000 MT	1000 MT
12	Ammonium Chloride	00	1000 MT	1000 MT
13	Potassium Chloride	00	500 MT	500 MT
14	Aluminium Chloride	00	300 MT	300 MT
Above existing Product no.1 proposed additional 2000 MT & New Product no. 11 to 14, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.				
15	Sodium Sulphate	00	250 MT	250 MT
16	Sodium Bi-Sulphite	00	300 MT	300 MT
17	Di-Calcium Phosphate	00	300 MT	300 MT
Above Product no. 12 to 14, shall be manufactured alternatively i.e. only one product will be manufactured at time in a plant.				

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

- Industry shall use fresh Raw Material & fresh Acid for the production of proposed products.

3. **CONDITIONS UNDER WATER ACT 1974:**

3.1 Source of Water:- GIDC Water Supply

3.2 The quantity of total water consumption shall not exceed **17 KL/Day** after CTE-amendment as per below break up after CTE-Amendment;

a) Industrial: **15 KL/Day.**
b) Domestic: **2 KL/Day.**

3.3 The quantity of total of waste water generation shall not exceed **6.1 KL/Day** after CTE-amendment as per below break up

a) Industrial: **4.7 KL/Day.**
b) Domestic: **1.4 KL/Day.**

3.4 Out of 4.7 KL/day, 0.7 KL/day effluent generated from Boiler Blow down shall be reuse for making Alkali Media in Scrubber, 1 KL/day recycled effluent generated from existing scrubber shall be reuse in process and remaining 3 KL/day effluent shall be treated in to ETP & treated wastewater shall be discharged in to CETP Sarigam.

Trade Effluent

3.5 The quality of industrial effluent shall confirm to the following standards: (Whichever is applicable)

PARAMETERS	CETP inlet Norms
pH	6.5 to 8.5
Temperature	40° C
Colour (pt.co. scale) in units	100 units
Suspended Solids	100 mg/l

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

GPCB

PARAMETERS	CETP inlet Norms
Oil and Grease	10 mg/l
BOD (3 days at 27°C)	400 mg/l
COD	1000 mg/l
Chlorides	600 mg/l
Sulphate	1000 mg/l
Ammonical Nitrogen	50 mg/l
Phenolic Compounds	1 mg/l
Arsenic	0.2 mg/l
Total Chromium	2 mg/l
Hexavelent Chromium	0.1 mg/l
Copper	3 mg/l
Lead	0.1 mg/l
Mercury	0.01 mg/l
Nickel	3 mg/l
Zinc	5 mg/l
Cadmium	2 mg/l
Tot Dissolved Solids	2100 mg/l

- All efforts shall be made to remove colour & unpleasant odour as far as practicable.

3.6 The final treated effluent confirming to the above standards shall be discharged into CETP, Sarigam for further treatment and disposal.

3.7 The applicant shall make the arrangement for holding the effluent for 48 hrs. in case of failure of / non operation of CETP, Sarigam Clean Initiative.

3.8 Industry shall provide fixed pipelines network with flow meter for conveyance of treated effluent & maintain records in this regard.

3.9 Domestic wastewater shall not be disposed through soak pit/septic tank.

3.10 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

4. CONDITIONS UNDER AIR ACT 1981:

4.1 Following shall be used as fuel:

Sr. No.	Utility	Fuel	Existing Quantity	Proposed Quantity	Total Quantity
1	Boiler	Natural Gas	145 m3/hr	0	145 m3/hr.
2	Spray Dryer	Natural Gas	110 m3/hr	0	110 m3/hr.

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4.2 The applicant shall install & operate comprehensive adequate air pollution control system in order to achieve prescribed norms.

4.3 The flue gas emission through stack attached to stack shall conform to the following standards:

Sr. No	Stack attached to	Stack height in meter	APCM	Parameters	Permissible limit
1	Boiler (2 TPH)	11	Adequate Stack Height	PM	150 mg/Nm^3
2	Spray Dryer (100 kg/Hr.)	11	Venturi Scrubber	SO_2 NO_8	100 ppm 50 ppm

4.4 The process emission through Various Stacks/Vent of reactor, Process, Vessel shall Conform to the following standards:-

Sr. No	Stack attached to	Stack height in meter	APCM	Parameters	Permissible limit
1	Glass Lined Reactor 3Nos (Cap.15 MT & 2 nos having cap. 12 MT)	11 (Common)	Common Water Scrubber + alkali scrubber	Acid Mist	50 mg/Nm3
2	Brick Lined Reactor (2 Nos of Cap. 14 MT each)				

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:-

PARAMETERS	PERMISSIBLE LIMIT	
	Annual	24 Hrs Average
Particulate Matter-10 (PM 10)	60 Microgram/m3	100 Microgram/m^3
Particulate Matter- 2.5 (PM 2.5)	40 Microgram/m3	60 Microgram/m^3
SO2	50 Microgram/m3	80 Microgram/m^3
NOx	40 Microgram/m3	80 Microgram/m^3

5. CONDITIONS UNDER HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDRY MOVEMENT) RULES, 2016 :

(Applicant shall have to comply with provisions of Hazardous and other Wastes (Management &Transboundry Movement) Rules, 2016)

5.1 Industry shall provide adequate collection, storage, treatment & transportation system in accordance with the nature, quantity & compatibility of hazardous waste and shall

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

offer their hazardous waste only to authorized operator of the ultimate disposal facility.

5.2 Applicant shall comply all the directives issued by Honorable Courts, notifications issued by Ministry of Environment & Forest, Department of Environment & Forest, Central Pollution Control Board and other competent authorities time to time.

5.3 Applicant shall comply all the guidelines published by Ministry of Environment & Forest, Department of Environment & Forest, Central Pollution Control Board and other competent authorities time to time.

5.4 Industry shall also comply following directives issued by the Supreme Court of India dated 14.10.2003.

5.5 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No.657 of 1995 dated 14th October 2003.

5.6 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.

5.7 The applicant shall obtain membership of common TSDF site for disposal of Haz. Waste as categorized in Hazardous and other wastes (Management & Transboundry Movement) Rules-2016 as amended from time to time.

5.8 The applicant shall provide temporary storage facilities for each type of Haz. Waste as per Hazardous and other wastes (Management & Transboundry Movement) Rules-2016 as amended from time to time.

6. **GENERAL CONDITION:**

6.1 Adequate plantation shall be carried out all along the periphery of the industrial premises and a green belt of adequate width is to be developed.

6.2 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

6.3 The applicant shall however, not without the prior consent to operate of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986.

6.4 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M: 75 dB (A)

Between 10 P.M. and 6 A.M.: 70 dB (A)

6.5 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

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6.6 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property ,in that case they are obliged to pay the compensation as determined by the competent authority.

6.7 In case of any unauthorized discharge outside the factory premises, it would be considered as violation under the Water Act 1974.

6.8 Applicant is required to comply with Public Liability Insurance Act-1991.

6.9 Management of Solid Waste generated from industrial activities shall be as per Solid Waste Management Rules-2016 (solid waste as defined in Rules-3(46)).

6.10 As per provision of Rules-18 of Solid Waste Management Rules-2016 all industrial unit using fuel and located within 100 km from the refused derived fuel requirement by refused derived fuel so produced.

For and on behalf of
Gujarat Pollution Control Board

(M. V. Patel)
Environment Engineer

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INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

सत्यमेव जयते

Certificate No.	:	IN-GJ69816691154466V
Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654257845406 20V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	PREET DYE CHEM
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/05 GOVERNMENT OF INDIA

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023

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સૂચના

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- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Sodium Sulphate (Na2SO4) Powder generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Sodium Sulphate (Na2SO4) Powder	By-product	19779 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Pulverization of Sodium Sulphate	1000 MT/Month

BUYER shall purchase, collect, store and utilize Sodium Sulphate (Na2SO4) Powder receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Sodium Sulphate (Na2SO4) Powder (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

J. M. PATEL NOTARY VALSAD DISTRICT GUJARAT STATE REGD. NO. 5476/08 GOVERNMENT OF INDIA

For CORROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

PREET DYES & CHEMICALS PANOLI

JAYANTILAL M. PATEL NOTARY VALSAD DISTRICT GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

DYES & CHEMICALS PANOLI

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Preet Dyes and Chemicals

PREET DYES & CHEMICALS PANOLI Auth. Sign.

Authorized Signatory

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

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NOTARY JAYANTILAL M. PATEL Dist. Valsad (Guj.) Area REGD. NO. 5470/08 GOVERNMENT OF INDIA

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Book No. 03
Page No. 124
Serial No. 4784
Date 29 MAY 2023

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GPCB

PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

Consent to Establish (NOC) - Amendment
CTE AMENDMENT NO: CTE-115403

NO: GPCB/ANK/CCA-1590(1)/ID-33646/ **DT:__/12/2021**

To,
M/s. PREET DYES & CHEMICALS,
PLOT NO: 3026,
GIDC ESTATE PANOLI,
DIST-BHARUCH.

SUB: Amendment in Consent to Establish (NOC) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.

REF: (1) Your NOC application No. 198900 dated 21/07/2021(for CTE-Expansion).
(2) CCA No. AWH - 105350 dated: 06/02/2020.

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants **Consent to Establish (NOC)** for **Proposed changes** in an industrial plant/activities at **PLOT NO: 3026, GIDC ESTATE PANOLI, DIST: BHARUCH** to manufacture the products.

The Validity of this order will be up to 20/07/2028.

1. **The list of proposed products to be manufactured shall be as follows:**

Sr. No.	Products	Quantity (MT/Month)		
		Existing	Proposed	Total (After Expansion)
1	Sodium Sulphate	100	--	100
2	Acid Orange-7	11	--	11
3	Acid Red-88			
4	Acid Red-18			
5	Acid Yellow-36			
6	Acid Blue-113			
7	Acid Black-1			
8	Direct Orange-26			
9	Direct Red-31			
10	Direct Yellow-4			
11	Direct Violet-9			
12	Direct Green-8			
13	Direct Black-29			
14	Reactive Yellow-7 (Yellow M-GR)			
15	Reactive Blue-4 (Brilliant Blue M-R)			

Outward No: 609930 Dt: 13/12/2021

Clean Gujarat Green Gujarat
ISO 9001:2008 & ISO 14001:2004 Certified Organization
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16	Benzidine Yellow-13 G (Pigment Yellow)			
17	Pigment Lake Red-C			
18	Sulphanilic Acid			
19	Salicylic Acid			
20	Hydrazobenzene			
21	Pulverization of Sodium Sulphate	--	1000	1000
22	Pulverization of Ammonium Sulphate	--	1000	1000

2. **Specific conditions:**

a. **Unit shall maintain ZLD.**

b. **Unit shall use fresh raw material only.**

c. **Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.**

d. **Unit shall sell out their hazardous waste to authorized endusers who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MoU with such authorized endusers and submit MoU.**

e. **All the efforts shall be made to send hazardous waste to cement industry for Co-processing first & there after it shall be disposed through other option.**

f. **Unit shall follow spent solvent management guideline framed by board and shall make MoU with outside distillation units, if any. Also submit the prescribed forms as per guideline.**

3. **CONDITION UNDER THE WATER ACT:**

3.1 **There shall be no change in water consumption, wastewater generation and their mode of disposal from proposed changes**

4. **CONDITIONS UNDER THE AIR ACT:**

4.1 There shall be no change in fuel consumption & flue gas emission from proposed changes.

4.2 The condition No. 4.3 for Process gas stacks under Air Act of the CCA order No: **AWH-105350, issued vide letter no. GPCB/ ANK/CCA-1590(1)/ID-33646/553914, dated 06/02/2020** is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
	Proposed				
1	Pulverizes (Sodium Sulphate & Ammonium sulphate)	--	Balloon Bags	--	--

Outward No: 609930, 28/12/2022

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

4.3 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /M³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM_{10})	60	100
2.	Particulate Matter ($PM_{2.5}$)	40	60
3.	Oxides of Sulphur (SO_x)	50	80
4.	Oxides of Nitrogen (NO_x)	40	80

- **Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.**
- **24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

4.4 Stack monitoring facilities like porthole, platform/ ladder etc., shall be provided with stacks/vents chimney in order to facilitate sampling of gases being emitted into the atmosphere.

4.5 All measures for the control of environmental pollution shall be provided before commencing production.

5. CONDITIONS UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016:

5.1 Unit shall comply with provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016.

5.2 Unit shall obtain authorization under Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016 for increase/ decrease in Hazardous & other waste quantity / category.

6. All other Conditions of CCA order No: AWH-105350, issued vide letter no. GPCB/ ANK/CCA-1590(1)/ID-33646/553914,dated:06/02/2020 shall remain unchanged.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(M.P. Solanki)
Dy. ENVIRONMENT ENGINEER

Outward No:609930, 28/12/2021

Clean Gujarat Green Gujarat
ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation
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Government of Gujarat

Certificate of Stamp Duty

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Certificate Issued Date	:	24-May-2023 01:51 PM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404654239553740 54V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	MODHESHWARI CHEMICALS
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY GOVERNMENT OF INDIA
J. M. PATEL
VALSAD DISTRICT
GUJARAT STATE
REGD. NO.
5470/08

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak
ACC
Sarigam

29 MAY 2023

JD 0013365243

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- Any alteration to this certificate renders it invalid and would constitute a criminal offence.

- Kindly contact Stock Holding Branch / Centre in case of discrepancy.

- For Information related to e-Stamping you may write to us on our email id estamp.ahmedabad@stockholding.com or visit our Branch/Centre.

સૂચના

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રની વિગતો www.shcilestamp.com દ્વારા અથવા સ્ટોક હોલ્ડિંગની "ઈસ્ટેમ્પિંગ" મોબાઈલ એપ્લિકેશન અથવા સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર (જેની વિગતો www.stockholding.com પર ઉપલબ્ધ છે) પર જઈ ને ચકાસી શકાય છે.

- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.

- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.

- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Modheshwari Chemicals Plot No: A-1/1511, GIDC Estate Ankleshwar, Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Ammonium Sulphate (NH4)2SO4 (Powder) generated from the manufacturing activities of the COMPANY for In-house utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Sulphate (NH4)2SO4 (Powder)	By-product	8370 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Ammonium Sulphate	1000 MT/Month

BUYER shall purchase, collect, store, and utilize Ammonium Sulphate (NH4)2SO4 (Powder) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Sulphate (NH4)2SO4 (Powder) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions:

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 3475/08 NOTARY GOVERNMENT OF INDIA

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any Illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

NOTARY GOVERNMENT OF INDIA J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

MODHESHWARI CHEMICALS

Proprietor / Authorised Signatory

JAYANTILAL M. PATEL NOTARY VALSAD DISTRICT GOVT. OF INDIA

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's	BUYER's
For M/s Coromandel International Limited	For M/s Modheshwari Chemicals
For COROMANDEL INTERNATIONAL LIMITED AUTHORISED SIGNATORY	MODHESHWARI CHEMICALS Proprietor / Authorised Signatory
Authorized Signatory	Authorized Signatory

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NOTARY GOVERNMENT OF INDIA J. B. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

NOTARY GOVERNMENT OF INDIA JAYANTILAL M. PATEL Area Dist. Valsad (Guj.) REGD. NO. 5470/08

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Book No. 03
Page No. 125
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Government of Gujarat

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Unique Doc. Reference	:	SUBIN-GJGJ13022404654270289332l3V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	BY PRODUCT MOU
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	PREET DYE CHEM
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08 GOVERNMENT OF INDIA

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

Snehal R. Nayak ACC Sarigam

29 MAY 2023

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- For information related to e-Stamping you may write to us on our email id estamp.ahmedabad@stockholding.com or visit our Branch/Centre.

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- આ પ્રમાણપત્રમાં કરેલ કોઈપણ ફેરફાર અમાન્ય છે અને તે ફોજદારી ગુનો બને છે.
- આ ઈ-સ્ટેમ્પ પ્રમાણપત્રમાં કોઈપણ વિસંગતતા જણાય તો સ્ટોક હોલ્ડિંગની શાખા / કેન્દ્ર પર સંપર્ક કરવો.
- ઈ-સ્ટેમ્પિંગ સંબધિત જાણકારી માટે અમને estamp.ahmedabad@stockholding.com પર ઈ-મેઈલ કરવો અથવા અમારી શાખા / કેન્દ્ર ની મુલાકાત લેવી.

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MEMORANDUM OF UNDERTAKING (MOU)

BETWEEN

COMPANY	BUYER
M/s. Coromandel International Limited Plot 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Dist.: Valsad-396155, Gujarat, India	M/s. Preet Dyes and Chemicals Plot No: 3026, GIDC Estate Panoli, Dist-Bharuch

THAT

As a part of this MOU, BUYER has agreed to purchase the Ammonium Sulphate (NH4)2SO4 (Powder) generated from the manufacturing activities of the COMPANY for inhouse utilization. Detail of materials as per COMPANY's CC&A are as follows:

Sr No	Name of Material	Category	CC&A Quantity as per COMPANY
1	Ammonium Sulphate (NH4)2SO4 (Powder)	By-product	8370 MT/Annum

Details of material as per BUYER's CTE & CC&A are as follows:

Sr No	Name of Material	Quantity as per BUYER
1	Pulverization of Ammonium Sulphate	1000 MT/Month

BUYER shall purchase, collect, store and utilize Ammonium Sulphate (NH4)2SO4 (Powder) receives from COMPANY. BUYER has represented to the COMPANY that it has got adequate infrastructure facilities and shall obtain all statutory licenses, permissions from the relevant authorities to store and use the Ammonium Sulphate (NH4)2SO4 (Powder) (hereinafter referred to as "Material").

The particulars of this MOU including terms and conditions between the COMPANY and BUYER are mentioned herewith:

Specific Conditions :

1. **BUYER shall have valid consent and authorization (CC&A) from Gujarat Pollution Control Board.**
2. The transportation of the said material will be through dedicated vehicles fitted with GPS 140.
3. BUYER shall not be engaged in trading of the purchased material.

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

29 MAY 2023

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4. BUYER shall be solely responsible for all losses, damages, actions, etc., that may be caused due to any inordinate delay in off-loading the material by BUYER. After receiving the Material from the Company, the total responsibility of handling, storage & utilization of Material will be on BUYER only.
5. BUYER shall adhere to the GPCB Consent condition for storage of Material.
6. The Parties to this MOU are independent contractors and nothing in this MOU shall be construed to create any Principal-Agent or Employer-Employee relationship between the Parties or their respective employees by virtue of this MOU.
7. BUYER shall only collect, store, and utilize material of COMPANY at the said location only.
8. BUYER shall be responsible for the safe and environmentally sound operation of the said material within its premises and keep the Company and its directors/employees fully indemnified at all times.
9. BUYER shall maintain a complete record of the above said Material Procured from the Company and utilization.
10. BUYER and COMPANY shall submit quarterly reports of material purchase and sell respectively to Gujarat Pollution Control Board regularly.
11. BUYER shall follow all Rules & Guidelines given in Gujarat Pollution Control Board (GPCB), Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change (MoEF & CC) from time to time and shall continue to abide by applicable laws.
12. Any illegal activity or negligence by BUYER or its agents/employees will initiate to terminate this MOU forthwith without prejudice to any of the accrued rights of the Company. It is further agreed between the Parties that COMPANY shall have an unfettered rights to forthwith terminate this MOU without assigning any reason to BUYER for breach of any of the terms of this MOU and/or any negligence, misconduct, improper use, distribution, storage of the Material that violate the applicable laws, rules and regulations for the time being in force.
13. BUYER shall indemnify and hold the COMPANY (including its officers, directors, employees, agents, contractors, successors and assigns) harmless from and against any and all liabilities, Claims, demands, damages, costs, expenses (including attorney's fees) or money judgements incurred by, or rendered against the COMPANY arising out of this Agreement and/or the breach of any of the terms and conditions of this Agreement and/or any breach

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

PIDILITE DYES & CHEMICALS LTD. PANOLI

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
29 MAY 2020

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and non-compliances of applicable laws and/or regulations for the time being in force.

14. This MOU is legally binding on the Parties and governed by the laws of India. The appropriate Courts in Hyderabad shall have exclusive jurisdiction to try any dispute between the Parties that cannot be resolved amicably within 30 days.

15. This MOU shall be valid from the date of signing for a period of one year and shall automatically deemed to have been extended for further periods subject to possession of all required permits/licenses etc., by BUYER, unless terminated by any of the Parties by issuing 30 days written notice to the other.

COMPANY's

For M/s Coromandel International Limited

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

Authorized Signatory

BUYER's

For M/s. Preet Dyes and Chemicals

PREET DYES & CHEMICALS AUTH. SIGN. PANOLI

Authorized Signatory

NOTARY NOTARIAL

GOVERNMENT OF INDIA NOTARY J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/08

ATTESTED

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

NOTARY JAYANTILAL M. PATEL Area Dist. Valsad (Guj.) REGD. NO. 5470/08 GOVERNMENT OF INDIA

E-Stamp Certificate No.:
IN-GJ69617644877209V

Book No. 03
Page No. 125
Serial No. 4786
Date 29 MAY 2023

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ANNEXURE – 4: Quality Comparison of by-product with BIS Standard

Ammonium chloride				
Sr. No.	Parameter	Unit	BIS Standards (Technical Grade) IS 1113 (1965) – Reaffirmed 2003	CIL Result from NABL Accredited Laboratory
1	Ammonium chloride (as NH4Cl), Percent by weight (on dry basis), Min	%	98.5	99.2
2	Moisture, percent by weight, Max	%	1	0.68
3	Iron (as Fe), percent by weight, Max	%	0.01	0.005
4	Sulphates [as (NH4)2SO4], percent by weight, Max	%	0.3	0.17
5	Matter insoluble in water, percent by weight, Max	%	0.2	0.09

Sodium Sulphate				
Sr. No.	Parameter	Unit	BIS Standards (Grade B) IS 255 (1982) - Reaffirmed 1999	CIL Result from NABL Accredited Laboratory
1	Sodium sulphate (as Na2SO4), Percent by mass, Min	%	98	98.78
2	Matter insoluble in water, Percent by mass, Max	%	0.5	0.14
3	Chloride (as NaCl), Percent by mass, Max	%	2	0.22
4	Iron, Aluminium and Chromium (as R2O3), Percent by mass, Max	%	0.02	0.016
5	Iron (as Fe), Percent by mass, Max	%	0.002	0.019
6	Loss on Drying, percent by mass, Max @ 105	%	1	0.37
7	pH (of 10 percent solution)	%	7.5 to 8	7.8

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Ammonium Sulphate				
Sr. No.	Parameter	Unit	BIS Standards (Type 1) IS 12478 – 1988 - Reaffirmed 1999	CIL Result from NABL Accredited Laboratory
1	Assay, percent by mass, Min (Ammonium sulphate as (NH4)2SO4)	%	96.7	96.9
2	Moisture, percent by mass, Max	%	1	0.81
3	Free acidity as (H2SO4), percent by mass, Max	%	0.7	0.31
4	Water insoluble, percent by mass, Max	%	To pass the test	Pass
5	Iron (as Fe), percent by mass, Max	%	0.2	0.04
6	Arsenic, percent by mass	mg/kg	0.01	0.002

IN-GJ46615125935404V

INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

सत्यमेव जयते

Certificate No.	:	IN-GJ46615125935404V
Certificate Issued Date	:	17-Apr-2023 11:20 AM
Account Reference	:	IMPACC (SV)/ gj13022404/ UMARGAM/ GJ-VL
Unique Doc. Reference	:	SUBIN-GJGJ13022404201568966294787V
Purchased by	:	COROMANDEL INTERNATIONAL LIMITED
Description of Document	:	Article 5(h) Agreement (not otherwise provided for)
Description	:	SALES PURCHASE AGREEMENT
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	COROMANDEL INTERNATIONAL LIMITED
Second Party	:	CHEMIFS CHEMICAL PRIVATE LIMITED
Stamp Duty Paid By	:	COROMANDEL INTERNATIONAL LIMITED
Stamp Duty Amount(Rs.)	:	300 (Three Hundred only)

GOVERNMENT OF INDIA ★NOTARY★ J. M. PATEL VALSAD DISTRICT GUJARAT STATE REGD. NO. 5470/03

20 APR 2023

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

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or to reward a person for doing so and that it has taken reasonable measures to prevent agents, employees, third parties, subject to its control or determining influence, from doing so.

Further, if at any point of execution of this agreement / Agreement, "RECYCLER" receives any demand, request for gratification, favour, etc., from any of the employees or representatives of Coromandel in connection with this Agreement, it shall promptly report the same to Coromandel's Whistle Blower at his email ID: corbodsman@corp.murugappa.com

Each party shall comply with all laws applicable to that party relating to anti-corruption, including the anti-corruption laws of any country in which any activities or obligations arising under the Agreement have been or are to be performed.

"RECYCLER" undertakes that in the event of use of any corrupt practices by it, Coromandel shall be entitled to cancel the Agreement and recover from "RECYCLER" The amount of any loss arising from such cancellation. The decision of Coromandel or its nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the "RECYCLER".

ANTI-COMPETITIVE BEHAVIOUR

Each party hereby warrants to the other party that, as at the date of the Agreement and on each subsequent occasion it performs obligations under the Agreement, it has not engaged in any Anti-competitive behaviour in relation to the potential or actual terms and conditions of Agreement to be agreed or as agreed in relation to the Product, including but not limited to the amount paid for the Product / services rendered, any level of volume discount or any other credit terms. "Anti-competitive Behaviour" means any communication (by any means, whether electronic, written, oral or otherwise), agreement (by any means, whether formal, informal, Agreement, non-Agreement, written or oral) or other form of coordination or cooperation with any other competitor (whether past, present or potential) that is unlawful or otherwise restricted or prohibited under applicable competition laws and regulations of India.

IN WITNESS WHEREOF the Parties herein have affixed their signatures on this Agreement on the day, month and year hereinabove first written

For COROMANDEL INTERNATIONAL LIMITED
(GENERATOR/SELLER)

Sign with Stamp

For, Chemils Chemical Pvt.Ltd.
(RECYCLER)

Sign with Stamp

Witness-1 Nitesh Singh
Witness-2 Abhishek Rou

ATTESTED
JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA
Book No. 02
Page No. 164
Serial No. 3476
Date 20 APR 2023

E-Stamp Certificate No.
IN-GJ18851259354041V

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RESPONSIBILITY OF THE TRANSPORTER:

1. Vehicles are authorized and linked with Global Positioning System (GPS specially AIS 140) and details web link share to sender and receiver of the waste.
2. Vehicles should follow XGN guideline provided by waste sender and waste receiver.
3. Vehicles should have the valid permit for transportation of hazardous waste from the RTO as per Motor Vehicle Act.
4. Vehicles should be painted preferably in blue colour with white strip of 15 to 30 cm width running centrally all over the body.
5. Vehicles should be fitted with mechanical handling equipment as may be required for safe handling of wastes.
6. The words "HAZARDOUS WASTE" should be displayed on all sides of the vehicles in Vernacular Language Hindi & English.
7. Each vehicle should have first-aid kit, spill control equipment and fire extinguisher.
8. Vehicle used for transportation shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made thereunder.
9. Transporter shall possess requisite copies of the certificate (valid authorization obtained from the concerned GPCB for transportation of waste by the waste generator and operator of a facility) for transportation of hazardous waste.
10. Transporter should have valid "Pollution under Control Certificate" (PUCC) during the transportation of hazardous waste and shall be properly displayed.
11. Name of the facility operator or the transporter, as the case may be, shall be displayed.
12. Emergency phone numbers and TREM Card in Form 9 should be available according to HW (M & TM) Rules, 2016.
13. Vehicle shall be fitted with roll-on /roll-off covers if the individual containers do not possess the same.
14. Carrying of passengers is strictly prohibited and those associated with the waste haulers shall be permitted only in the cabin.
15. Transporter shall carry documents of manifest for the wastes during transportation as required under Rule 19 of the Hazardous and other wastes [M&TM] rules, 2016.
16. Transporter shall carry documents of challan, gate pass & other applicable documents for the wastes during transportation.
17. The trucks shall be dedicated for transportation of hazardous wastes, and they shall not be used for any other purpose.
18. Hazardous Waste transport vehicle shall run only at a speed specified under Motor Vehicle Act in order to avoid any eventuality during the transportation of hazardous waste.
19. Educational qualification for the driver shall be minimum of 10th pass (SSC). The driver of the transport vehicle shall have valid driving license of heavy vehicles from the State Road Transport Authority and shall have experience in transporting the chemicals.
20. Transporter will ensure that the people handling hazardous waste have adequate training and knowledge of waste being handled.
21. Driver (s) shall be properly trained for handling the emergency situations and safety aspects involved in the transportation of hazardous wastes. He should be aware of procedures outlined in Emergency Response Plan and trained on emergency spill control procedures.
22. The design of the trucks shall be such that there is no spillage during transportation.

RESPONSIBILITY OF GENERATOR

1. That Hazardous waste will be handed over to transporter under supervision of representative of Generator.
2. That the representative of the Generator shall observe the loading of the vehicle when hazardous waste is taken from the plant.

CHEMIFIS CHEMICAL PVT. LTD. SARIGAM

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3. That the clearance of the paper such as gate pass manifest will be provided by Generator.
4. That the waste will be stored as per categorization and adequately segregated at generator's site. All precautions shall be taken to avoid spillage of any kind and leaching to the soil by the Generator.

MOBILISATION:

1. The Transporter shall ensure to deploy number of vehicles as required by Coromandel from time to time. Coromandel will give 24 hours advance intimation for mobilisation of the vehicle initially and shall advise Transporter 12 hours in advance regarding cancellations/ discontinuance. Transporter shall also deploy its personnel to handle the vehicle.
2. Transporter shall deploy vehicle suitable for transportation of Hazardous Wastes. The vehicle deployed by Transporter shall have all necessary fittings as per relevant laws and also shall have necessary permits, licenses as required by statutes.
3. In case of failure to mobilise the vehicle, Coromandel will impose appropriate penalty or organize alternate vehicle from other source and the differential cost will be debited to Transporter's account.
4. In case of breakdowns, the Transporter shall have to make his own arrangements for immediate repairs or for mobilizing alternate vehicle as required immediately. In case Transporter fails to make arrangements as above, Coromandel will organise alternate vehicle from another source and the differential cost will be debited to your account.

SAFETY AND GENERAL:

1. It is clearly to be understood by the Transporter that safety shall be always given prime consideration in the fulfilment of obligations under the Agreement. To this end, Transporter shall take all such steps that are deemed appropriate in the performance of the scope of work.
2. Safety Trainings: Transporter shall impart training to its staff about the required knowledge on handling of Hazardous Waste and emergency preparedness during transit. Transporter shall deploy its team to any training programme organized by Coromandel in this regard. Every hazardous cargo transporting driver should get trained about and shall possess training certificate for carrying hazardous cargo.
3. Safety Inspections / audits:
   a. Transporter shall inspect its vehicles (once in 3 months) in order to ensure that the vehicle is suitable and fit as per applicable law to transport Hazardous Waste.
   b. Coromandel shall also inspect the vehicle periodically or as and when they feel the need and the Transporter should undertake and carry out at his own cost, the suggestions and/or recommendations made by the Coromandel within the time limit specified by Coromandel.
   c. If, in the opinion of the Coromandel, any vehicle is not in serviceable condition due to inadequate maintenance, accidental damages, ageing etc. the Transporter shall have to make alternate arrangements immediately.
   d. Upon inspection by Coromandel Team (Security; Safety; Operations) if any short fall of requirements noted will be communicated to the Transporter for corrections. Repeated violations will be penalized as follows
      (i) Repeated Unsafe act by the driver / helper - Rs. 200/- per violation
      (ii) Repeated Unsafe condition/s - Rs.5,000/- per violation
      Coromandel will formally inform the violations observed and the same amount will be recovered from the payments to be made to Transporter.

TRANSIT ACCIDENTS / INCIDENTS:

1. During the current Agreement, the Transporter shall be very cautious so as to avoid accidents etc.

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2. During transportation of the hazardous material, transporter will be solely responsible and accountable for any accident or emergency like leakage, overturn of tanker.
3. In case of any accident caused by his vehicle(s), a penalty of Rs.5,000/- will be levied for each/every accident. Also, all statutory formalities, arising out of such accident(s), shall be fulfilled by the Transporter, at his cost. Transporter hereby undertake to indemnify Coromandel and keep its director, employees, or representatives indemnified against all losses, damages, cost, expenses, claim, action, suits, compliant, actions, litigations initiated or threatened to be initiated against Coromandel and/or its directors, employees, or representatives, by any third party or government agencies.

STATUTORY & LEGAL REQUIREMENTS

The Transporter shall be solely responsible and be wholly liable for the compliance of all statutory requirements, including but not limited to those in respect of the men deployed by him, in relation to or arising out of the scope of obligations undertaken under the Agreement.

1. Without prejudice to the foregoing liability, the Transporter shall also be solely liable for any and every damage or injury whatsoever and howsoever caused by him, or the men deployed by him or by his vehicles (including due to negligence or otherwise of himself or his men), during the performance of the scope of work under the Agreement, to:
2. Men employed or deployed by Coromandel within or outside the premises of Coromandel.
3. Third parties to their person or property, whether within or outside the premises of Coromandel.
4. The Transporter shall undertake to indemnify and keep indemnified the Coromandel from and against all and every damage, expenses, charges or costs incurred or liable to or called upon to be paid by the Coromandel in relation to any of the above obligations of the Transporter.

CHEMICAL PVT. LTD.

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AGREEMENT

This Agreement made at Sarigam on this 20th Apr.,2023 between **COROMANDEL INTERNATIONAL LIMITED**, a company incorporated in India under the Companies Act 1956, and having L24120TG1961PLC000892 and its Registered Office at "Coromandel House", 1-2-10, Sardar Patel Road, Secunderabad-500003, and having Manufacturing Plant at Plot No : 2102,2104/1,735 [illegible] Estate Sarigam Tal. Umbergaon, Dist :Valsad , Gujarat 396155, India (herein after referred to as "**GENERATOR/SELLER**" which expression shall, unless repugnant to the context or meaning thereof be deemed to mean and include its successors and permitted assigns) of the one part.

AND

-M/s Chemifs Chemical Pvt.Ltd . having its recycling facilities located at Plot No. 1313,NCWI Zone GIDC Sarigam 396155 Tal. Umbergaon Dist. Valsad (Hereinafter referred as "RECYCLER" which expression shall, unless repugnant to the context or meaning thereof be deemed to mean and include it successors and permitted assigns) of the other part as per below:

AND WHEREAS, the foremost and the sole objective of **Chemifs Chemical Pvt.Ltd.**is to prevent Environmental Pollution Hazards and to observe the existing laws on Environmental and Pollution Control.

AND WHEREAS, the Generator desires to send its Spent HCL 30 % for recycling to Chemifs Chemical Pvt.Ltd. as per norms of Gujarat Pollution Control Board and Chemifs Chemical Pvt.Ltd. having requisite facilities for recycling , agrees to receive Spent HCL 30 % sent by Generator on terms and conditions stated hereunder, which have been mutually agreed to by and between Chemifs Chemical Pvt.Ltd.and **Coromandel International Ltd.**.

TERMS AND CONDITIONS OF AGREEMENT:

"GENERATOR/SELLER"

1. **GENERATOR** is engaged with manufacturing of various types of Pesticide products at Sarigam ("Site"), for which GPCB has granted Consolidate Consent & Authorization dated 22/02/2017 vide order no. AWH-84402, Valid up to 30/09/2021. (Renewal Application Inw.Id. – 262839 dtd. 21/08/2022 under processes.)
2. Whereas Spent HCL 30 % (24,588 M.T. /Year) is to be generated during our industrial activity and We will follow all the guidelines of the Board.
3. The generator will never send Spent HCL 30 % more than the consented quantity of the Recycler.
4. We undertake that We will maintain the records of generation and disposal of Spent HCL 30 % as prescribed in the guideline by the Board.
5. We as Generator will strictly adhere and comply with Hazardous and other wastes rules, 2016.
6. The generator will take all liability arising out of incident/accident such as spillage and fire and ensure public liability insurance (PLI) if applicable.

"RECYCLER"

1. **RECYCLER** is engaged with Manufacturing of various products mentioned in the Consent order and Board has granted CCA vide order no AWH - 122544, (Provisional) Valid up to 08/06/2026.
2. Whereas recycling capacity of Spent HCL 30 % @ 28,176 M.T./Year.
3. We undertake that We will follow all the guidelines prepared by the Board.
4. We undertake that We will maintain the records of received Spent HCL 30 %.

CHEMIFS CHEMICAL PVT. LTD. SARIGAM

JAYANTILAL M. PATEL
NOTARY
VALSAD DISTRICT
GOVT. OF INDIA

20 APR 2023

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5. We undertake that conveyance of Spent HCL 30 % be carried out only through **online GPS mounted authorized vehicles and XGN system generated online manifest** which are following the guideline prescribed in Hazardous and other wastes [M&TM] rules, 2016.
6. We as occupier/Generator/Facility operator will strictly adhere and comply with Hazardous and other wastes [M&TM] rules, 2016.

"GENERATORY/SELLER" and "RECYCLER"

1. This agreement is valid for **2 YEARS (i.e. from 20th Apr. 2023 to 19th Apr. 2025)**, however the agreement can be extended for further years by mutual consent & revised terms & condition agreed between both parties in writing. Either party may terminate this agreement upon 60 days' prior notice to the other. Either party reserves the right to suspend or terminate this Agreement in the event of the other party committing any breach/violation of the condition of the present Agreement or any provision of applicable law or regulation for the time being in force. Both the Parties hereto agree that the present agreement shall automatically come to an end if the authorization granted by Gujarat Pollution Control Board, to perform this agreement is revoked or terminated.

ARBITRATION

In the event of any disputes, differences of controversies should arise between the Parties hereto, in relation to this agreement. The Parties hereto shall thoroughly explore all possibility for an amicable settlement. In case amicable settlement cannot be reached within 30 days of initiation, such unresolved disputes shall be referred to a sole Arbitrator to be appointed in accordance with the Arbitration and Conciliation Act, 1996 and any amendment thereof and the rules framed thereunder shall govern such proceedings. The venue of such Arbitration shall be Hyderabad and language shall be English only. The award passed by Sole Arbitrator shall be final and binding upon the Parties hereto. The cost of Arbitration Proceeding shall be decided by the Sole Arbitrator.

JURISDICTION

All pre and post arbitration litigations arising out of or touching upon these presents shall be subject to the exclusive jurisdiction of the courts at Hyderabad alone.

FORCE MAJEURE

Neither COROMANDEL, nor the "**RECYCLER**" shall be considered in default in the performance of their obligations so long as such performance is prevented or delayed because of strikes, war, hostilities, revolution, civil commotion, epidemic, accident, fire, flood or any law-and-order proclamation, regulation or ordinance of Government or sub-division thereof because of any act of God.

ANTI CORRUPTION

In connection with the Agreement, the "**RECYCLER**" warrants to Coromandel that "**RECYCLER**" nor its employees, agents or representatives have given, offered, promised or authorized and shall not give, offer, promise or authorize anything of value or any undue pecuniary or other advantage of any kind (or implied that they will or might do any such thing at any time in the future) in any way connected with the Agreement / Contract directly or indirectly, to a government official or any other person to influence or reward official action; to influence or induce a person to perform his or her work duties dishonestly or otherwise improperly;

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Provisional Consent Order (CCA)

Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
Tele : 23222756

Consent No. AWH-122544 Valid upto: 08/06/2026

Application : CtO:CCA-Ammendment, No. 260527 Dt. 16/09/2022, Granted On: 14/11/2022 | PCB Id:77384

Besides streamlining and simplifying of regulatory regime,Gujarat Pollution Control Board has taken initiative in from of introduction of Consolidated Consent and Authorization (CC&A) which provides for a one shot application and clearance of the consents under Water Act,Air Act and Authorization under Hazardous Wastes Rules for a period of 5 years.
Board issues consolidated consent and Authorization to an industrial unit for operation of plant/carrying out industrial activity specifying following conditions.

Consolidated Consent and Authorisation

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)Act-1981
and Authorization under rule 3(c)& 5(5)of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules'2008 framed under the E(P)Act-1986.
And whereas Board has received consolidated Application No.(CtO:CCA-Ammendment) 260527 and Dated 16/09/2022 for the consolidated consent and authorization(CC&A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under,

CONSENT AND AUTHORISATION : (under the provisions / rules of the aforesaid environmental acts)

To,
M/s. CHEMIFS CHEMICAL PRIVATE LIMITED,
Plot No. 1313,NCWI Zone,GIDC Sarigam-396155, Taluka:-Umbergaon ,District:-Valsad,
City : Sarigam,
Dist : Valsad-Sarigam, Tal : Valsad-Sarigam, SIDC : Sarigam
Phone : ———

1. Consent Order No: AWH-122544 **Valid Upto:** 08/06/2026

2. All Conditions under the AIR ACT-1981 WATER ACT-1974 HAZARDOUS ACT-2008 shall be Applicable to you as mentioned in the detailed Consent Order ***

Consented CETP: Not Linked to any CETP
Consented TSDF: Not Regd with any TSDF

3. GENERAL CONDITIONS :-

a) This order is provisional order and detailed order is considered as final.
b) All the conditions & provisions under the Water Act 1974, the Air Act 1981 and the Environment (Protection) Act – 1986 and the rules made there under shall be complied with *.
c) All the conditions & provisions under the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules 2008 as amended shall be complied.
d) The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection round the year of board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
e) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise in less than 75(B)(A) during day time and 70(B)(A) during night time. Daytime is reckoned in between 6 a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.
f) In case of change of ownership/management the name and address of the new owners/ partners/ directors/ proprietor or equipment or working conditions as mentioned in the consent form / order should immediately be intimated to the Board.
g) Industry shall have to display data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premises.
h) The CCA shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
i) Any unauthorized change in personnel, equipment or working conditions as mentioned in the CCA order by CCA holder shall constitute a breach of this CCA.
j) Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is atleast 1000 trees per acre of land and a green belt of 5 meters width is developed.
K) The applicant shall have to submit the returns in prescribed from regarding water consumption and shall have to make payment of water cess to the Board under the Water Cess Act- 1977.

*** Note : ACT-Specific, Industry-specific, Area-specific Conditions alongwith Product, Waste water effluent details shall be precisely mentioned in the DETAILED Consent Order.

*** Note :This is only provisional communication. The final Consent/Authorization in hard copy with duly signed by competent authority shall the final and valid Consent/Authorization.

For and on behalf of
Gujarat Pollution Control Board

D. M. Thaker.

(Member Secretary)

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Format for obtaining approval from the Central Pollution Control Board under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016*

1.	**GENERAL INFORMATION**	
1.1	Name & Address of the Unit;	M/s. Chemvis Chemical Private Limited Plot NO. 1113, NOWI Zone, GIDC Sarigam Tal: Umbergaon, Dist. Valsad 396195
1.2	Contact Person and phone number with Email Id.	Mr.Kirti Rai PHONE NO. 9377007501
1.3	Products to be manufactured and quantity (MT/Day).	

Sr. No.	Name of products	Total MT/month
1	Poly Aluminium Chloride Solution (10-12%)	2000
2	Poly Aluminium Chloride (PAC) Powder	200
3	Aluminium Tri Chloride (By way of Mixing & Blending) PAC solution powder	750
	TOTAL	**2950**

1.4	Please attach copy of air consent, water consent and authorization;	CCA Copy Attached in Annexure-1
2.	**DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN PRODUCT MANUFACTURING**	
2.1	Proposed quantity (in MTA) of hazardous or other waste to be utilized;	Spent Hydrochloric Acid solution-7200 MTA (600 MT/M)
2.2	Process details of hazardous waste utilization (including working principle of each of the plant & machinery and flow diagram of the utilization process along with complete mass balance and write-up about the process);	Attached in Annexure-4
2.3	Please attach a copy of air consent to Establish, Consent to Operate(Air and/or Water) and authorization	CCA copy attached in Annexure-1.
2.4	Expected Generation of Air Emission(Source and fugitive), Wastewater Generation, Solid Waste generation including HW from the proposed utilization process	There will be no air emission, waste water generation and other solid wastes including hazardous or other waste generated by utilization of waste
2.5	Material balance with and without utilizing hazardous waste in case the waste is proposed for utilization/Co-processing in an already existing process	Material balance with and without hazardous waste is attached in annexure –5.
2.6	Quantity of Fuel and /or raw material that are expected to be conserve (in % of raw material replaced) from the proposed utilization process;	We will use Spent HCl as a raw material of (Aluminium Tri Chloride) . We will Save pure raw material by utilization waste and also save fuel and energy.

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2.7	Data including characteristics pertaining to air emissions waste water generation and other solid wastes including hazardous waste expected to be generated during utilization of hazardous waste	There will be no air emission, waste water generation and other solid wastes including hazardous or other waste generated by utilization of waste.
2.8	Details of finding of laboratory/pilot scale study, international practice, etc	Not Applicable
2.9	Name of the product(to be manufactured from utilization of hazardous waste) if any, its characteristics and where the same will be used and in which process	Annexure 4

SARIGAM CHEMICALS PVT. LTD.

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

By RPAD

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under the Hazardous and Other Waste (Management and Transboundary Movement) Rules'2016, framed under the Environment (Protection) Act-1986

And whereas Board has received on line consolidated application **Inward ID No: 201686 dated 05/09/2021** for the consolidated consent and authorization of this Act & A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:
(Under the provisions / rules of the afore said environmental acts)

To,
M/S. Chemifs Chemical Private Limited
Plot No. 1343, NCWI Zone,
GIDC Surigam,
Taluko:-Umbergaon,
District:-Valsad 396 155

1. **Consent Order No: AWH-115186 Date of Issue: 16/10/2021**
2. The consent shall be valid up to 08/06/2026 for the use of outlet for the discharge of treated effluent and emission due to mixing of following products.

Sr. No.	Name of Product	Quantity
1	Poly Aluminum Chloride Soln (10-12%)	2000 MT/M
2	Poly Aluminum Chloride (PAC) Powder	200 MT/M
3	Aluminium Tri Chloride (By way of Mixing & Blending) PAC solution powder	750 MT/M

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS

1. Industry shall use pure Acid for production.
2. Industry shall strictly follow the undertaking submitted on 14/10/2021.
3. **CONDITIONS UNDER WATER ACT 1974:**
   3.1 The quantity of total water consumption shall not exceed 7.5 KL/Day as per below break up
   a) Industrial: 6.0 KL/Day
   b) Domestic: 1.5 KL/Day.

CHEMIFS CHEMICAL PVT. LTD. SARIGAM

... 2008 & ISO - 14001 - 2004 Certified Organisation
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3	Specifications of product derived with and without utilization of the aforesaid hazardous waste (Attach Data). Please also provide BIS or other specifications of the product, as applicable)	Existing	Hazardous waste Pure HCl	Product Aluminium Tri Chloride
		Proposed	Spent HCl 30%	Aluminium Tri Chloride 99
4.	**ADDITIONAL DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN ETP/CETP**			
4.1	Name of chemical being currently used as neutralizing coagulating agent/others	Not Applicable		
4.2	Consumption of quantity of chemical being currently used as neutralizer /coagulant/others in terms of per MLD	Not Applicable		
4.3	Proposed dosage of hazardous waste in terms of per MLD	Not Applicable		
4.4	Current intake of CTTP/CTP (monthly average)	Not Applicable		
4.5	Details of ETP/CETP along with various intermediates treatment units and expected impact by the said utilization on the treated waste water	Not Applicable		
5.	**ADDITIONAL DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN ENERGY RECOVERY**			
5.1	Name of the material that is being currently used as fuel for energy source and its calorific value	Not Applicable		
5.2	Consumption of quantity of fuel that is being currently used as fuel in terms of MTA	Not Applicable		
5.3	Details of the hazardous waste proposed to be utilized with their calorific value, proximate analysis, ultimate analysis and expected impact by the said utilizations emissions	Not Applicable		
5.4	Name and details of the furnace/boiler/kiln that is used in the utilization process with working principle and its operational conditions	Not Applicable		

ANNEXURE – 1
CCA Copy

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23225295
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

5. AUTHORIZATION UNDER THE HAZARDOUS AND OTHER WASTES MANAGEMENT AND TRANSBOUNDARY MOVEMENT RULES 2016

5.1 M/s. Chemfs Chemical Private Limited is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No: 131/1, 'G' Zone GIDC Surigam, Taluka: Umbergaon, Dist: Valsad – 396 155.

Sr. No.	Waste	Schedule & Cat	Quantity	Facility
1	Process Wastes, Residues and Sludge	1-22.1	2.88 MT/Year	Collection, storage and reuse in process within premises

5.2 The authorization shall be valid up to 08/06/2026.

5.3 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules form time to time under the Environmental (Protection) Act 1986.

6. GENERAL CONDITIONS UNDER HAZARDOUS AND OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES-2016.

6.1 The Authorized person shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made thereunder.

6.2 The Authorization or its renewal shall be produced for inspection at the request of an officer Authorized by the State Pollution Control Board.

6.3 The person Authorized shall not sell, lease, exchange, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.

6.4 Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of the authorization.

6.5 The person authorized shall implement Emergency Response Procedure (ERP) based on which the authorization is being granted considering all site specific possible scenarios such as pollutant leakages, fire etc. and their possible impact on the environment. Drill in this regard at regular interval of time.

6.6 The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Wastes and Penalty".

6.7 It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.

6.8 The imported hazardous and other wastes shall be fully insured for transit, handling, its accidental occurrence and its clean up operation.

6.9 The record of consumption and sale of the imported hazardous and other wastes shall be maintained.

CHEMFS CHEMICAL PVT. LTD. SURIGAM

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3.2 The quantity of total of waste water generation shall not exceed 2.7 KL/Day as per below break up

a) Industrial 1.7 KL/Day.

b) Domestic 1.0 KL/Day.

Trade Effluent

3.3 Out of 1.7 KLD industrial wastewater, Boiler Blowdown i.e. 0.7 KLD shall reuse in cooling tower and Scrubbed bleed i.e 1 KLD shall reuse in process. Hence unit shall achieve Zero Liquid Discharge.

3.4 The CETP drainage connection given by the GIDC for discharge of industrial effluent shall be disconnected & the outlet shall be sealed.

3.5 Domestic waste water shall be disposed off through septic tank/soak pit system.

4. CONDITIONS UNDER AIR ACT 1981:

4.1 The following shall be used as a fuel in D.G. Set respectively:

Sr. No.	Fuel		Capacity
1	Boiler	Natural Gas	145 SCM
2	Spray Dryer	Natural Gas	110 SCM

4.2 The applicant shall install & operate air pollution control system efficiently in order to achieve prescribed norms.

4.3 The flue gas emission through stack attached to Boiler & Spray Dryer shall conform to the following standards:

Stack No.	Stack Attached To	Stack Height in Meter	APCM	Parameter	Permissible Limit
1	Boiler (2 TPH)	11	Adequate Stack Height	PM	150 mg/Nm³
				SO_2	100 ppm
2	Spray Dryer (100Kg/Hr)	11	Venturi Scrubber	NO_x	50 ppm

4.4 There shall be no process emission from the manufacturing process as well as any other ancillary operations.

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:

PARAMETERS	PERMISSIBLE LIMIT	
	Annual	24 Hrs. Average
Particulate Matter-10 (PM 10)	60 Microgram/m³	100 Microgram/m³
Particulate Matter-2.5 (PM 2.5)	40 Microgram/m³	60 Microgram/m³
SO_2	50 Microgram/m³	80 Microgram/m³
NO_x	40 Microgram/m³	80 Microgram/m³

M/S Chemfis Chemical Private Limited (T-2345)

CHEMFIS CHEMICAL PVT. LTD. SARIGAM

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6.10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing of authorized imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

6.11 The importer or exporter shall bear the cost of import or export and antipollution damages if any.

6.12 An application for the renewal of an authorization shall be made as laid down under these Rules.

6.13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

6.14 Annual return shall be filed by June 30th for the period ending 31st March of the year.

7. SPECIFIC CONDITIONS (WHICHEVER IS APPLICABLE)

7.1 The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.

7.2 Handing over of the hazardous and other wastes to the authorized actual user shall be only after making the entry into the passbook of the actual user.

7.3 In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.

7.4 The occupier of the facility shall comply Standard operating procedure guidelines published by MoEF&CC or CPCB or GPCB form time to time.

7.5 Unit shall comply provisions of E-Waste (Management) Rules, 2016.

For and on behalf of
Gujarat Pollution Control Board

(M. V. Patel)
Environment Engineer

No: GPCB/CCA-SRG-707/ID: 27384/ Date:

ISSUED TO:
M/S. Chemifs Chemical Private Limited
Plot No. 1313, NCWI Zone,
GIDC Sarigam,
Taluka:-Umbergaon,
District:-Valsad 396 155

CHEMIFS CHEMICAL PVT. LTD. SARIGAM

M/S. Chemifs Chemical Private Limited (ID: 27384)

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Application Status

S.No	unit name	unit Address	Approval Satus	Application Status
1	Chemfa	Plot NO 1313, NCWI Zone, GIDC-Sarigam Tal Umbergaon Dist. Valsad – 396185	Under Process – With HWM Division of GPCB	[illegible]

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CTE-Ammendment

Date: 18/11/2022

1. Name of the firm with full address and Pincode	PLOT/PHASE No. Plot No. 1313,NEW Zone,GIDC Sarigam-396155, Taluka:-Umbergaon ,District:-Valsad Sarigam - 396155 DIST : Valsad/Sarigam. TAL. : Valsad-Sarigam. SIDC : Sarigam
2. Location of the Proposed factory (site plan showing area and coverage, name of village or plot no of SIDC including distance of the proposed location from the residential area (s) and road and railways and water or lake or pond showing the direction.)	Outside from residential area : 0.05 Kms Distance from State, District or National Highways : 5.1 Kms
3. (a) Layout proposed showing internal and storm direction of storm water , run off	As per the PHE attached
b. Location address with PIN Code	As per above
c. Purpose for which NOC is required	- We have Applied for CTE Amendment for existing product expansion and addition of new product i.e. which will be mfg alternatively i.e. Air, Water, Haz and Plant & Machineries details are upload in pdf (pg-p IMP Form VI,VII [Haz] Waste Importer) (SNo V) thus for your kind reference.
4. Proposed date of starting Production	25/07/2023

5. List of Raw materials with quantity in Metric tons (MT) per month

Sr.	Raw Material Name	Capacity - Unit / Month
1	Ammonium Nitrate	25 (Ton - MT)
2	Ammonium Sulphate	50 (Ton - MT)
3	Ammonium Thiocyanate	30 (Ton - MT)
4	Ammonium Chloride	25 (Ton - MT)
5	Ammonia Liquid	4500 (Ton - MT)
6	Sodium Hydroxide	60 (Ton - MT)
7	Sodium Nitrite	25 (Ton - MT)
8	Hydrochloric Acid - 30%	50 (Ton - MT)
9	Nitric Acid	25 (Ton - MT)
10	Sulphuric Acid	50 (Ton - MT)
11	Potassium Hydroxide	25 (Ton - MT)
12	Potassium Carbonate	25 (Ton - MT)
13	Sodium Carbonate	25 (Ton - MT)
14	Sodium Nitrate	25 (Ton - MT)
15	Sodium Thiocyanate	25 (Ton - MT)
16	Sodium Nitrite Chloride salt	25 (Ton - MT)
17	Sodium Azide	25 (Ton - MT)
18	Sodium Sulphide	25 (Ton - MT)
19	Sodium Acetate	25 (Ton - MT)
20	Sodium Acid Phosphate	25 (Ton - MT)
21	Sodium Hypochlorite	25 (Ton - MT)
22	Sodium Meta Bisulphite	25 (Ton - MT)
23	Sodium Bicarbonate	25 (Ton - MT)
24	Sodium Chloride	25 (Ton - MT)
25	Sodium Nitrite	25 (Ton - MT)
26	Sodium Thiosulphate	25 (Ton - MT)
27	Sodium Nitrate Chloride salt	25 (Ton - MT)
28	Sodium Azide	25 (Ton - MT)
29	Sodium Sulphide	25 (Ton - MT)
30	Sodium Acetate	25 (Ton - MT)
31	Sodium Acid Phosphate	25 (Ton - MT)
32	Sodium Hypochlorite	25 (Ton - MT)
33	Sodium Meta Bisulphite	25 (Ton - MT)

7. List of Products with quantity proposed to be produced per month :

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Forwarding & Undertaking Letter from Industry

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RSPL™
Recycling Solutions Pvt. Ltd.

Certificate

To whomsoever it may concern
This is to certify that

Certificate No : 4100002242

COROMANDEL INTERNATIONAL LTD

PLOT NO.2102,
G.I.D.C., SARIGAM,DIST. VALSAD
SARIGAM
Gujarat

is a valid member of

Recycling Solutions Private Limited Unit-II

for Alternate Fuel Resource Facility.

This membership is valid for a period of
1 Years

Date of issue : 17.12.2019
Date of expiration : 16.12.2029
Place of issue : SURAT

For, Recycling Solutions Private Limited
Director/Authorised signatory

Waste Information

SrNo	Type Of Waste	Sign Qty(TPA)	SrNo	Type Of Waste	Sign Qty(TPA)
1	ACEPHATE AQUEOUS. - 29.2	600.000	2	ACETIC ACID. - 29.2	1,000.000
3	LIQUID WASTE WATER. - 29.2	1.000	4	ORGANIC RESIDUE MNZ BURN WASTE - 29.2	1,200.000
5	ORGANIC RESIDUE. - 29.2	850.000	6	SPENT CARBON. - 35.3	100.000
				Total Sign Qty (TPA)	3,751.000

SUBJECT TO BHARUCH JURISDICTION

Site Address : Plot No. 208/2, GIDC Estate Panoli, Panoli - 394 116 Ankleshwar, Dist. Bharuch, Gujarat, India. Phone : +91 2646 272029
CIN - U37100MH2012PTC237696

Regd. Office
370, SVP Road, Shop 8, Plot 384, Cigarettwala Building, Opp.CBI, Prathna Samaj, Nr.Hariishandas Hospital, Mumbai - 400 004, Maharashtra, India.

E-mail : mail@rs-pl.com

Website : www.rs-pl.com

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Membership certificate of common incineration of DIPL, Dahej

DETOX INDIA
operated by VEDANTA

Certificate

Certificate No: 1200000857

To Whomsoever it may concern

This is to certify that

COROMANDEL INTERNATIONAL LTD.

PLOT NO. 2102, 2104/1, 735 & 2112/2113,
GIDC ESTATE SARIGAM,
TAL: UMBERGAON,
VALSAD

is a valid member of

DETOX INDIA PVT. LTD.

DIPL-Dahej

for

Integrated Common Incineration Facility

This Membership is valid for a period of

5 years

Date of issue : 05.05.2020

Date of expiration : 04.05.2025

Place of issue : Surat

For, Detox India Pvt. Ltd.

Director

SUBJECT TO SURAT JURISDICTION

Detox India Private Limited
(Formerly : Ankleshwar Cleaner Process Technology Centre Pvt. Ltd.)
Plot No : D-2/CH/(B), G.I.D.C. Dahej Phase-II, Tal. : Vagra, Dist. : Bharuch-392 130 (Guj.) INDIA.
Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat-395 002 (Guj.) INDIA.
Ph. : +91 261 2331248, 2546181, E-mail : info@detoxindia.com | CIN : U90000GJ2003PTC060122

TRUE COPY
ADVOCATE

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ANNEXURE-R-17

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 1, 2022

PCB ID: 24285

To,
Unit Head – Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382010, Gujarat.

Subject : **Submission of Justification/Compliance/Action already taken/Action to be taken to Notice of Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.**

Ref. :
- **Notice of Direction under section 31 (A) of the Air (Prevention and Control of Pollution) ACT-1981 as amended from time to time issued vide Order No. GPCB/SRG-CCA-229(38)/ID-24285/679471 dated 30/07/2022.**
- **GPCB Visit dated 08/02/2022 & 08/03/2022**

Dear Sir/Madam,
This has reference to the above. We are hereby submitting Justification/Compliance/Action already taken/Action to be taken to Notice of Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.

Sr. No.	Observation	Justification/ Compliance / Action already taken/Action to be taken
1.	Unit has installed new scrubber attached to MCP + Acephate + DDVP packing plant without prior CTE/CCA of the Board.	As per obtained in CC&A Order No. AWH – 84402 dated 22/02/2017, in condition no. 4.4 of 4 under The Air Act, (Refer page No. 9 of 15, Sr. No. 6 & 11 of 15, Sr. No. 18) (Enclosed as an **Annexure-I** (Marked with yellow colour)) and as per CC&A Renewal + Amendment re-applied Application; Dedicated **alkali scrubber system to Drum Filling Station i.e. for MCP and DDVP packing area** (Refer page No. 11 of 15, Sr. No.18) & **water scrubber to Acephate i.e. for Acephate packing area** (Refer page No. 9 of 15, Sr. No. 6, Group-F) **are already installed and under operation**. We have not installed any new scrubber to MCP + Acephate + DDVP packing plant.
2.	It is observed that deodorant system of the unit is also not in operational condition so there is possibility of spreading of odour in surrounding area and odour felt in production area of the unit.	• During GPCB official inspection dated 08/02/2022, due to some leakages, deodorant system was not found in operation. But as an immediate action, all of the leakages are got repaired and it is now under functional. • Additionally, now deodorant system are covered all of the surrounding/periphery area and other area of existing unit and it is supervised by shift

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

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FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		operational team on regular basis. • Photographs of deodorant system covering entire periphery of unit and other area are enclosed as **Annexure II.**
3.	During inspection incinerator is found maintenance during which extreme foul odour felt near incinerator.	During GPCB official inspection dated 08/03/2022, in-house incinerator was taken into shut down mode since 25/02/2022 for regular schedule maintenance work but before taking maintenance work, decontamination of the equipments need to perform so due to this, foul odour felt near incinerator during visit. We have also informed to GPCB through letter submitted dated 25/02/2022 at RO, GPCB, Sarigam (Ref-No. EMS-GPCB/COR/45-2022/ID: 24285) regarding said shutdown and maintenance activity of incinerator. Acknowledgment copy for the same is enclosed as an **Annexure-III.** So as an immediate action, we have increased dispersion rate of deodorant system to prevent foul odour. We further assure you that, we will take necessary action, if any required more, to prevent foul odour during maintenance activity of in-house incinerator.
4.	Unit has not shown flue gas vent of NG Fired Hot Air generator in existing CC&A.	As soon as possible, we will apply and obtain necessary permission from the Board for flue gas stack of NG Fired Hot Air generator.
5.	Unit is observed that unit has provided fogging system which is not provided all round the unit.	Fogging system are now covered all of the surrounding/periphery area and other area of existing unit and it is supervised by shift operational team on regular basis. Photographs of the same are enclosed as **Annexure-II.**

Thanking You.
Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)
CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

COROMANDEL, SARIGAM
RECEIVED
Sign. 1079/P
Date : 5/4/17

BY: RPAD

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 3(c) & 5(5) of the Hazardous Waste (Management Handling and Transboundary Movement) Rules'2008, framed under the EP Act-1986.

And whereas Board has received CC&A application **Inward ID No: 115227, dated 01/12/2016** for the Renewal of consolidated consent and authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:
(Under the provisions / rules of the aforesaid environmental acts)

To,
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

1. **Consent Order No: AWH – 84402, Date of issue: 22/02/2017.**
2. The consents shall be valid up to **30/09/2021** for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following items / products:

Sr. No.	Name of the Products	Quantity (MT/Annum)	Remarks
GROUP A			
1	Mancozeb (Tech.)	38000	Either or combination of the products
2	Mancozeb (Tech.) + Maneb (Tech.)	38000	
3	Mancozeb (Tech.) + Zineb (Tech.)	38000	
4	Mancozeb (Tech.) + Propineb (Tech.)	22116	
	Total Production capacity of Group A	**38000**	
GROUP B			
1	Diethyl Thiophosphoryl Chloride (DETC)	3600	Either or combination of the products
2	DMTC	2160	
3	Diafenthiuron	1650	
4	Thiamethoxam	1650	
5	Pymetrozine	1650	
6	Diflubenzuron	1650	
	Total Production capacity of Group B	**3600**	

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GROUP C			
1	DMTC Amide	4796	
	Total Production capacity of Group C	**4796**	
GROUP D			
1	Glyphosate (Tech.)	5000	Either or combination of the products
2	PMIDA	3300	
	Total Production capacity of Group D	**5000**	
GROUP E			
1	Chlorpyriphos (Tech.)	5000	
	Total Production capacity of Group E	**5000**	
GROUP F			
1	Acephate (Tech.)	7000	
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	Either or combination of the products
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	Either or combination of the products
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	
	Total Production capacity of Group K	**2000**	

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GROUP L			
1	Methamidafos (Tech.)	0	
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic Acid	429	Either or combination of the products
2	2,3-Difluoro-5-chloro pyridine	353	
3	Clodinafop propargyl (Tech.)	933	
4	Triclopyr Acid (Tech.)	933	
5	Triclopyr Butotyl Ester (Tech.)	933	
6	Picloram (Tech.)	495	
7	Pretilachlor (Tech.)	933	
8	Bispyribac sodium (Tech.)	330	
9	Azoxystrobin	52.8	
10	Boscalid	660	
11	Metalaxyl	933	
12	Proclaraz	933	
	Total Production capacity of Group N	**933**	
GROUP O			
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	Either or combination of the products
2	Fipronil (Tech.)	933	
3	Emmamectin Benzoate (Tech.)	495	
4	Difenoconazole (Tech.)	660	
5	Triazophos (Tech.)	933	
6	Glufosinate Ammonium Salt	933	
7	Metribuzin	933	
	Total Production capacity of Group O	**933**	
GROUP P			All of the products

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1	Imidacloprid (Tech.)	510	
2	Acetamiprid (Tech.)	480	
	Total Production capacity of Group P	**990**	
BY PRODUCTS			
1	Ammonium Chloride Powder (NH4Cl)	13398	-
2	Sodium Chloride (NaCl) Powder	8238	-
3	Sodium Sulphate (Na2SO2) Powder	19779	-
4	Ammonium Sulphate (NH4)2SO4 (Powder)	8370	-
Total Production capacity of all Groupsand By-Product		**160277**	

LIST OF FORMULATION PRODUCT

Sr. No.	FORMULATION PRODUCTS	Qty. MT/Annum
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
	LIQUID FORMULATIONS	
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+ Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650

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20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% + Cypermethrine 5% EC	1650
23	Cypermethrin 10% EC	1650
24	Cypermethrin 25% EC	1650
25	Maneb 80% WP	8910
26	Propineb 70% WP	9240
27	Zineb 80% WP	8910
28	Triclopyr Butotyl ester 480 gm/lit	990
29	Methamidophos 600 gm/lit SL	5280
30	Imidaclopyrid 17.8% SL	8580
31	Clodinafop propargyl 15% WP	10230
	Total	243210

3.0 **CONDITIONS UNDER THE WATER ACT:**

3.1 The source of water supply shall be GIDC Sarigam.

3.2 The quantity of total water consumption shall not exceed **1078 KLPD** as per below break up
a) Industrial: **1018 KLPD.**
b) Domestic: **60 KLPD.**

3.3 The quantity of total of waste water shall not exceed **1073.33 KLPD** as per below break up
a) Industrial: **1013.33 KLPD**
b) Domestic: **60 KLPD.**

3.4 Out of 10133.33 KLPD the concentrated and toxic effluent stream generated i.e. 93.83 KL/day shall be segregated and completely incinerated in a well-designed in house Liquid waste incinerator or shall be disposed through common incineration facility SEPPL-Kutchh or GSEPL-Palsana, 669.5 KLPD High TDS low COD effluent shall be evaporated through Multiple Effective Evaporators (MEEs)/ In case of any breakdown or maintenance of in house MEEs, high TDS effluent will be sent to SEPPL for evaporation and drying, 190 KL/day dilutes stream + 60 KL/Day domestic = i.e. 250 KL/Day along with MEE condensate 331 kl/Day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharges as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day.
The mechanism to monitor of the concentrated stream and diluted stream to be developed and the submit the board for verification.
The record of concentrated stream generated treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis.
In no case, concentrated stream shall be sent with diluted stream for the further treatment.
The unit shall affix of water meter as per section 4 (1) of the water (prevention and control of pollution) cess Act-1977 for the purpose of measuring and recording the quantity of water consumed of such places as may be required.

3.5 **TRADE EFFLUENT:**

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3.5.1 The concentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well designed incinerator - in-house incinerator or SEPPL-Kutchh or GSEPL-Palsana incineration facility or co-processing facility.
The incineration system shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc.
The industry shall operate fully & efficiently incineration system / air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partly non operational for any reason what so ever (whether for maintenance/repairs/electricity failure or otherwise). They shall not restart such activity unless & until the incineration system is fully in operation.
The pipeline connecting various equipments of sump of incineration system should be minimum in number & shall have permanent connection (no loose or flexible connection).
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for combustion & temperature, measuring devices within incinerator at different points & scrubber outside the incinerator shall be provide. There all data shall be recovered every day.
The applicant shall have to register the unit under the provisions of the factories act- 1948 & shall be obtained necessary factory license.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store & handle solid waste in accordance with provisions of the relevant rules in this behalf.
The printed Log Book shall be maintained for :

a. Energy consumption.
b. Waste water flow at inlet & outlet of incineration system.
c. Quantity of sludge generated.
d. Laboratory analysis reports for each of the specified parameters of liquid Effluent, gaseous discharge & soil sludge samples.

The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production, though such figures shall be supplied on monthly basis. The unit shall supply separate figures for consumption of electricity for running the incinerator by having separate meter /sub meters for such incinerator.

3.5.2 The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards:

PARAMETERS	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C.
Colour (pt.co.scale) in units	100 units
Suspended solids	200 mg/l
Oil and grease	10 mg/l
Phenolic compounds (as C_6H_5OH)	1.0 mg/l
Cyanide (as CN)	0.2 mg/l
Fluoride	2 mg/l
Sulfides	2 mg/l
Ammonical Nitrogen (As N)	10S0 mg/l
Arsenic (As)	0.2 mg/l
Total Chromium	2 mg/l
Chromium – Hexavalent	0.1 mg/l
Copper (Cu)	3.0 mg/l
Lead (Pb)	0.1 mg/l

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Mercury (as Hg)	0.01 mg/l
Nickel (Ni)	3.0 mg/l
Zinc (as Zn)	5 mg/l
Cadmium (Cd)	2.0 mg/l
Iron	3 mg/l
BOD (5 days at 20°C.	300 mg/l
COD	750 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/l
Insecticides / Pesticides	Absent
Sodium Absorption Ratio	26
Sodium Percent	60
Bio-assay test	90 % survival of fish after 96 hrs in 100 % effluent

- All efforts shall be made to remove color & unpleasant odor as far as practicable.

3.5.3 The final treated effluent conforming to the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being managed by Sarigam Waste Effluent Management Co. Ltd.

3.5.4 Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.

4.0 CONDITIONS UNDER THE AIR ACT:

4.1 The following shall be used as fuel in dryers, boiler, incinerator & DG Sets respectively.

SR NO.	FUEL	CONSUMPTION	Utility
1	Natural Gas	Approx. 2500 SCM/Hr	Boiler /Incineration / MEE
2	Furnace Oil	2 KL/Hr	Boiler
3	Natural Gas	1000 SCM/Hr	Hot air generator
4	HSD	6 KL/day	DG

4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.

4.3 The flue gas emission through Boiler stack attached to stack shall conform to the following standards:

Stack No.	Stack Attached to	Stack Height in Meter	Control Measures provided	Parameter	Permissible Limits
1	Boiler – 3 Nos	50	—	PM SO_2 NO_x	150 mg/NM^3 100 ppm 50 ppm
3	DG set – 01 No (1000 KVA)	12	—		
4	DG set-2 Nos (500 KVA)	12	—		
5	DG set-1 No (200 KVA)	12	—		
6	Liquid & Gas Incinerator Incinerator 01	52	Ventury Alkali Scrubber	PM SO2 NOx HCL CO Total Organic Carbon Total Dioxine and Furans Sb+AS+Pb+Cu+Mn+Ni+V	50 200 400 50 100 20 0.2 ng TEQ 1.5
7	Solid Incinerator Incinerator 03				
8	Liquid Incinerator Incinerator 04	50	Ventury Alkali Scrubber		

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4.4 The process emission through various stacks/vent of rectors, process, vessel shall conform to the following standards.

Sr. NO.	Plant	Stack attached to	Stack height Mtr.	Air Pollution Control Measures	Parameter to be Monitored	Permissible limit, Mg/nm3	Remarks
1	GROUP A						
	Mancozeb or	1) Mancozeb reactor – 01 Nos- 20 KL or	30	Air Blower/ Air Ventury	CS2 PM SO2	180 50 40	Either or combination of the products
	Mancozeb + Maneb or	2) Maneb reactor 01 Nos- 20 KL or					
	Mancozeb + Zineb or	3) Zineb reactor Nos- 20 KL					
	Mancozeb + Propineb	4) Propineb Reactor – 01 Nos – 14 KL					
		5) Spray Dryer – 3000 Kgs/Hr. – 2 Nos	30	Bag filter / Water Scrubber			
2	GROUP B						
	Diethyl Thiophosphoryl Chloride (DETC) or DMTC	Reactor – 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	Either or combination of the products
	Diafenthiuron(Tech.)	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Thiamethoxam	Reactor 01 Nos – 6.3 KL		No stack			
	Pymetrozine	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Diflubenzuron	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
3	GROUP C						
	DMTC Amide	Reactor 01 Nos – 10 KL	20	Acidic scrubber	NH3	30	
4	GROUP D						
	Glyphosate (Tech.)	Slurry Preparation – 2 nos of reactor each 10 KL capacity and connected to common stack –01Nos	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	Either or combination of the products

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	PMIDA	Reactor 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	
5	GROUP E						
	Chlorpyriphos (Tech.)	HTCP Reactor – 01 Nos – 6.0 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl	20	
6	GROUP F						
	Acephate (Tech.)	Ammonia solution preparation reactor – 01 Nos – 04 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
7	GROUP G						
	Monocrotophos (Tech) OR Dicrotophos(Tech.)	Chlorination Reactor – 01 Nos – 6.3 KL and Neutralizer Reactor – 01 KL – 12 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl Cl2	20 9	Either or combination of the products
	GROUP H						
	DDVP	Gas to Incinerator – 01			CH3Cl		
8	GROUP I						
	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor – 2 Nos- 12 KL, connected to common scrubber & Storage tank – 03 Nos – 20 KL connected to common scrubber	11	Alkali Scrubber	HCl Cl2 PCl3	20 9 9	
9	GROUP J						
	Trimethyl Phosphite (TMP) OR	1) TMP/TEP plant reactor – 01 Nos – 3 KL	20 11	1st Scrubber Water scrubber 2nd with Acid	NH3 Odor	30 Nil	Either or combination of the products

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	Triethyl Phosphite (TEP)	2) TMP/TEP products storage tanks – 02 Nos -40 KL		Media Acid scrubber/Carbon tower			
10	GROUP K						
	Phosphorous Sulphochloride ($PSCl_3$)	$PSCl_3$ plant reactor – 01 Nos – 6.3 KL and storage tank – 01 Nos – 10 KL	22	Alkali Scrubber	HCL PCl_3	20 9	
	GROUP L						
	Methamidafos	No process stack					
11	GROUP M						
	Phosphorous Acid	phosphorous acid Reactor – 01 Nos – 5 KL	20	Water Scrubber	HCl	20	
12	GROUP N						
	2-(4-Hydroxy phenoxy) Propionic acid	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products
	2,3-Difluoro-5-chloro pyridine	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triclopyr Acid / Triclopyr Butotyl Ester	Reactor – 01 Nos – 6.3 KL	No process stack				
	Clodinafop Propargyl	Reactor – 01 Nos – 6.3 KL	No process stack				
	Picloram	Picloram& pretilachlor Reactors – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Pretilachlor		No process stack				
	Bispyribac Sodium	Reactor – 01 Nos – 6.3 KL	No process stack				
	Azoxystrobin	Reactor – 01 Nos – 6.3 KL	No process stack				
	Boscalid	Reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Metalaxyl	Metalaxyl Reactor – 01 Nos – 6 KL	20	Alkali Scrubber	HCl	20	
13	GROUP O						
	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products

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	Fipronil	Fipronil reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Emmamectin Benzoate	Reactor – 01 Nos – 6.3 KL	No process stack				
	Difenoconazole	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triazophos	Reactor – 01 Nos – 6.3 KL	No process stack				
	Glufosinate Ammonium Salt	Reactor – 01 Nos – 6.3 KL	No process stack				
	Metribuzin	Reactor – 01 Nos – 6.3 KL	No process stack				
14	NH4Cl	NH4Cl Storage Tank	11	Acid Scrubber			
15	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
16	HCl Storage Tank	HCl Storage Tank – 01 Nos – 20 KL	11	Alkali Scrubber	HCl Cl2	20 9	
17	Chlorine Shed	Chlorine Shed – 01 Nos	13.5	Alkali Scrubber	Cl2	9	
18	Drum Filling Station	Drum Filling Station – 01 Nos	11	Alkali Scrubber	Odor		
19	Sodium Sulphate recovery	Stack attached to Dryer	20	Bag filter	PM	150	
20	Ammonium Chloride recovery	Stack attached to Dryer	20	Bag filter	PM	150	
21	Quippo (1.364 MW)	Stack attached to Power plant	45	---	PM SO2 NOX	150 100 50	
22	Incinerators – 03 Nos – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO2 NOX	50 200 400	

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:-

Parameters	Permissible limit
Suspended Particulate Matter (size less than 10 um) PM 10 ug/M3 **	100 Microgram/M^3
Suspended Particulate Matter (size less than 2.5 um) PM 2.5 ug/M3 **	60 Microgram/M^3
Oxides of Sulphur **	80 Microgram/M^3
Oxides Of Nitrogen **	80 Microgram/M^3
HCL	200 Microgram/M^3

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CL2	100 Microgram/M^3
H2S	500 Microgram/M^3
HC	160 Microgram/M^3
Ammonia	400 Microgram/M^3
HF	60 Microgram/M^3
CS2	2000 Microgram/M^3
CO	5000 Microgram/M^3

- 4 Hourly or 08 Hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not one two consecutive days of monitoring

4.6 The applicant shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no.4.3 and 4.4 as above.

4.7 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no.4.2 and 4.4 as above.

4.8 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification.

4.9 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

5. **GENERAL CONDITIONS:-**

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board

5.2 Applicant shall also comply with the general condition give in annexure I

6. **Authorization for the [Management & Transboundry Movement of Hazardous Waste Form-2 (See rule 6 (2) for grant of Authorization for occupier or Operator handling Hazardous Waste Rules – 2016.**

6.1 Number of authorization: **AWH-84402, Date of Issue: 22/02/2017**

6.2 Reference of application **No. 115227, dated 01/12/2016.**

M/s. COROMANDEL INTERNATIONAL LTD., is hereby granted an authorization to operate facility for following Hazardous wastes on the premises situated at Plot No. 2102, GIDC Industrial Area, Sarigam, Dist. Valsad.

Sr. No.	Waste	Category of Hazardous Waste as per the Schedules I, II and III of these rules		Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity
		Schedule	Category		
1.	ETP Sludge	I	35.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2640 MT/Year
2.	Discarded Container/bags	I	33.3	Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners/ disposed through common GPCB approved decontamination facility.	24000 Nos./Year

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

3.	Oil & Grease skimming residue	I	35.4	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	32.40 MT/year
4.	Chemical Sludge containing residue pesticides	I	29.2	Collection, storage, transportation, disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
5.	Used Oil	I	5.1	Collection, storage, transportation, disposal by selling to registered reprocessors.	0.3 MT/Year
6.	Spent carbon	I	36.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	257.4 MT/Year
7.	Ash from incinerator	I	37.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4755 MT/Year
8.	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	0.240 MT/Year
9.	Spent HCl 30% Acetic acid – 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	24588 MT/Year 7000 MT/Year
10.	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2032 MT/Year
11.	Salts from MEE	I	37.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4570.44 MT/Year

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12.	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who heve valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	1995 MT/Year
13.	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation , disposal through – house incineration or SEPPL, Kutch, GISPL-Palsana	50 MT/Year

6.3 The Authorization shall be valid for a period of **30/09/2021.**

6.4 The Authorization is subject to the following general and specific conditions:

A. General Conditions under Hazardous and other Wastes (MANAGEMENT & TRANSBOUNDARY MOVEMENT) Rules-2016.

1. The Authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The Authorization or its renewal shall be produced for inspection at the request of an officer Authorized by the State Pollution Control Board.
3. The person Authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific Conditions (whichever is applicable)

1. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
2. Handing over of the hazardous and other wastes to the authorized actual user shall be only after making the entry into the passbook of the actual user

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

3. In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.
4. The occupier of the facility shall comply Standard operating procedure/ guidelines published by MoEF&CC or CPCB or GPCB form time to time.
5. Unit shall comply provisions of E-Waste (Management) Rules, 2016.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Mrs. D.P. Shah)
ENVIRONMENTAL ENGINEER

NO: GPCB/SRG-CCA-229(25)/ID:24285/408584 Date:- 31/3/2017

ISSUED TO:
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

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Annexure- II

Photographs of deodorant system covering entire periphery of unit



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471 O/C

EG576528480IN IVR:6971576528480
SP SARIGAM SO <396155>
Counter No:2,25/02/2022,12:48
To:UNIT HEAD,GPCB
PIN:382010, Gandhinagar Gujarat HO
From:COROMANDEL INT LTD,GIDC
Wt:25gms
Amt:41.30(Cash)Tax:6.30
<Track on www.indiapost.gov.in>

Lett Ref-No- EMS-GPCB/COR/45-2022/ID-24285

25th Feb'2022

To,

Mr. A. G. Patel,

Regional Officer, Sarigam

Gujarat Pollution Control Board.

Subject: Intimation for Incinerator – 01 plant Shut down activity

GPCB ID:24285

Dear Sir,

This has reference to above mentioned subject; we hereby want to inform you that our Incinerator-01 plant is under maintenance work for 20 days. Online continuous monitoring data of Incinerator 01 stack (**Equipment Serial No:5000401**) will not be uploaded on GPCB/CPCB portal during the period of shut down activity.

We will update the status once the shutdown activity gets completed. This is for your kind information.

Kindly acknowledge the same.

Thanking You,

Yours Faithfully

For Coromandel International Limited

Dinesh Chandra Patil

RECEIVED
GPC Board Sarigam
Sign Dt. 25/02/2022

Assoc. Vice President and Unit Head.

C.C.: Unit Head, Head Office, GPCB Gandhinagar.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office: Coromandel House
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27841034
F : +91 40 27844117
E: info@coromandel.murugappa.com
W: www.coromandel.biz

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 4, 2022 PCB ID: 24285

To,
Unit Head –Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382010, Gujarat.

Subject	:	**Submission of Compliance and Action taken/Action to be takento Direction issued on 30/07/2022by HO, GPCB, Gandhinagar.**
Ref.	:	• **Direction under section 5 of the Environment (Prevention) ACT-1986for violation of the Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time issued vide Order No. GPCB/SRG-CCA-229(38)/ID-24285/679542 dated 30/07/2022.** • **GPCB Visit dated 08/02/2022&08/03/2022.**

Dear Sir/Madam,
This has reference to the above. We are hereby submitting Compliance / Action taken/Action to be taken to Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.

Sr. No.	Observation	Compliance and Action taken/Action to be taken
1	During inspection on entry of the unit one tractor along with contaminated debrisalmost seems to be hazardous waste contaminated debris observed coming out of theunit and driver informed that they are taking the same to another plot No. 731/2 of theunit. On inspection it is found that maintenance (reconstruction) of storm water drain isgoing on and its generated contaminated debris and other scrap material approximately1.5 MT is dumped on Plot No. 731/2 of the unit.	• At a time of GPCB official visit dated 08/03/2022, storm water drain cleaning work & renovation work was going on at site and due to these said works, around 1.075 MT(Not 1.5 MT)debris was generated and stored at our near-by Plot No. 731/2 only for drying purpose for the safe disposal at Common TSDF for land-filing, it was not dumped at the said plot. BUT as instructed by GPCB officials, all debris was collectedand disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
2	Unit is not having NOC/CCA of the Board for this Plot Looking to the situation at PlotNo. 731/2, it can be said that unit has deliberately dumped this type of waste at the saidplot.	• At a time of GPCB official visit dated 08/03/2022, storm water drain cleaning work & renovation work was going on at site and due to these said work, around 1.075 MT(Not 1.5 MT) debris was generated and stored at our near-by Plot No. 731/2 **only for drying purpose for the safe disposal at Common TSDF for land-filing**, it was not dumped at the said plot.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

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G P C Board Sarigam
Sign Patel Dt. 04/08/2022

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		BUT as instructed by GPCB officials, all debris was collected and disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
3	Unit has stored generated hazardous waste at various locations within plant of the unit.	During inspection dated 08/02/2022 by GPCB officials, primary clarifier of ETP was under routine/regular maintenance work and sludge of the same was stored at nearby area of primary clarifier. BUT as instructed by GPCB officials and as an immediate action, entire sludge was transferred to dedicated hazardous waste storage area and area got cleaned.Photographs for Cleaned area are enclosed as **Annexure-3.**
4	Industry shall collect all dumped waste approx. 1.5 MT at Plot No. 731/2 & dispose thesame as per the provisions of HWM Rules, 2016	• Observed Entire quantity of debris i.e. 1.075 MT (Not 1.5 MT) dried at Plot No. 731/2was collected and disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
5	Industry shall carry out remediation of above site and submit remediation report from reputed institute, like NEERI, NPC, IIT, Schedule-I auditor etc.	As such no contamination observed at Plot No. 731/2 as evident from the soil samples collected and analized by RO, GPCB, Sarigam. Analysis Report issued by GPCB is enclosed as an **Annexure-4.** However, as directed to carry out remediation study for Plot No. 731/2 has been allotted to M/s. Sardar Vallabhbhai National Institute of Technologies (SVNIT), Surat. Work Order for the same is enclosed as an **Annexure-4.1**. So remediation activity for Plot No. 731/2 has been started. So once it is done, we will submit report for the same to GPCB as soon as possible.
6	Unit shall comply with CCA conditions.	Compliance report for each and every conditions given in ○ **CC&A Order No. AWH-84402, date of issue 22/02/2017,** ○ **CCA Amendment Order No. AWH 105201, dated 06/12/2019 &** ○ **CCA Amendment Order No. AH – 110281 dated 24/11/2020**

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		are enclosed as an **Annexure-5, 6&7** respectively.
7	Industry shall pay Rs. 67,500/- (Sixty Seven Thousand Five hundred) as an InterimEnvironmental Compensation (Interim EDC).	Interim Environment damage compensation (Rs. 67,500/-) is paid dated 02/08/2022. Transaction No. N214222061837983. Print Screen for payment done details is enclosed as **Annexure-8.**

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

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: Manifest Copy dated 10/03/2022 475

Safe Enviro Private Limited [53681]

Manifest No: 1576411 10/03/2022 — **Copy 6**

To be forwarded by To be returned by the Operator of the facility to the Occupier after treatment and disposal of hazardous material/waste.

Sender's Details			
Sender Name	Coromandel International Limited [24285]		
Address	SARIGAM GIDC ESTATE, SARIGAM ,- Taluka :UMR District:SAR Pin no:396155		
Contact Details	9909994157 pollID@coromandel.murugappa.com	GPS Coordinates	Lat :20.3011 Long :72.8834

Receiver's Details			
State	Gujarat	Type of Facility	Common TSDF
Facility Details	Safe Enviro Private Limited [53681]		
Contact Details	9510660178 eso@safeindia.com	GPS Coordinates	Lat :22.2453 Long :72.5141
Address	966 to 970, 1040 , 1045 to 1049, - Taluka :UMR District:BHA Pin no:392150		

Waste Details					
Waste Details	1~35~35.3~Chemical sludge from waste water treatment				
Waste Intended for	Landfill	Total Qty	1.075MT	Consistency	Solid

Transporter Details			
Name	Gujarat Safe Logistic	Contact Details	9879624949 gujaratsafelogistic@gmail.com
Address	B/204,PEACE AVENUE NEAR FELLOWSHIP SCHOOL District :Valsad Taluka :Pardi		

Vehicle Details					
Vehicle no	GJ10Z9697	GPS Enabled	Yes	Type of Vehicle	Truck
Driver name	Akbar Sama	Driver Contact No	9316835928		

Waste Transportation Details					
Vehicle Depart.	10/03/2022 3:24PM	Number of Drums	0	Loose Waste	1.075
Remarks	Contaminated debris material sent for landfill.		No of bags	0	

Sender's Declaration :

1. I hereby declare that contents of the consignment are fully and accurate described above by proper shipping name and are categorized , packed, marked and labeled , and are all in all respects in proper condition for transport by road according to applicable national government regulations.
2. I hereby declare that we have obtained membership of common facility / carried out agreement with actual user for disposal/ actual use of hazardous waste.

Name and Stamp of Sender: COROMANDEL INTERNATIONAL LIMITED Plot No.2102, G.I.D.C Estate SARIGAM-396 155, Dist Valsad, Gujarat

Date: 10/3/22

Signature: 10/03/2022

Transporter's Acknowledgement of Receipt of waste

Stamp:

Date: 10/3/22

Signature:

Receiver's Certification of Receipt of Hazardous waste

RECEIVED

Stamp: SAFE ENVIRO PRIVATE LIMITED IMGNAD

Date: 11 MAR 2022

Signature:

DATE: 11/03/22
CONTRACT No: 113
TOKEN No: 18520

Print by 24285 @ 10/03/2022 04:40:26 PM 1 (Through XGN)

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Annexure-2

Photographs for Cleaned area at Plot No. 731/2





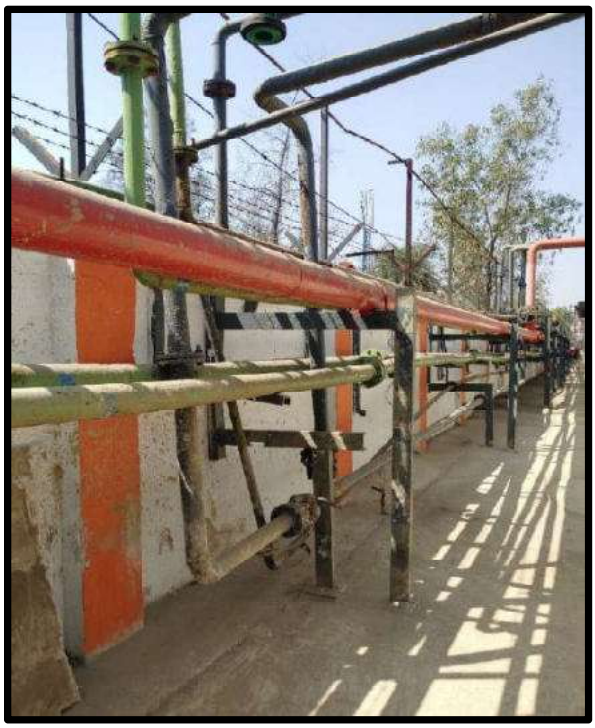




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Annexure-3

Photographs for Cleaned area within premises





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Annexure-4

ANALYSIS REPORT FOR Hazardous 478
WATSE TYPE : SOL

Sample ID:325889 - Analysis Completion 25/03/2022

Pesticides (technical) (excluding formulation) / LAB Inward : 57779

Gujarat Pollution Control Board
Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

1. Name & : **Coromandel International Limited - 24285**
2. Address of the Unit : **2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM „- SARIGAM - 396155 , Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam**
3. Nature of Sample : **REP-Representative/Grab , (Insp Type : HOR-H.O.Reference)**
4. Sample Collected By : **Rana Jaimin C**
5. Date & Time of Collection & Receipt : **08-Mar-2022, (1125 to 1125)**
6. Date of Start & Completion of Analysis : **10/03/2022 13:13:33 & 25/03/2022**
7. Sampling Point : **Contaminated soil/debris waste sample collected which is dumped at North west side of plc**
8. Physical State : **Solid**
9. Disposal Mode : **--**
10. Waste Category : **--**
11. Temperature on Collection : **& Color & Appearance : Grayish**
12. Hazardous Sampled (SPM-M3) : **-- & Carboys Marks : Barcode**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	Unit	4500 B APHA Std.Methods 22nd edi.-2012	1 – 14	7.48
2	Total Acidity as Caco3 *	gm/kg	Titration Method. (2310 B APHA Standard Methods	1 – 1000 mg/l	BDL
3	Total Alkalinity as Caco3 *	gm/kg	Titration method. (2320 B APHA Standard Methods	1 – 5000 mg/l	0.04
4	Total Inorganic Solids (TIS)	gm/kg	2540 G APHA Standard Methods 22nd edi-2012	1-1000 gm/kg	950
5	Ammonical Nitrogen	gm/kg	1).Titrimetric method 2).Nesslerization method. (45	. 0.5 - 5000 mg/l.	0.364
6	Chemical Oxygen Demand	gm/kg	APHA (23rd Edition)- 5220 B Open Reflux Method-	5.0- 50000 &	0.75
7	Oil & oil emulsions *	gm/kg	Liquid – Liquid Partition Gravimetric method. (5520	01 – 1000	BDL

Laboratory Remarks : Freeze By:335-vig_335 Dt.: 28/03/2022



H. M. Ganvit,SSO

Field Observation :
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ANALYSIS REPORT FOR Hazardous 479
WATSE TYPE : SOL

Sample ID:325890 - Analysis Completion 25/03/2022

Pesticides (technical) (excluding formulation) / LAB Inward : 57780

Gujarat Pollution Control Board
Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

1. Name & : **Coromandel International Limited - 24285**
2. Address of the Unit : **2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM „- SARIGAM - 396155 , Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam**
3. Nature of Sample : **REP-Representative/Grab , (Insp Type : HOR-H.O.Reference)**
4. Sample Collected By : **Rana Jaimin C**
5. Date & Time of Collection & Receipt : **08-Mar-2022, (1130 to 1130)**
6. Date of Start & Completion of Analysis : **10/03/2022 13:13:49 & 25/03/2022**
7. Sampling Point : **Contaminated soil/debris waste sample collected which is dumped at North East side of plo**
8. Physical State : **Solid**
9. Disposal Mode : **--**
10. Waste Category : **--**
11. Temperature on Collection : **& Color & Appearance : Yellowish**
12. Hazardous Sampled (SPM-M3) : **-- & Carboys Marks : Barcode**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	Unit	4500 B APHA Std.Methods 22nd edi.-2012	1 – 14	6.52
2	Total Acidity as Caco3 *	gm/kg	Titration Method. (2310 B APHA Standard Methods	1 – 1000 mg/l	0.04
3	Total Alkalinity as Caco3 *	gm/kg	Titration method. (2320 B APHA Standard Methods	1 – 5000 mg/l	BDL
4	Total Inorganic Solids (TIS)	gm/kg	2540 G APHA Standard Methods 22nd edi-2012	1-1000 gm/kg	872
5	Ammonical Nitrogen	gm/kg	1).Titrimetric method 2).Nesslerization method. (45	. 0.5 - 5000 mg/l.	0.196
6	Chemical Oxygen Demand	gm/kg	APHA (23rd Edition)- 5220 B Open Reflux Method-	5.0- 50000 &	3.16
7	Oil & oil emulsions *	gm/kg	Liquid – Liquid Partition Gravimetric method. (5520	01 – 1000	0.004

Laboratory Remarks : Freeze By:335-vig_335 Dt.: 28/03/2022



H. M. Ganvit,SSO

Field Observation :
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सरदार वल्लभभाई राष्ट्रीय प्रौद्योगिकी संस्थान, सूरत
सरदार वल्लभभाई राष्ट्रीय प्रौद्योगिकी संस्थान, सूरत
SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY, SURAT
(An Institute of National Importance, Established under NITSER Act by Ministry of Education, Govt. of India)
SVNIT
60 ANNIVERSARY

Ref No: SVNIT/DCE/ENV/Coromandel/C-1437 02-08-2022

To,
Mr Dinesh Chandra Patil
Assoc. Vice President & Unit Head
Coromandel-Sarigam
Valsad, Gujarat

Subject: To conduct remediation study of CIL Plot no-731/2 regarding

Your Ref Letter No: EMS-SVNIT/COR/01-2022-23/ID-24285 dated 02-08-2022

Dear Sir,

We are pleased to inform you that SVNIT, Surat is ready to carry out the ~~MEE Facilities Efficiency Tests~~ Remediation study at Sarigam- Valsad, Gujarat with following term and conditions:

Kindly follow the terms and conditions

- Consultancy charge is Rs 3,54,000/- (Rs 3,00,000/ + 54,000/-18% GST)
- Laboratory analysis charge as per parameters list which will be decided during the execution of work
- During the visits all the logistic arrangements should be borne by the, Coromandel-Sarigam
- To complete the work, Coromandel-Sarigam has to provide all the necessary documents (soft and hard copy) as required by SVNIT, Surat.

- This is for your information that work will be only started after acceptance of terms & conditions, and deposition of 100% payment for consultancy, charges etc.
- If this offer is acceptable to you, kindly send the work order and release the payment

This amount has to be paid through online or DD drawn in favour of Research and Consulting A/C SVNIT Surat payable at Surat. A/C No: 35373382053 IFSC Code: SBIN0003320, MICR Code: 395002012. GSTIN: 24AAJS1184P1ZP

Please feel free for any query.
Thanking You

Yadav 02/8/22

Dr K. D. Yadav
Associate Professor
Department of Civil Engineering
SVNIT, Surat
Email: kdjhansi@yahoo.com
Contact: +91 -9428398266

S. V. NATIONAL INSTITUTE OF TECHNOLOGY * SURAT * DCE

2.11.22

Forwarded through,
Head, Department of Civil Engineering

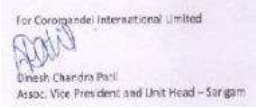
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Annexure–5

Compliance of Consent Order No. AWH-84402

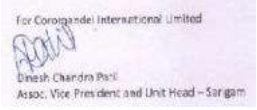
<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Consent Order No. AWH-84402, Date of Issue: 22/02/2017.</td><td></td></tr>
<tr><td>2.</td><td>The consent shall be valid up to 30/09/2021 for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following internal products.
<table>
<tr><th>Sr. No.</th><th>Name of the Products</th><th>Capacity (MT/Annum) (As per CC&A)</th><th>Remarks</th></tr>
<tr><td colspan="4">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb (Tech.)</td><td>38000</td><td rowspan="4">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb (Tech.) + Maneb (Tech.)</td><td>38000</td></tr>
<tr><td>3</td><td>Mancozeb (Tech.) + Zineb (Tech.)</td><td>38000</td></tr>
<tr><td>4</td><td>Mancozeb (Tech.) + Propineb (Tech.)</td><td>22116</td></tr>
<tr><td></td><td>Total Production capacity of Group A</td><td>38000</td><td></td></tr>
<tr><td colspan="4">GROUP B</td></tr>
<tr><td>1</td><td>Diethyl Thiophosphoryl Chloride (DETC)</td><td>3600</td><td rowspan="6">Either or combination of the products</td></tr>
<tr><td>2</td><td>DMTC</td><td>2160</td></tr>
<tr><td>3</td><td>Diafenthiuron</td><td>1650</td></tr>
<tr><td>4</td><td>Thiamethoxam</td><td>1650</td></tr>
<tr><td>5</td><td>Pymetrozine</td><td>1650</td></tr>
<tr><td>6</td><td>Diflubenzuron</td><td>1650</td></tr>
<tr><td></td><td>Total Production capacity of Group B</td><td>3600</td><td></td></tr>
<tr><td colspan="4">GROUP C</td></tr>
<tr><td>1</td><td>DMTC Amide</td><td>4796</td><td>-</td></tr>
<tr><td></td><td>Total Production capacity of Group C</td><td>4796</td><td>-</td></tr>
<tr><td colspan="4">GROUP D</td></tr>
<tr><td>1</td><td>Glyphosate (Tech.)</td><td>5000</td><td rowspan="2">Either or combination of the products</td></tr>
<tr><td>2</td><td>PMIDA</td><td>3300</td></tr>
<tr><td></td><td>Total Production capacity of Group D</td><td>5000</td><td>-</td></tr>
<tr><td colspan="4">GROUP E</td></tr>
<tr><td>1</td><td>Chlorpyriphos (Tech.)</td><td>5000</td><td>-</td></tr>
</table></td><td>• Complied.
• Total Production Quantity is within permitted Production Capacity.</td></tr>
</table>

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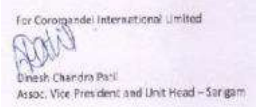
	Total Production capacity of Group E	**5000**	
GROUP F			
1	Acephate (Tech.)	7000	-
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	**Either or combination of the products**
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	-
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	-
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	**Either or combination of the products**
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	-
	Total Production capacity of Group K	**2000**	
GROUP L			
1	Methamidafos (Tech.)	0	-
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	-
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic	429	**Either or combination of**

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	Acid		**the products**	
2	2,3-Difluoro-5-chloro pyridine	353		
3	Clodinafoppropargyl (Tech.)	933		
4	Triclopyr Acid (Tech.)	933		
5	TriclopyrButotyl Ester (Tech.)	933		
6	Picloram (Tech.)	495		
7	Pretilachlor (Tech.)	933		
8	Bispyribac sodium (Tech.)	330		
9	Azoxystrobin	52.8		
10	Boscalid	660		
11	Metalaxyl	933		
12	Proclaraz	933		
	Total Production capacity of Group N	**933**		
GROUP O				
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	**Either or combination of the products**	
2	Fipronil (Tech.)	933		
3	Emmamectin Benzoate (Tech.)	495		
4	Difenoconazole (Tech.)	660		
5	Triazophos (Tech.)	933		
6	Glufosinate Ammonium Salt	933		
7	Metribuzin	933		
	Total Production capacity of Group O	**933**		
GROUP P				
1	Imidacloprid (Tech.)	990	**All of the Products**	
2	Acetamiprid (Tech.)	990		
	Total Production capacity of Group P	**990**		
BY PRODUCTS				
1	Ammonium Chloride Powder (NH4Cl)	13398	-	
2	Sodium Chloride (NaCl)	8238	-	
3	Sodium Sulphate (Na2SO4)	19779	-	

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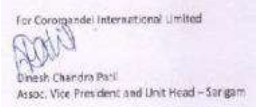


4	Ammonium Sulphate (NH4)2SO4	8370	-
Total Production capacity of all Groups and By-Product		**160277**	-

LIST OF FORMULATION PRODUCTS

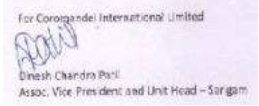
Sr. No.	FORMULATION PRODUCTS	Qty. (MT/Annum) (As per CC&A)
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650
20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% +	1650

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		Cypermethrine 5% EC		
	23	Cypermethrin 10% EC	1650	
	24	Cypermethrin 25% EC	1650	
	25	Maneb 80% WP	8910	
	26	Propineb 70% WP	9240	
	27	Zineb 80% WP	8910	
	28	TriclopyrButotyl ester 480 gm/lit	990	
	29	Methamidophos 600 gm/lit SL	5280	
	30	Imidaclopyrid 17.8% SL	8580	
	31	Clodinafoppropargyl 15% WP	10230	
		Total	**243210**	
3.0	**CONDITIONS UNDER WATER ACT:**			
3.1	The source of water supply shall be GIDC Sarigam			Complied
3.2	The quantity of total water consumption shall not exceed 1078 KLPD as per below break up a) Industrial: 1018 KLPD b) Domestic: 60 KLPD			• Complied. • Total average Water consumption in FY 2021-2022is1068.32 KLDincluding domestic.
3.3	The quantity of total waste water shall not exceed 1073.33 KLPD as per below break up a) Industrial: 1013.33 KLPD b) Domestic: 60 KLPD			• Complied. • Total average Waste water generationin FY 2021-2022 is 545.02 KLD including domestic.
3.4	Out of 1013.33 KL/day the concentrated and toxic effluent stream generated i.e. 93.63 KL/day shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or shall be disposed through common incineration facility SEPPL Kutchh or GSEPL-Palsana. 669.5 KL/Day High TDS Low COD effluent shall be evaporated through Multiple Effective Evaporator (MEEs)/ in case of any breakdown or maintenance of in house MEE, high TDS effluent will be sent to SEPPL for evaporation and drying. 190 KL/day dilutes stream + 60 KL/day domestic i.e. 250 KL/day along with MEE condensate 331 KL/day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharged as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day. The mechanism to monitor of the concentrated stream generated, treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis. In no case, concentrated stream shall be sent with diluted stream for			• Complied. • Total Average Waste water discharge quantityin FY 2021-2022 is 545.02 KLD including domestic.

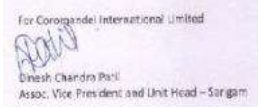
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<table>
<tr><td></td><td>the further treatment.
Unit shall affix of Water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act -1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required.</td><td></td></tr>
<tr><td>3.5</td><td colspan="2">TRADE EFFLUENT:</td></tr>
<tr><td>3.5.1</td><td>Theconcentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or SEPPL Kutchh or GSEPL-Palsanaincineration facility or co-processing facility.
The incineration facility shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc.
The industry shall operate fully and efficiently incineration system/ air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partially non operational for any reason what so ever (whether for maintenance/repairs/electricity failures or otherwise) They shall not restart such activity unless and until the incineration facility is fully in operation.
The pipeline connecting various equipments of sump of incineration system should be minimum in numbers and shall have permanent connection (no losses or flexible connection)
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for consumption & temperature measuring devices within incinerator at different points & scrubber outside the incinerator shall be provided. These all data shall be recovered every day.
The applicant shall have to register under the provisions of factories act – 1948 and shall be obtained necessary factory provisions.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store and handle solid waste in accordance with provisions of the effluent rules in behalf
The printed logbook shall be maintained for:
a. Energy Consumption
b. Waste water flow at inlet and outlet of incineration system
c. Quantity of sludge generated
d. Laboratory analysis reports for each of the specified parameters of liquid effluent, gaseous discharge & sludge samples.

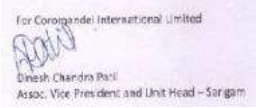
The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production through such figure shall be supplied on monthly basis. The unit shall supply separate figure for consumption of electricity for running the incinerator by having separate measuring meters for such incinerator.</td><td>• Complied.
• We are disposing off incinerable hazardous waste to SEPPL – Kutch/BEIL/ Cement Industry and RSPL – Panoli for incineration.
• We are operating incinerator system with CEMS attached to CPCB and GPCB Server.</td></tr>
<tr><td>3.5.2</td><td>The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards.
<table><tr><th>PARAMETERS</th><th>PERMISSIBLE LIMIT</th></tr></table></td><td>• Complied.
• We are operating</td></tr>
</table>

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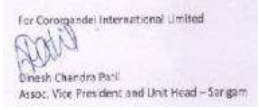
<table>
<tr>
<td></td>
<td>
<table>
<tr><td>pH</td><td>5.5-6.5</td></tr>
<tr><td>Temperature</td><td>40◦C</td></tr>
<tr><td>Color (pt-co scale) in units</td><td>100 Units</td></tr>
<tr><td>Suspended solids</td><td>200 mg/l</td></tr>
<tr><td>Oil and grease</td><td>10 mg/l</td></tr>
<tr><td>Phenolic Compound</td><td>1.0 mg/l</td></tr>
<tr><td>Cyanide (as CN)</td><td>0.2 mg/l</td></tr>
<tr><td>Fluoride</td><td>2 mg/l</td></tr>
<tr><td>Sulphide</td><td>2 mg/l</td></tr>
<tr><td>Ammonical Nitrogen</td><td>100 mg/l</td></tr>
<tr><td>Arsenic (As)</td><td>0.2 mg/l</td></tr>
<tr><td>Total Chromium</td><td>2.0 mg/l</td></tr>
<tr><td>Hexavalent Chromium</td><td>0.1 mg/l</td></tr>
<tr><td>Copper (Cu)</td><td>3.0 mg/l</td></tr>
<tr><td>Lead (Pb)</td><td>0.1 mg/l</td></tr>
<tr><td>Mercury (hg)</td><td>0.01 mg/l</td></tr>
<tr><td>Nickel(Ni)</td><td>3.0 mg/l</td></tr>
<tr><td>Zinc(Zn)</td><td>5.0 mg/l</td></tr>
<tr><td>Cadmium (Cd)</td><td>1.0 mg/l</td></tr>
<tr><td>Iron</td><td>3 mg/l</td></tr>
<tr><td>BOD (5 Days at 20C)</td><td>300 mg/l</td></tr>
<tr><td>COD</td><td>750 mg/l</td></tr>
<tr><td>Chlorides</td><td>600 mg/l</td></tr>
<tr><td>Sulphates</td><td>1000 mg/l</td></tr>
<tr><td>Total Dissolved solids</td><td>2100 mg/l</td></tr>
<tr><td>Insecticides/Pesticides</td><td>Absent</td></tr>
<tr><td>Sodium absorption ratio</td><td>26</td></tr>
<tr><td>Sodium percent</td><td>60</td></tr>
<tr><td>Bio – essay test</td><td>90% survival of fish after 98 hrs in 100% effluent.</td></tr>
</table>
• All efforts shall be made to remove color & unpleasant odor as far as predictable.
</td>
<td>ETP with primary, secondary and tertiary system and installed Continuous effluent monitoring system with GPCB and CPCB server connectivity.
• Treated waste water quality is well within permitted limit.
• Analysis Report of the same attached as Annexure-5.1.</td>
</tr>
<tr>
<td>3.5.3</td>
<td>The final treated effluent conforming the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being, managed by Sarigam Waste Effluent Management Co. Ltd.</td>
<td>• Complied.
• Final treated effluent discharged into CETP through GIDC underground drainage system.</td>
</tr>
<tr>
<td>3.5.4</td>
<td>Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.</td>
<td>Complied.</td>
</tr>
<tr>
<td>4.0</td>
<td>CONDITIONS UNDER THE AIR ACT:</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>The following shall be used as fuel in dryers, boiler, incinerator & DG sets respectively.
<table>
<tr><th>Sr. No</th><th>Fuel</th><th>Existing</th><th>UTILITY</th></tr>
<tr><td>1.</td><td>Natural gas</td><td>Approx. 2500SCM/Hr</td><td>Boiler / Incinerator / MEE</td></tr>
</table>
</td>
<td>• Complied.
• Average natural Gas consumption is 1149.89SCM / Hr against 3500</td>
</tr>
</table>

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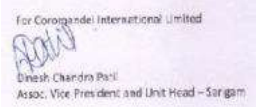
<table>
<tr><td></td><td>
<table>
<tr><td>2.</td><td>Furnace Oil</td><td>2 KL/Hr</td><td>Boiler</td></tr>
<tr><td>3.</td><td>Natural Gas</td><td>1000 SCM/Hr</td><td>Hot Air Generator</td></tr>
<tr><td>4.</td><td>HSD</td><td>6 KL/day</td><td>DG</td></tr>
</table>
</td><td>SCM/Hr, and HSD is 0.253 KL/Day in FY 2021-2022 .</td></tr>
<tr><td>4.2</td><td>The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.</td><td>Complied.</td></tr>
<tr><td>4.3</td><td>The flue gas emission through stack attached to stack shall conform to the following standards:
<table>
<tr><th>Sr. No.</th><th>Stack Attached to</th><th>Height meter</th><th>APCM</th><th>Parameter</th><th>Permissible Limit</th></tr>
<tr><td>1.</td><td>Boiler-3 Nos.</td><td>50</td><td>--</td><td rowspan="4">PM
SO_X
NO_X</td><td rowspan="4">150 mg/Nm^3
100 ppm
50 ppm</td></tr>
<tr><td>2.</td><td>D G Set – 01 Nos.(1000 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>3.</td><td>D G Set – 2 Nos.(500 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>4.</td><td>D G Set– 01 Nos.(200 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>5.</td><td>Liquid and Gas Incinerator 01</td><td rowspan="2">52</td><td rowspan="2">Ventury Alkali scrubber</td><td rowspan="3">PM
SO_2
NO_x
HCL
CO
Total Organic Carbon
Total Dioxins and furans
Sb+As+Pb +Cr+CO+Cu+Mn+Ni+V</td><td rowspan="3">50
200
400
50
100
20
0.2 ng TEQ/Nm^3
1.5</td></tr>
<tr><td>6.</td><td>Solid Incinerator Incinerator 03</td></tr>
<tr><td>7.</td><td>Liquid Incinerator Incinerator 04</td><td>50</td><td>Ventury Alkali scrubber</td></tr>
</table>
</td><td>• Complied.
• Emission are well within permitted norms.
• In incinerator CEMS installed with GPCB and CPCB server connectivity.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis results of the same is attached as Annexure-5.2.</td></tr>
<tr><td>4.4</td><td>The process emission through various stack/vent of reactors, process vessels shall conform to the following standards.
<table>
<tr><th>Sr No</th><th>Plant</th><th>Stack attached to</th><th>Stack height (meter)</th><th>APCM</th><th>Parameter</th><th>Permissible limit, mg/Nm^3</th><th>Remarks</th></tr>
<tr><td colspan="8">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb</td><td>Mancozeb reactor</td><td rowspan="4">30</td><td rowspan="4">Air Blower/ Ventury scrubber</td><td rowspan="4">CS_2
PM
SO_2</td><td rowspan="4">180
50
40</td><td rowspan="4">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb + Maneb</td><td>maneb reactor</td></tr>
<tr><td>3</td><td>Mancozeb + Zineb</td><td>Zineb reactor</td></tr>
<tr><td>4</td><td>Mancozeb +propineb</td><td>Propineb Reactor</td></tr>
<tr><td>5</td><td></td><td>Spray Dryer(2Nos) 3000 Kgs/Hr.</td><td>30</td><td>Bag Filter / Water Scrubber</td><td></td><td></td><td></td></tr>
<tr><td colspan="8">GROUP B</td></tr>
<tr><td>6</td><td>Diethyl Thiophospho</td><td>Reactor - 01 Nos. – 10 KL</td><td>20</td><td>Alkali scrubber</td><td>HCl</td><td>20</td><td>Either or combinatio</td></tr>
</table>
</td><td>• Complied.
• At 11places online monitoring system installed and emissions are well within permitted norms.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis Report of the same attached Annexure-5.3.</td></tr>
</table>

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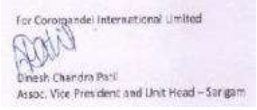
	rylChloride						n of the products
7	DMTC						
8	Diafenthiuron	Reactor – 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
9	Thiamethoxam	Reactor – 01 Nos. – 6.3 KL	--	--	--	--	
10	Pymetrozine	Reactor – 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
11	Diflubenzuron	Reactor - 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
GROUP C							
12	DMTC Amide	Reactor - 01 Nos. – 10 KL	20	Acidic scrubber	NH_3	30	
GROUP D							
13	Glyphosate (Tech.)	Slurry Preparation	20	Water Scrubber	NH_3	30	Either or combination of the products
14	PMIDA	Reactor - 01 Nos. – 10 KL	20	Alkali scrubber	HCl	20	
GROUP E							
15	Chlorpyriphos (Tech.)	HTCP Reactor- 01 Nos. – 10 KL	20	Two scrubbers in series-water scrubber &alkali scrubber	HCl	20	
GROUP F							
16	Acephate(Tech.)	Ammonia solution preparation reactor- 01 Nos. – 4 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH_3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
GROUP G							
17	Monocrotophos (T) **OR** Dicrotophos	Chlorination Reactor and Neutralizer	20	Two scrubbers in series water scrubber &alkali scrubber	HCl Cl_2	209	Either or combination of theproducts
GROUP H							
18	DDVP	Gas to Incinerator			CH_3Cl		
GROUP I							
19	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor& Storage tank	11	Alkali Scrubber	HCl Cl_2 PCl_3	209 9	
GROUP J							
20	Trimethyl Phosphite (TMP) **OR** Triethyl Phosphite (TEP)	TMP plant reactor andstorage tank	20	Acid Scrubber	NH_3 Odor	30 Nil	Either of the product
		TMP/DETC products storage tanks	11	Acid Scrubber			
GROUP K							

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21	Phosphorous Sulphochloride ($PSCl_3$)	PSCl3 plant reactor and storage tank	22	Alkali Scrubber	HCL PCl_3	209	
GROUP L								
22	Methamidafos	NO process gas emission					
GROUP M								
23	Phosphorous Acid	phosphorous acid Reactor	20	Water Scrubber	HCl	20	
GROUP N								
24	2-(4-Hydroxy phenoxy) Propionic acid	--	No process stack				Either of the product will be manufacture
25	2,3-Difluoro-5-chloro pyridine	--	No process stack				
26	Triclopyr Acid / TriclopyrButotyl Ester	--	No process stack				
27	Clodinafop Propargyl						
28	Picloram	Picloram&pretilachlorreactors	20	Alkali Scrubber	HCl	20	
29	Pretilachlor		No process stack				
30	Bispyribac Sodium	--	No process stack				
31	Azoxystrobin		No process stack				
32	Boscalid	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
33	Metalaxyl	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
GROUP O								
34	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	--	No process stack				Either of the product will be manufacture
35	Fipronil	Fipronil reactor	20	Alkali Scrubber	HCl	20	
36	Emmamectin Benzoate	--	No process stack				
37	Difenoconazole	--	No process stack				
38	Triazophos	--	No process stack				
39	Glufosinate Ammonium Salt	--	No process stack				
40	Metribuzin	--	No process stack				
4	NH4Cl	NH4Cl	11	Acid			

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1		Storage Tank		Scrubber			
42	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
OTHERS							
43	HCl Storage Tank	HCl Storage Tank	11	Alkali Scrubber	HCl Cl_2	20 9	
44	Chlorine Shed	Chlorine Shed	13.5	Alkali Scrubber	Cl_2	9	
45	Drum Filling Station	Drum Filling Station	11	Alkali Scrubber	Odor		
46	Sodium Sulphate Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
47	Ammonium Chloride Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
48	Qurippo (1.364 MW)	Stack Attached to Power plant	45	--	PM SO_2 NOx	150 100 50	
49	Incinerators – 03 Nos. – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO_2 NOx	50 200 400	

4.5

Ambient air quality within the premises of the industry shall conform to the following standards:

PARAMETERS	PERMISSIBLE LIMIT
Particulate Matter(PM_{10})	100 microgram /M^3
RSPM ($PM_{2.5}$)	60 microgram /M^3
Oxides of Sulphur (SO_X)	80microgram /M^3
Oxides of Nitrogen (NO_X)	80 microgram /M^3
HCl	200 microgram /M^3
Cl_2	100 microgram /M^3
H_2S	500 microgram /M^3
HC	100 microgram /M^3
Ammonia	400 microgram /M^3
HF	80 microgram /M^3
CS_2	2000 microgram /M^3
CO	5000 microgram /M^3

- 4 Hourly or 08 Hourly or 01 Hourly monitored values as applicable shall be complied the 98% of the limit in a year, 2% of the time. They may exceed the limits out not one two consecutive days of monitoring.

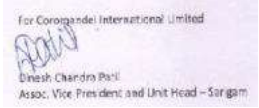
- Complied.
- Regular third party monitoring is carried out and emissions found well within permitted norms.
- Analysis report of the same attached as **Annexure-5.4.**

4.6

The applicant shall operate industrial plant/ air pollution control equipment very efficiently and continuously so that the gaseous emission always conform to the standards specified in condition no. 4.3 and 4.4 as above.

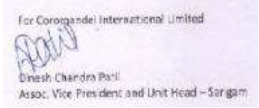
- Complied.
- We operate APCM efficiently.
- Regular third party monitoring is carried out and emissions found well within permitted norms.

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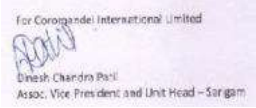
<table>
<tr><td>4.7</td><td>The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in condition no. 4.3 and 4.4 as above.</td><td>Noted.</td></tr>
<tr><td>4.8</td><td>The applicant shall provide portholes, ladder, platform etc at chimney (s)for monitoring the air emissions and the same shall be open for inspection to/and for use of Board’s staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.</td><td>• Complied
• We have provided portholes, ladders and platforms with stack nomenclature in each chimney.</td></tr>
<tr><td>4.9</td><td>The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 dB(A)during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6·a.m.</td><td>• Complied
• We are monitoring noise level by NABL and GPCB authorized third party and all are well within norms.</td></tr>
<tr><td>5.</td><td colspan="2"><u>GENERAL CONDITIONS:</u></td></tr>
<tr><td>5.1</td><td>Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>Noted and will inform board, if any.</td></tr>
<tr><td>5.2</td><td>Applicant shall also comply with the general condition given in annexure – I</td><td>Complied.</td></tr>
<tr><td>6.0</td><td colspan="2">Authorisation For The Management &Transboundary Movement Of Hazardous Wastes Form-2 (See rule 6(2)) for grant of authorization for occupier or operator handling hazardous waste Rules – 2016.</td></tr>
<tr><td>6.1</td><td>Number of authorization: AWH-84402 date of Issue 22/02/2017.</td><td>--</td></tr>
<tr><td>6.2</td><td>Reference of application No. 115227, dated 01/12/2016.
M/s. COROMANDEL INTERNATIONAL LTD. is hereby granted an authorization to operate facility for following hazardous waste on the premises situated at plot No: 2402, GIDC industrial Area, Sarigam, Dist. Valsad.
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Waste</th><th colspan="2">Category of Hazardous waste as per the Schedules I, II and III of these Rules</th><th rowspan="2">Authorized mode of disposal or recycling or utilization or co-processing etc.</th><th rowspan="2">Quantity</th></tr>
<tr><th>Sch.</th><th>Category</th></tr>
<tr><td>1</td><td>ETP Sludge</td><td>I</td><td>35.3</td><td>Collection, storage, transportation, disposal at common incineration facility TSDF</td><td>2640 MT/Year</td></tr>
</table></td><td>• Hazardous Waste disposed in FY-2021-22 as per HWM rules-2016.</td></tr>
</table>

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					site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli	
	2	Discarded Container/ bags	I	33.3	Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners disposed through common GPCB approved decontamination facility.	24000 Nos./year
	3	Oil & Grease skimming residue	I	36.4	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	32.40 MT/Year
	4	Chemical Sludge containing residue pesticides	I	29.2	Collection, storage, transportation, disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
	5	Used Oil	I	5.1	Collection, storage, transportation, disposal by selling to	0.3 MT/Year

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				registered reprocessors.	
6	Spent carbon	I	38.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	257.4 MT/Year
7	Ash from incinerator	I	37.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	4755 MT/Year
8	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	0.240 MT/year
9	Spent HCl 30% Acetic Acid 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and	24588 MT/year 7000 MT/year

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For Coromandel International Limited
Dinesh Chandra Pant
Assoc. Vice President and Unit Head – Sarigam

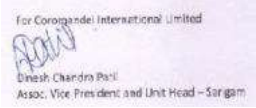
					(TMB) rule-2016		
	10	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	2032 MT/Year	
	11	Salts from MEE	I	37.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	4570.44 MT/Year	
	12	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	1995 MT/Year	
	13	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation, disposal through incineration SEPPL, Kutch. GISPL-Palsana.	50 MT/Year	
6.3	The authorization shall be valid up for a period of 30/08/2021						Noted.

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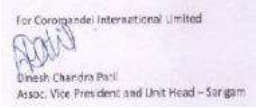
6.4	The authorization is subject to the following general and specific conditions.	Noted.
A.	**General Conditions under hazardous and other Wastes (Management & Transboundary Movement) Rules – 2016.**	
1.	The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 & the rules made there under.	Complied.
2.	The authorisation or its renewal shall he produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.	Noted.
3.	The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.	Complied.
4.	Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.	Noted.
5.	The person authorised shall implement Emergency Response Procedure (FRP) for which this authorisation is being granted considering all site specific. Possible scenarios such as spillages, leakages, tire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.	Complied.
6.	The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities For Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"	Complied.
7.	It is the duty of the authorised person to take prior permission of the Pollution Control Board to close down the facility	Noted.
8.	The imported hazardous and other wastes shall he fully insured for transit as well as for any accidental occurrence and its clean - up operation.	Complied.
9.	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	Not applicable.
10.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre - processing or utilisation of imported hazardous or other wastes shall he treated and disposed of as per specific conditions of authorisation.	Noted.
11.	The importer or exporter shall bear the cost of import or export and mitigation of damages if, any	Noted.
12.	An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules - 2016.	Noted.
13.	Any other conditions for compliance as per the Guidelines issued by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time	Noted.
14.	Annual return shall be filed by June 30th for the period ensuring 31st March of the year.	Complied.
B.	**Specific Condition (Whichever is applicable)**	
1.	The authorized actual user of hazardous waste shall maintain records of hazardous and other wastes purchased in passbook issued by state pollution control board along with authorization.	Complied.
2.	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in passbook of the actual user.	Complied

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3.	In case of renewal of authorization, a self certified compliance report in respect of effluent emission standard and the conditions specified in the authorization for hazardous and other waste shall be submitted to SPCB	Complied
4.	The occupier of the facility shall comply standard operating procedure/guidelines published by MoEF& CC or CPCB or GPCB from time to time.	Complied
5.	Unit shall comply provisions of E-waste management Rules - 2016	Complied

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Certificate No.: TC-7099

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

Annexure-5.1: Analysis Report for treated wastewater

LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: MAY22/110/30 (ULR- TC709922000010811F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22EF01	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sample Collected By: Mr. Parag Shah
6.	Analysis commenced on: 20.05.2022	7.	Analysis Completed on: 25.05.2022
8.	Reporting Date: 09.06.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed	11.	Group: Pollution and Environment
12.	Sampling Location: **ETP Outlet**	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Recived Date: 20.05.2022

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		:	6.91	6.5 – 8.5	APHA 23rd Edition 4500-H^+ B
2.	Temperature	°C	:	27	40	APHA 23rd Edition 2550- B
3.	Colour	Pt-CO	:	20	100	APHA 23rd Edition 2120 B
4.	Total Dissolved Solids	mg/L	:	1836	2100	APHA 23rd Edition 2540 C
5.	Suspended Solids	mg/L	:	19	200	APHA 23rd Edition 2540 D
6.	COD	mg/L	:	71	750	APHA 23rd Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	:	21	300	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/L	:	<1	10	APHA 23rd Edition 5520 B
9.	Ammonical Nitrogen	mg/L	:	5.12	50	IS 3025 (PP 34): 1988
10.	Chlorides	mg/L	:	504	600	APHA 23rd Edition 4500 Cl^- B
11.	Sulphates	mg/L	:	426	1000	APHA 23rd Edition 4500 SO^4 E
12.	Phosphate	mg/L	:	4.27	5.0	APHA 23rd Edition 4500 P – C
13.	Bio-Assay Test		:	Pass	90 % survival of fish after 96 hrs. in 100% concentration	IS 6582 Part-2, 2001

Remark :

Authorised By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE :
1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: MAY22/110/31

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22EF01	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sample Collected By: Mr. Parag Shah
6.	Analysis commenced on: 20.05.2022	7.	Analysis Completed on: 25.05.2022
8.	Reporting Date: 09.06.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed	11.	Group: Pollution and Environment
12.	Sampling Location: **ETP Outlet**	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Recived Date: 20.05.2022

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Insecticide as Lindane	-	:	Absent	Absent	Gas Chromatography

Remark :

Authorised By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE :
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3) The results reported above relate to the sample identified under Sample Details.

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TC-7099

ENVIRONMENTAL MONITORING REPORT

Annexure-5.2: Analysis Result for Air emission

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/02 (ULR- TC709922000010792F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE02	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Incinerator – 1,2,3
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	Incinerator – 1,2,3
2.	Height	m	:	52
3.	Diameter	mm	:	800
4.	Temperature	°c	:	110
5.	Velocity	m/s	:	9.96
6.	Type of fuel used		:	Natural Gas
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	18	50	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	N.D	200	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.50	400	IS 11255 (Part 7) :2005

Remark: N.D: - Not Detected.

Authorized By -

Name : Bhavisha Pandya | **Designation : Sr.Chemist**

NOTE:
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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/01 (ULR- TC709922000010791F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE01	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Boiler
6.	Sampling Time: 11:10 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**IAEC Boiler GT – 3281,5914**
2.	Height	m	:	50
3.	Diameter	mm	:	1500
4.	Temperature	°c	:	128
5.	Velocity	m/s	:	9.38
6.	Type of fuel used		:	Natural Gas
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	8	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	N.D.	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.34	50	IS 11255 (Part 7) :2005

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/07 (ULR- TC709922000010797F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE07	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 1 (200 KVA)
6.	Sampling Time: 11:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed √	Thimble: Packed √	Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 1 (200 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°C	:	122
5.	Velocity	m/s	:	10.11
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	ltr/hr	:	15-18

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm³	:	65	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	10.25	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.02	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/08 (ULR- TC709922000010798F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sangam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE08	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 2 (500 KVA)
6.	Sampling Time: 11:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed √	Thimble: Packed √	Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	D.G.Set- 2 (500 KVA)
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°C	:	140
5.	Velocity	m/s	:	11.86
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	Lit/hr.	:	40-45

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm³	:	60	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	11.95	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.74	50	IS 11255 (Part 7) 2005

Remark:

Authorized By -

Name : Bhavisha Pandya | **Designation : Sr.Chemist**

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3) The results reported above relate to the sample received under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/09 (ULR- TC709922000010799F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE09	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 3 (500 KVA)
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 3 (500 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°c	:	148
5.	Velocity	m/s	:	12.29
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	Ltr/hr	:	40-45

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	62	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	13.11	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	8.21	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/10 (ULR- TC709922000010800F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE10	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 4 (1000 KVA)
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 4 (1000 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	500
4.	Temperature	°c	:	220
5.	Velocity	m/s	:	14.70
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	ltr/hr	:	80-90

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	64	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	10.16	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.29	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

Annexure-5.3: Analysis Reports for Process Gas Emission

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/03 (ULR- TC709922000010793F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE03	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Mancozeb Reactor
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Mancozeb Reactor**
2.	Height	m	:	45
3.	Diameter	mm	:	1000
4.	Temperature	°C	:	86
5.	Velocity	m/s	:	12.26
6.	Type of fuel used		:	-
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	36	50	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	3.20	40	IS : 11255(Part 2) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/16

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22SE03		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sample Date: 19.05.2022		5.	Sampling Location: Mancozeb Reactor	
6.	Sampling Time: 13:00 hr		7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed		Thimble: Packed	Bladder: Clamped √
17.	Sample Received Date: 04.06.2022				

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Mancozeb Reactor**
2.	Height	m	:	45
3.	Diameter	mm	:	1000
4.	Temperature	°c	:	86
5.	Velocity	m/s	:	12.26
6.	Type of fuel used		:	-
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	CS_2	mg/Nm^3	:	N.D.	180	IS : 11255 (Part – 4): 2006

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/04 (ULR- TC709922000010794F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE04	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: PCl3 Reactor & Storage tank
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**PCl3 Reactor & Storage tank**
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°C	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Free Chlorine(Cl_2)	mg/Nm^3	:	0.262	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/17

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE04	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: PCl3 Plant Scrubber
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	PCl3 Plant Scrubber
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Phosphorous Trichloride (PCl_3)	mg/Nm³	:	N.D.	9	APHA Method
2.	Hydrogen Chloride(HCl)	mg/Nm³	:	0.39	20	APHA 23rd Edition: 4500 - Cl C

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/05 (ULR- TC709922000010795F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE05	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Sodium Sulphate recovery Plant
6.	Sampling Time: 13:45 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Sodium Sulphate recovery Plant**
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	62
5.	Velocity	m/s	:	10.96
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	17	150	IS : 11255(Part 1) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/06 (ULR- TC709922000010796F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE06	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Chlorine Shed Scrubber
6.	Sampling Time: 14:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	Chlorine Shed Scrubber
2.	Height	m	:	13.5
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Chlorine (Cl_2)	mg/Nm^3	:	0.342	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/11 (ULR- TC709922000010801F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE11	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: TMP Plant Storage tank
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	TMP Plant Storage tank
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	30
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Ammonia(NH_3)	mg/Nm^3	:	0.16	30	IS 11255 (Part 6): 1999

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/12 (ULR- TC709922000010802F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE12	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: HCL Storage Tank
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**HCL Storage Tank**
2.	Height	m	:	11
3.	Diameter	mm	:	-
4.	Temperature	°c	:	29
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Chlorine (Cl_2)	mg/Nm^3	:	N.D.	9	LAB-SOP-104

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/18

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE12	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: HCL Storage Tank
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**HCL Storage Tank**
2.	Height	m	:	11
3.	Diameter	mm	:	-
4.	Temperature	°c	:	29
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Hydrogen Chloride(HCl)	mg/Nm^3	:	0.43	20	APHA 23rd Edition: 4500 - Cl C

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/13 (ULR- TC709922000010803F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE13	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 21.05.2022	5.	Sampling Location: Spray Dryer (B-Plant)
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	Spray Dryer (B-Plant)
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	75
5.	Velocity	m/s	:	12.07
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	18	150	IS : 11255(Part 1) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/14 (ULR- TC709922000010804F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE14	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant –NH_3 Solution Preparation
6.	Sampling Time: 15:10 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant –NH_3 Solution Preparation**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	31
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Ammonia(NH_3)	mg/Nm^3	:	8.48	30	IS 11255 (Part 6): 1999

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/15 (ULR- TC709922000010805F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE15	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant – Chlorination Reactor
6.	Sampling Time: 15:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant – Chlorination Reactor**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Free Chlorine(Cl_2)	mg/Nm^3	:	0.294	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/19

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE15	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant – Chlorination Reactor
6.	Sampling Time: 15:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant – Chlorination Reactor**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Hydrogen Chloride(HCl)	mg/Nm^3	:	0.35	20	APHA 23rd Edition: 4500 - Cl C

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

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TC-7099

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871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

Annexure-5.4: Analysis Report Ambient air quality

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/20 (ULR- TC709922000010806F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ01		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 20.05.2022		5.	Sampling Location: NR.Main Gate	
6.	Sampling time: 11:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: WNW		Station category: Industrial
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	58	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	22	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.62	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.65	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.22	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	10.87	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE : 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------**END OF REPORT**----------

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/21 (ULR- TC709922000010807F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ02		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 24.05.2022		5.	Sampling Location: NR.Canteen	
6.	Sampling time: 14:30 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: NW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	57	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	23	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.36	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.42	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.66	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	11.71	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE : 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/22 (ULR- TC709922000010808F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ03		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 21.05.2022		5.	Sampling Location: NR.ETP Plant	
6.	Sampling time: 11:45 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: WSW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	53	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	25	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	6.44	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.72	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	N.D.	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	13.38	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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----------END OF REPORT----------

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/23 (ULR- TC709922000010809F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ04		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 22.05.2022		5.	Sampling Location: RO Water tank	
6.	Sampling time: 13:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: WSW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	54	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	22	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.18	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.42	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.44	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	12.55	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/24 (ULR- TC709922000010810F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ05		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 23.05.2022		5.	Sampling Location: NR.Incinerator	
6.	Sampling time: 14:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: NW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	50	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	25	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.63	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	9.02	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.33	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	14.22	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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Hazardous waste Storage area



Spent solvent storage area



Used oil storage area

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E-Waste storage area

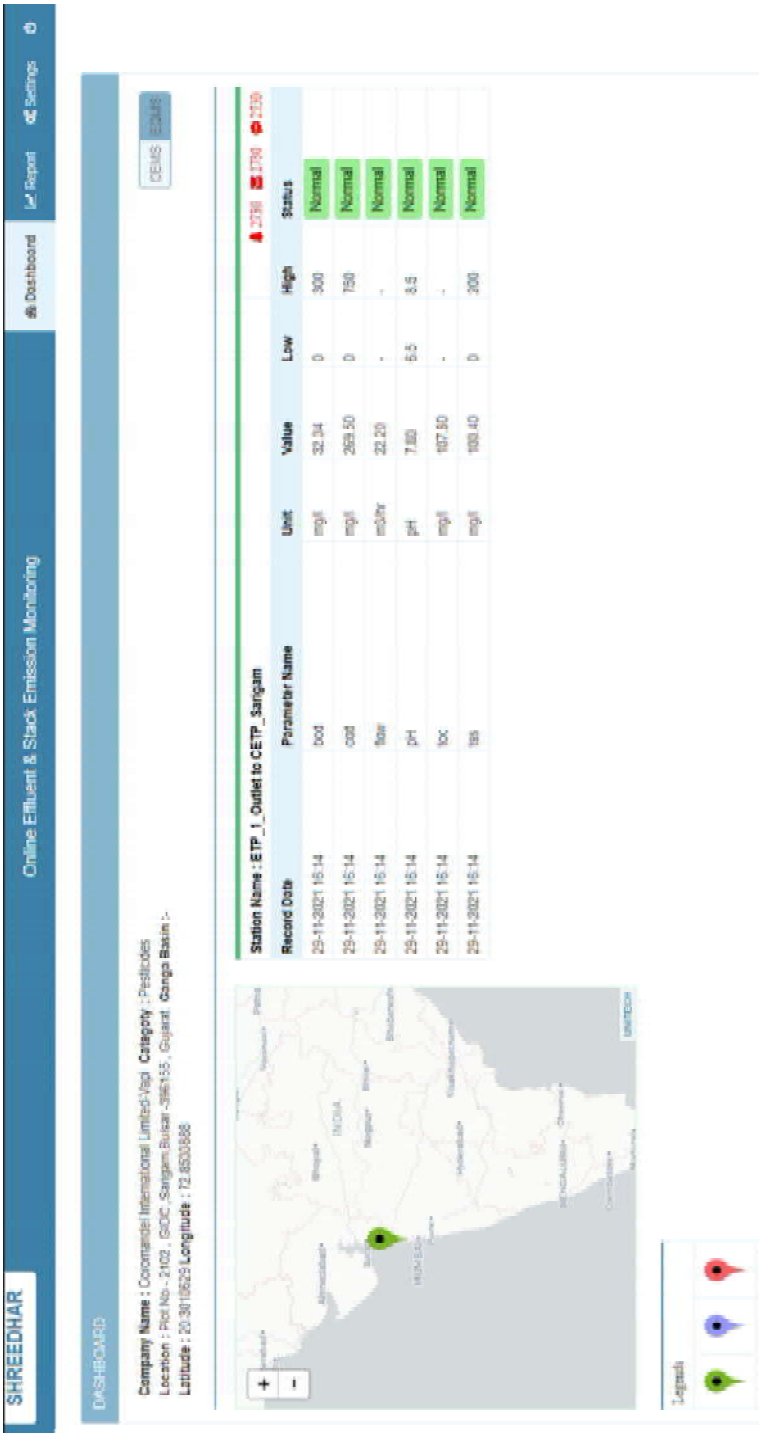


ETP Storage area

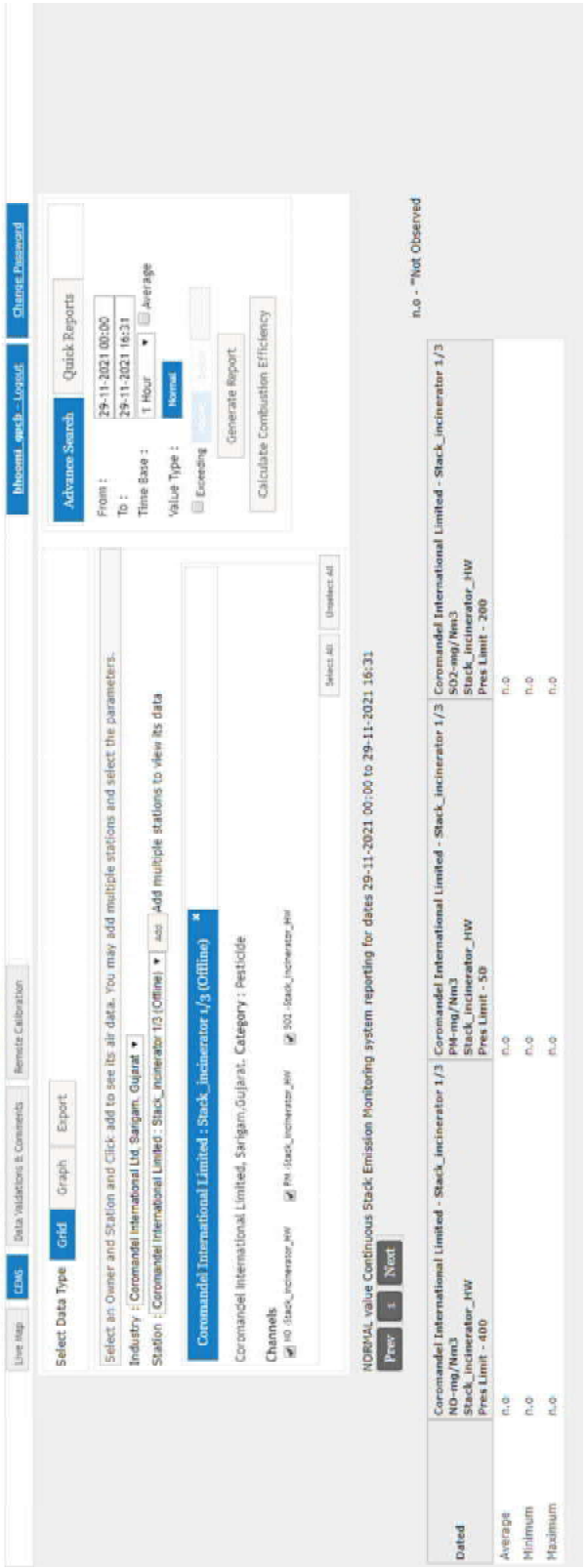
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OCEMS connectivity of final discharge and Incinerator stack

http://saksham.unitechinstrument.com/Default/Home.aspx



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Final Storm outlet





pH meter at final storm outlet



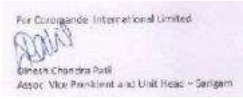
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Annexure – 6

Compliance of CCA Amendment (AWH - 105201)

<table>
<tr><th>SR. NO.</th><th>CONDITION</th><th>REMARKS</th></tr>
<tr><td colspan="3">CCA Amendment order no.: AWH-105201issued vide letter no. GPCB/SRG-CCA -229(33)/ID-24285/529243dated 06/12/2019.</td></tr>
<tr><td>1.</td><td>Amendment in Products of N Group only:
<table>
<tr><th>Sr. No.</th><th>Products</th><th>Existing</th><th>Additional</th><th>Total</th></tr>
<tr><td>1</td><td>2-(4-Hydroxy 1henoxy) Propionic Acid</td><td>429</td><td>00</td><td>429</td></tr>
<tr><td>2</td><td>2,3-Difluoro-5-chloro pyridine</td><td>353</td><td>00</td><td>353</td></tr>
<tr><td>3</td><td>Clodinafoppropargyl (Tech.)</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>4</td><td>Triclopyr Acid (Tech.)</td><td>933</td><td>-933</td><td>00</td></tr>
<tr><td>5</td><td>TriclopyrButotyl Ester (Tech.)</td><td>933</td><td>-933</td><td>00</td></tr>
<tr><td>6</td><td>Picloram (Tech.)</td><td>495</td><td>-495</td><td>00</td></tr>
<tr><td>7</td><td>Pyrazosulfuron Ethyl</td><td>0</td><td>933</td><td>933</td></tr>
<tr><td>8</td><td>Pretilachlor (Tech.)</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>9</td><td>Bispyribac Sodium (Tech.)</td><td>330</td><td>00</td><td>330</td></tr>
<tr><td>10</td><td>Azoxystrobin</td><td>52.8</td><td>00</td><td>52.8</td></tr>
<tr><td>11</td><td>Boscalid</td><td>660</td><td>00</td><td>660</td></tr>
<tr><td>12</td><td>Metalaxyl</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>13</td><td>Proclaraz</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td colspan="2">Total Production</td><td colspan="3">933 MT/Year</td></tr>
</table>
The validity period of the order shall be up to 30/09/2021.</td><td>Complied</td></tr>
<tr><td></td><td>There shall be no change in water consumption, waste water generation, wastewater discharge, flue gas emission and hazardous waste quantity with reference to CCA – AWH – 84402 issued vide letter no. GPCB/CCA-SRG -229(25)/ID-24285/408584dated 31/03/2017&amended thereof.</td><td>Complied</td></tr>
</table>

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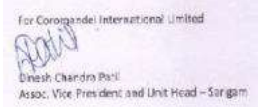
Annexure–7

Compliance Of CCA Amendment (AWH - 110281)

<table>
<tr><th>SR. NO.</th><th>CONDITION</th><th>REMARKS</th></tr>
<tr><td colspan="3">CCA Amendment order no.: AWH-110281issued vide letter no. GPCB/SRG-CCA -229(35)/ID-24285/573714dated 24/11/2020.
The validity period of the CCA Amendment order will be up to 30.09.2021.</td></tr>
<tr><td colspan="3">Conditions under Air Act 1981:</td></tr>
<tr><td>1.</td><td>There shall be no change in fuel consumption and flue gas emission.</td><td>Complied</td></tr>
<tr><td>2.</td><td>The process emission through various Stacks/Vent of reactor. Process, Vessel in Group A shall be substituted as follow:
<table>
<tr><th>Sr. No</th><th>Plant</th><th>Stack Attached to</th><th>Stack Height (m)</th><th>APCM</th><th>Parameter</th><th>Permissible Limit mg/Nm^3</th><th>Remarks</th></tr>
<tr><td colspan="8">Group A</td></tr>
<tr><td>1</td><td>Mancozeb</td><td>Mancozeb Reactor</td><td rowspan="4">30</td><td rowspan="4">Air Blower/ Ventury Scrubber</td><td rowspan="5">CS_2
PM
SO_2</td><td rowspan="5">180
50
40</td><td rowspan="5">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb + Maneb</td><td>ManebReactor</td></tr>
<tr><td>3</td><td>Mancozeb + Zineb</td><td>ZinebReactor</td></tr>
<tr><td>4</td><td>Mancozeb +Propineb</td><td>PropinebReactor</td></tr>
<tr><td></td><td></td><td>Spray Dryer(3 Nos.)</td><td>30</td><td>Bag Filter/ Water Scrubber</td></tr>
</table></td><td>Complied</td></tr>
<tr><td colspan="3">Authorization under the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.</td></tr>
<tr><td></td><td>M/s. Coromandel International Limitedis hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot no. 2102, 2104/1, 735 & 2112/2113, GIDC Sarigam - 396155, Tal: Umbergaon, Dist. Valsad – Sarigam.</td><td>Complied</td></tr>
</table>

Sr. No.	Hazardous Waste	CAT. No.	Quantity (MT/Year)			Mode of Disposal	
			Existing	Additional	Total	Existing	Proposed
1	ETP Sludge	Sch-I/ 35.3	2640	-	2640	Collection, storage, transportation, disposal at GPCB approved TSDF site SEPPL - Kutch, GISPL-Palsana, and for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at GPCB approved TSDF site SEPPL - Kutch, GISPL-Palsana, **Eco Care – Dasada.**
2	Chemical Sludge containing residue pesticides	Sch-I/ 29.2	2145	-	2145	Collection, storage, transportation, disposal at common hazardous waste incinerator	Collection, storage, transportation, disposal at common

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						facility of SEPPL, GISPL & RSPL co-processing facility.	hazardous waste **incinerator facility** of SEPPL, GISPL, **DIPL, Dahej, BEIL, or cement industries**& RSPL **co-processing facility.**
10	Organic residue	Sch-I/ 28.1	2032	-	2032	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana& for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at common incinerator facility, TSDF site SEPPL, Kutch, GISPL-Palsana, **DIPL, Dahej, BEIL, or Cement industries**& for co-processing RSPL-Panoli.
11	Salts from MEE	Sch-I/ 37.3	4570.44	-	4570.44	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana, & for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at common incinerator facility, TSDF site SEPPL, Kutch. GISPL-Palsana, **Eco Care – Dasada**.

1.	The authorization shall be valid up to 30/09/2021.	Noted
2.	The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act – 1986.	Noted
The other conditions of CCA – AWH – 84402 issued vide letter no. GPCB/CCA-SRG -229(25)/ID-24285/408584 dated 31/03/2017 & amended thereof shall remain unchanged.		Noted & Complied

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For Coromandel International Limited
Dinesh Chandra Pant
Assoc. Vice President and Unit Head – Sarigam

Annexure-8

Print Screen payment details for paid Interim Environmental Compensation

Transaction Date	Value Date	Reference No.	Description	Transaction Branch	Debit Amount
02/08/2022 18:30:17	02/08/2022	N214222061837983	40150CC153-02/08/2022-0004403837	MUMBAI - INTERNET SYSTEM	67500.00

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 1, 2022

PCB ID: 24285

To,
Unit Head - Sarigam
Gujarat Pollution control Board
Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

Subject : **Submission of compliance to show cause notice issued by HO, GPCB, Gandhinagar dated 30/07/2022.**
Ref. : **Show Cause Notice No. GPCB/SRG-CCA-229(38)/ID: 24285/679472 dated 30/07/2022.**

Dear Sir/Madam,
This has reference to the above. We are submitting hereby compliance to show cause notice issued by HO, GPCB, Gandhinagar dated 30/07/2022.

Sr. No.	Specific Reason	Compliance
1.	During inspection it is observed that unit is using flexible pipeline at many locations in their ETP for conveyance of effluent and unit is not operating primary ETP units.	• **Regarding observed flexible pipeline at ETP;** Observed flexible pipeline are removed at ETP area and Fixed pipeline are provided. Photograph for the same is enclosed as **Annexure-I.** • **Regarding not operating primary ETP units;** During inspection dated 08/02/2022 by GPCB officials, primary clarifier was under routine/regular maintenance work. And due to that, operation of primary clarifier was stopped and it found not in operation during said inspection. But now, at present, ETP is now operating regularly and Photographs for the same are enclosed as **Annexure-II.**
2.	During inspection leakages observed in the quenching system of incinerator. This may result into odour.	As an immediate action, old quenching system has been replaced with new quenching system. Photographs of the same are attached in **Annexure-III.**
3.	Presently unit is not in compliance.	Compliance Report is attached as **Annexure-IV.**
4.	You have not complied CCA-Amendment rejection order dated 20/10/2021.	
5.	Proposal for by-product which is not acceptable as per provisions of HWM Rule, 2016.	

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Thank You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

Copy:
Regional Officer – Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

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Annexure-I

Photograph for Fixed pipelines provided at ETP



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Annexure-2

Photographs for ETP Units

Primary Clarifier



Secondary Clarifier



Bio-Reactor-I



Bio-Reactor-II



Sand and Carbon Filter



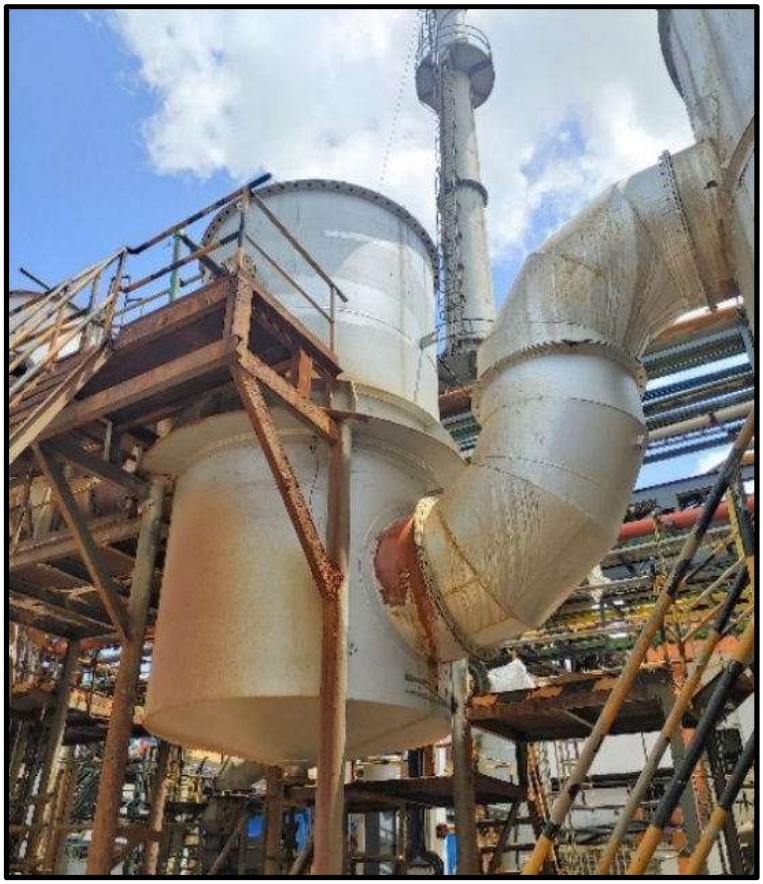
Final Discharge Sump



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Annexure-III

Photographs for new quenching system of incinerator



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Annexure-IV

Compliance Report for CC&A Renewal Rejection Order

<table>
<tr><th>Sr. No.</th><th>Specific Reason</th><th>Compliance</th></tr>
<tr><td>1</td><td>Presently Unit is not in compliance.</td><td>• Compliance report for each and every conditions given in
○ CC&A Order No. AWH-84402, date of issue 22/02/2017,
○ CCA Amendment Order No. AWH 105201, dated 06/12/2019 &
○ CCA Amendment Order No. AH – 110281 dated 24/11/2020
are enclosed as an Annexure -1, 2 & 3 respectively.
• And Compliance report for specific instructions/conditions given in Notice of Direction issued on 30/07/2022 by GPCB, Gandhinagar is enclosed as an Annexure-4.
• And Compliance Report to reasons of show cause notice no. GPCB/SRG-CCA-229(38)/ID-24285/679472 dated 30/072022 is enclosed as Annexure-5.
• During last/previous 2 visits (dated 08.02.22 & 08.03.22), Air, water, and process stack samples withdrawn, and all are meeting prescribe limits as mentioned in above said our CCA. The analysis results are enclosed as Annexure-6.</td></tr>
<tr><td>2</td><td>You have not complied CCA-Amendment rejection order dated 20/10/2021.</td><td>• Compliance to reasons given in CCA-Amendment rejection order dated 20/10/2021is enclosed as Annexure-7.</td></tr>
<tr><td>3</td><td>Proposal for by-product which is not acceptable as per provisions of HWM Rule, 2016.</td><td>• Purity of By-products generated (obtained as a By-Products in CC&A Order No. AWH-48951 dated 13/09/2012 And CC&A order no. AWH-84402 dated 31/03/2017 and its subsequent amendments) is given below;
<table><tr><th>By-Products</th><th>Purity</th><th>Characteristics report</th></tr><tr><td>Ammonium Chloride Powder (NH_4Cl)</td><td>98 to 99.5 %</td><td>enclosed as an Annexure – A</td></tr><tr><td>Sodium Sulphate Powder (Na_2SO_4)</td><td>98 to 99 %</td><td>enclosed as an Annexure – B</td></tr><tr><td>Ammonium Sulphate Powder ($(NH_4)_2 SO_4$)</td><td>96 to 99 %</td><td>enclosed as an Annexure – C</td></tr></table>• Additionally, in line with above-said purity of by-products as well as characteristics and analysis reports of each by-product (including said purity), we have applied for consideration of said by-products as by-products to Hazardous Waste Cell under Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amended time to time. Acknowledgment copy of the submitted application is enclosed as an Annexure – D & application with required supporting documents is uploaded in XGN tag 000.pdf dated 29.11.2021.
• The proposal of by-products is under active consideration of technical committee of GPCB and in this regard technical</td></tr>
</table>

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		presentations have been done twice dated 29.01.2022 and 25.03.2022 through VC. We have also replied all the queries raised during technical discussion to the Board. • After second meeting we have withdrawn proposal for consideration of material generated from Industrial processes as by-Product i.e. **Sodium Chloride Powder (NaCl)** from this application. • Response for theMOM of second committee meeting was submitted on 30.04.2022. • In our EC it is clearly mentioned ammonium chloride as a byproduct. Once EC is granted as byproduct it is acceptable as per CPCB's " Framework on Identification of Materials Generated from Industrial Processes as Wastes or By-products" document (September 2019) • Kindly we hereby request you to consider Ammonium chloride, Ammonium sulphate and Sodium sulphate and maintain the status-quo of the current CCA subject to the final decision of the committee binding on us. • All these materials are dispatched in solid form and not as liquid form.



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ANNEXURE-R-18

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

NOTICE OF DIRECTION UNDER SECTION 33-A OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974 (HEREINAFTER REFERRED TO AS THE WATER ACT) AS AMENDED FROM TIME TO TIME.

WHEREAS you are having an industrial plant at PLOT NO:2102. 2104/1,735,&2112/2113, SARIGAM GIDC ESTATE, SARIGAM , SARIGAM – 396155, DiST : Valsad-Sarigam, TAL : Umbergaon.

AND WHEREAS during the inspection of your industrial plant on **31/07/2018** under Section -23 of the Water Act by the Authorized officer of the Board it has been noticed that

1. Final Outlet was turbide in nature as Clarifier III of ETP was not working properly.
2. Online TOC meter was found not in operation.
3. Wastewater is observed in storm water drain and its sample analysis report shows COD – 1703 mg/l and BOD – 480 mg/l. which shows contamination occurs.

NOW THEREFORE Board proposes to issue directions under Section 33-A of the Water Act-1974 as under: -

1) You shall submit the detail sketch about the storm water drain and effluent conveying system.
2) You shall submit the area where chances of contamination is their, based on distance between effluent conveying line and storm water drain i.e. 2 meter, 5 meter , 10 meter etc.

Inward No-469470, 27/09/2018

3) You shall submit the detail action plan to stop contamination of storm water drain in future.
4) You shall submit the action taken for the repairing of online TOC meter.
5) You shall operate your ETP regularly and efficiently in order to achieve the norms specified in CCA.

YOU ARE HEREBY directed to reply with compliance of points within 15 days on receipt of this notice of direction failing to which directions as proposed above will be deemed to be passed without further reference to you.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/SRG-CCA- 229(26)/ID- 24285/ **dated :**

Issued to:
M/s. Coromandel International Limited
PLOT NO:2102, 2104/1,735,&2112/2113,
SARIGAM GIDC ESTATE, SARIGAM ,
SARIGAM - 396155
DIST : Valsad-Sarigam, TAL . Umbergaon

OUTWARD

Coromandel
FUTURE POSITIVE

CIN : L24120TG1961PLC00[illegible]

Dt. 01.10.2018

Ref: ID : 24285

To,

The Sr. Environmental Engineer,
Gujarat Pollution Control Board,
Paryavaran Bhavan, Sector-10-A
Gandhinagar -382 010

RECEIVED
Sign.
Date : 04-10-2018.
G.P.C. BOARD SARIGAM.

Ref: - Your Notice No. GPCB/SRG-CCA-229(26)/ID24285 outward No.469470 dated 22.09.2018

Dear Sir,

With reference to the above received letter below, please find our point-wise reply –

1. **Point Raised** - Final outlet was turbid in nature as clarifier III of ETP was not working properly
   Our reply - Online TSS meter reading was showing 50 ppm at the time of sample collection & GPCB analysis of the same has reflected 84 ppm, which is well within the prescribed limit of 200 ppm given in CCA. (annexure attached – GPCB analysis report)

2. **Point Raised** – Online TOC meter was found not in operation
   Our reply - Online TOC meter went under breakdown on dated 31/07/2018 at 2:00 AM, the party (M/S Shreedhar – GPCB authorized) was immediately contacted for attending the problem, the eight port valve was found faulty, the same was serviced & TOC meter was put back in service on 02/08/2018.

3. **Point Raised** – Waste water observed in storm water indicating contamination
   Our reply – We have containment arrangement in storm water system & all contaminated water is taken in to a pit & sent for treatment to ETP plant before discharge to CETP

S. No.	Direction issued	Current status/Action taken	Remarks/Attachments
1	You shall submit the detail sketch about the storm water drain and effluent conveying system.	We have separate system for Storm water and effluent transfer. Effluent transfer is in over head closed pipelines. We have fool proof provisions for containment of storm water in different small segments & then contaminated water is taken in to storm water pit, from where it is sent to ETP for processing & final discharge to CETP.	1.Storm water System layout, Annexure- A. 2. Effluent transfer system P&ID to ETP as annexure -B.
2	You shall submit the area where chances of contamination are there, based on distance between effluent conveying line and storm water drain i.e. 2 Meter, 5 Meter, 10 Meter etc.	There is no chance of contamination due to separate system for storm water and effluent transfer system. It is possible only in case of incidental leak spill from plant/pipe racks etc.	We have a system to contain contaminated storm water & take it back in ETP primary clarifier for treatment before final discharge to CETP.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

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3	You shall submit the detail action plan to stop contamination of storm water drain in future.	We have following control measures to prevent contamination of storm water drain system 1.Process plants have dyke walls around process area to avoid leak spill mixing into storm water drain. 2.In case of any accidental leak, provisions are there to isolate the lines with the help of isolation valves & collect the line material in drum. 3.Storm water drain has been divided in six zone to contain any accidental contamination in early stage. We collect it by use of pneumatic pump & take it back to ETP for further treatment.	We will develop SOP & educate people to keep storm water drainage in all time dry situation. All storm drain emptied by sending water to the ETP and made dry. Drain system photographs are attached as annex-C
4	You shall submit the action taken for the repairing of online TOC meter.	We have immediately contacted to vendor and repaired it on 2nd August'18. We have informed to CPCB also. Since then data is continuously going to CPCB/GPCB server.	Vendor service report is attached as Annex-D
5	You shall operate your ETP regularly and efficiently in order to achieve the norms specified in CCA.	CETP team and local GPCB team take frequent visit to monitor ETP operation. There is no significant abnormality noticed during visit. We operate ETP efficiently and regularly. All CCA norms are within limit.	Analysis of online meter, GPCB authorized party is attached for your kind reference.

Thanking you,

Yours Faithfully,

For Coromandel International Limited,

Himanshu Kumar Shukla,
Assoc. Vice President & Unit Head

Cc: The Regional Officer, GPCB, Sarigam

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544

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board, Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

Sample ID:239353 , Analysis Completion:20/08/2018

Pesticides (technical) (excluding formulation) / LAB Inward : 46265

Accreditation Standards & NABL Certificate Details : Biological(T-3121) / Chemical(T-3120) / 18.09.2014 , 17.09.2019

TEST REPORT

Test Report No. : 46265 Date: 20/08/2018

1. Name of the Customer : Coromandel International Limited - 24285
2. Address : 2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM ,- SARIGAM-396155, Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam
3. Nature of Sample : REP-Representative/Grab, (Insp Type : VIG-By Vigilance Team)
4. Sample Collected By : A.G. Patel, Vigl Head
5. Quantity of Sample Received : 5 Ltr
6. Code No. of the Sample : 239353
7. Date & Time of Collection & Inwarding : 31/07/2018 , (1605 to 1605) & 01/08/2018
8. Date of Start & Completion of Analysis : 01/08/2018 & 20/08/2018
9. Sampling Point : From Final outlet of the ETP ~
10. Flow Details (Remarks) : yes
11. Mode of Disposal : into CETP of Sarigam through u/g pipeline
12. Ultimate Receiving Body : CETP- GIDC PIPELINE THROUGH AREABIAN SEA
13. Temperature on Collection : 29 & pH Range on pH Strip :@ 7-8 on pH strip
14. Carboys Nos for : VAP-87EI53 & Color & Appearance :Greyish
15. Water Consumption & W.W.G (KLPD) : Ind :1188.230 , Dom :60.000 & Ind :978.000 , Dom :60.000

Sr	Parameter	Unit	Test Method	Range of Testing	
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2000,	Ambient oC - 60 oC	29
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi 2012	1 – 14 pH value As or	7.90
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	30
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	1722
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	84
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.20
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	160
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	60
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	776
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.48
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05--50000 mg/l	150

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 20/08/2018

J.D.OZA, Lab Head

Field Observation : sample collected as per is 3025

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

SHREEDHAR INSTRUMENTS

SERVICE REPORT

Ref No : SI/ - /SER/17-18/ 188

Date : 02/08/2018

CUSTOMER DETAILS

Customer Name & Address	Contact Person	Mitul Bhavsar
Coromandal Takmeh Ltd. GIDC Sanigam	Designation	Sr. officer
	Dept. :	Instrument
	Tel. No. :	O: M: 7600362419
	E mail :	mitulbhavsar03@gmail.com

INSTRUMENTS DETAILS

Instrument Model	TOC-4110
Sr. No.	H661053010163

SERVICE DETAILS

~~Pre-installation~~ ~~Installation~~ ~~AMC~~ ~~Services~~ PO No 8...

~~Chargeable~~ / Free. If chargeable Amount ____ Rs. ~~Calibration~~ PO Date 2-08-...

Problem Reported : NPOC = 0.00 PPM

Action :- 1) checked TOC machine & checked final flow ~~Action Taken~~ found very low. 2) found combustion tube i/p ferrul is luse. user open combustion tube & pipe but not proper fitting from user side. 3) proper fitting. cheked 8-port valve operation ok. 4) cheked comb. tube with catalyst found ok final flow found ok. (150 ml/min). Dose zero point 5) All Baseline parameter found OK. 6) Checked std in offline Result found OK. 7) Intg. take online sample Result offline Result found ok.

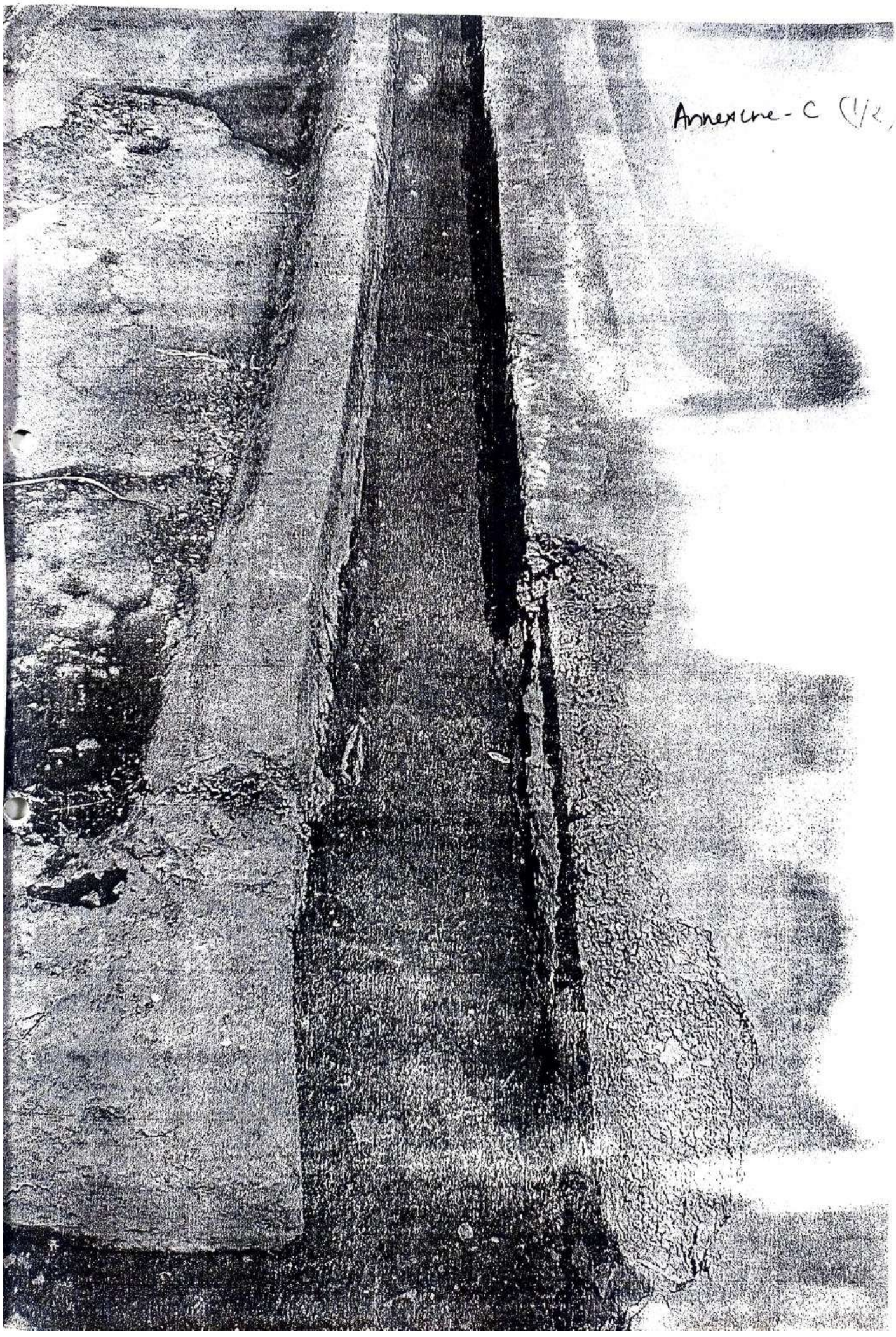
NPOC is ok, ...

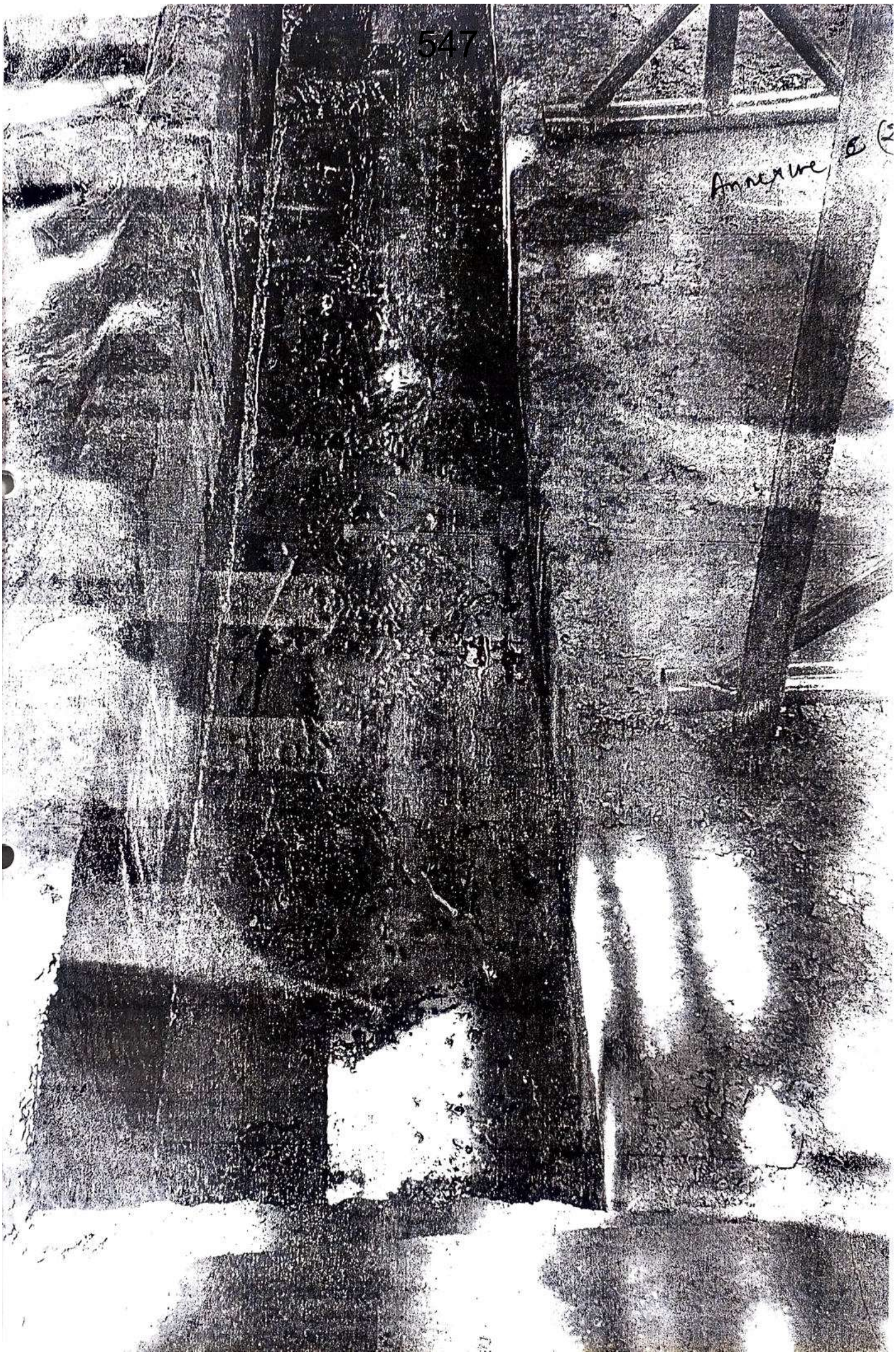
SPARE PARTS REPLACED / RECOMMENDED

Sr.No.	Item Code	Item	Qty.	Replaced	Recommended
1					
2	NA	NA		NA	
3					
4					

Engineer's Remark :	Customer's Remark :
- TOC machine working OK - pls. do proper maintance of TOC machine.	Machine Working Satisfactory
Engineer Signature : Patil 02/08/18	
Engineer Name : Umesh Patil	Concern Name : J. Behera 02/08/18
Engineer M : 9924116383	Invoice in name of :

Vadodara (H. O.) : 16, Shreeji Krupa Society, Opp. MGVCL Circle Office, B/h. Kalpvruksh Building, Gotri Road, Vadodara - 390 023. Phone : 0265-2323041
Mobile : +91 98245 10383, Email: sales@shreedhargroup.com
Ahmadabad : 6, Ruchi Appartment, 36 Swastik Society, Nr. Swastik Cross Road, Navrangpura, Ahmadabad - 380009. Phone : 079-26444603
Email: ahdoffice@shreedhargroup.com
Hyderabad : 2D, 2nd floor, Movva Nest, Opp: Vijetha Super Market, Near Nizampet X Roads, Hyderabad - 500072. Phone : 040-40159590
Email: hydoffice@shreedhargroup.com
Visit us at : www.shreedhargroup.com


Annexure-C (1/2)


Annexure, 6

Coromandel International Limited-Vapi
Plot No - 2102 , GIDC ,Sarigam,Bulsar -396155 , Gujarat
Category : Pesticides
Industry code : 10GJ025

Data Report

Duration: 20-07-2018 00:00 To 31-07-2018 23:59 Interval Time: 1 Hour

Station Name		ETP_1_Outlet to CETP_Sarigam					
1	20-07-2018 00:00	28.65	238.78	24.72	7.25	95.51	59.08
2	20-07-2018 01:00	28.08	234	25.09	7.26	93.6	46.72
3	20-07-2018 02:00	31.82	265.2	25.3	7.26	106.08	40.98
4	20-07-2018 03:00	40.59	338.23	0	7.25	135.29	36.87
5	20-07-2018 04:00	31.81	265.05	21.18	7.19	106.02	[illegible]
6	20-07-2018 05:00	29.99	249.9	30.74	7.29	[illegible]	[illegible]
7	20-07-2018 06:00	31.1	259.18	38.29	7.32	103.67	[illegible]
8	20-07-2018 07:00	31.14	259.48	34.59	7.37	103.79	[illegible]
9	20-07-2018 08:00	31.24	260.33	31.98	7.43	104.13	[illegible]
10	20-07-2018 09:00	31.2	260.03	27.65	7.45	104.01	14.78
11	20-07-2018 10:00	30.92	257.7	27.88	7.41	103.08	19.51
12	20-07-2018 11:00	31.82	265.13	35.15	7.37	106.05	23.32
13	20-07-2018 12:00	32.34	269.53	34.77	7.39	107.81	22.11
14	20-07-2018 13:00	31.08	259.03	34.77	7.4	[illegible]	43.66
15	20-07-2018 14:00	30.19	251.6	34.85	7.37	100.64	86.68
16	20-07-2018 15:00	29.98	249.83	34.39	7.43	99.93	97.12
17	20-07-2018 16:00	28.28	235.7	34.68	7.45	94.28	17.04
18	20-07-2018 17:00	30.34	252.83	0.55	7.38	101.13	18.48
19	20-07-2018 18:00	30.05	250.45	0	7.33	100.18	24.63
20	20-07-2018 19:00	30.35	252.9	0	7.32	101.16	28.85
21	20-07-2018 20:00	31.52	262.65	34.65	7.3	105.06	29.31
22	20-07-2018 21:00	34.69	289.08	34.66	7.27	115.63	24.17
23	20-07-2018 22:00	28.29	235.78	34.46	7.17	94.31	19.79
24	20-07-2018 23:00	25.01	208.43	28.06	7.26	83.37	24.94
25	21-07-2018 00:00	39.41	328.4	27.76	7.25	131.36	28.05
26	21-07-2018 01:00	50.51	420.9	28.04	7.26	168.36	58.62
27	21-07-2018 02:00	32.13	267.75	28.46	7.27	107.1	18.35
28	21-07-2018 03:00	34.4	286.68	0	7.25	114.67	19.23
29	21-07-2018 04:00	31.97	266.43	0	7.22	106.57	22.6
30	21-07-2018 05:00	32.66	272.15	25.8	7.21	108.86	23.75
31	21-07-2018 06:00	34.82	290.15	25.68	7.19	116.06	22.67
32	21-07-2018 07:00	36.8	306.63	25.99	7.16	122.65	21.49
33	21-07-2018 08:00	36.2	301.68	26.47	7.22	120.67	23.5
34	21-07-2018 09:00	38.88	324	35.73	7.25	129.6	23.45
35	21-07-2018 10:00	36.55	304.6	36.05	7.26	121.84	26.43
36	21-07-2018 11:00	44.03	366.9	0	7.28	146.76	33.46
37	21-07-2018 12:00	51.43	428.55	35.2	7.27	171.42	32.57
38	21-07-2018 13:00	57.08	475.63	35.08	7.25	190.25	45.48
39	21-07-2018 14:00	47.2	393.33	25.65	7.22	157.33	41.91

88	23-07-2018 15:00	35.58	296.5	19.85	7.32	118.6	33.76
89	23-07-2018 16:00	42.96	358	0	7.32	143.2	35.87
90	23-07-2018 17:00	0	0	0.06	7.33	0	28.59
91	23-07-2018 18:00	0	0	0	7.29	0	24.22
92	23-07-2018 19:00	46.57	388.08	0	7.25	155.23	22.03
93	23-07-2018 20:00	45.66	380.5	0	7.36	152.2	59.32
94	23-07-2018 21:00	35.48	295.65	0	7.34	118.26	34.5
95	23-07-2018 22:00	38.76	323	34.71	7.35	129.2	60.88
96	23-07-2018 23:00	46.52	387.68	34.65	7.33	155.07	31.57
97	24-07-2018 00:00	35.27	293.95	34.48	7.32	117.58	51.81
98	24-07-2018 01:00	40.86	340.48	34.13	7.32	136.19	27.43
99	24-07-2018 02:00	41.4	345.03	0.04	7.32	138.01	30.98
100	24-07-2018 03:00	34.37	286.38	38.65	7.32	114.55	29.62
101	24-07-2018 04:00	37.73	314.43	38.52	7.32	125.77	99.61
102	24-07-2018 05:00	42.46	353.83	23.14	7.31	141.53	38.1
103	24-07-2018 06:00	38.78	323.15	23.5	7.31	129.26	99.61
104	24-07-2018 07:00	36.14	301.13	23.73	7.32	120.45	27.35
105	24-07-2018 08:00	37.36	311.33	33.75	7.32	124.53	19.85
106	24-07-2018 09:00	33.75	281.28	33.7	7.32	112.51	16.5
107	24-07-2018 10:00	31.43	261.88	33.31	7.34	104.75	97.09
108	24-07-2018 11:00	28.72	239.33	33.4	7.39	95.73	99.61
109	24-07-2018 12:00	34.49	287.38	33.44	7.42	114.95	23.7
110	24-07-2018 13:00	33.86	282.13	35.72	7.45	112.85	30.95
111	24-07-2018 14:00	32.72	272.63	35.55	7.46	109.05	33.65
112	24-07-2018 15:00	36.96	308	35.89	7.5	123.2	33.71
113	24-07-2018 16:00	42.8	356.63	35.76	7.51	142.65	35.63
114	24-07-2018 17:00	36.98	308.18	35.66	7.52	123.27	54.33
115	24-07-2018 18:00	35.12	292.63	0.06	7.47	117.05	40.57
116	24-07-2018 19:00	37.87	315.58	0	7.46	126.23	50.65
117	24-07-2018 20:00	38.06	317.2	24.11	7.38	126.88	45.2
118	24-07-2018 21:00	25.05	208.73	24.32	7.34	83.49	35.63
119	24-07-2018 22:00	28.65	238.78	24.52	7.33	95.51	32.75
120	24-07-2018 23:00	31.87	265.58	0	7.38	106.23	31.78
121	25-07-2018 00:00	32.06	267.13	25.39	7.36	106.85	36.82
122	25-07-2018 01:00	27.9	232.53	25.54	7.33	93.01	39.85
123	25-07-2018 02:00	28.93	241.1	30.3	7.33	96.44	41.32
124	25-07-2018 03:00	23.61	196.75	30.49	7.31	78.7	42.58
125	25-07-2018 04:00	25.22	210.2	34.39	7.3	84.08	56.44
126	25-07-2018 05:00	35.4	295.03	34.48	7.3	118.01	[illegible]
127	25-07-2018 06:00	35.96	299.68	34.39	7.29	119.87	[illegible]
128	25-07-2018 07:00	23.73	197.75	34.34	7.27	79.1	[illegible]
129	25-07-2018 08:00	27.56	229.68	34.24	7.28	91.87	78.32
130	25-07-2018 09:00	33.26	277.18	34.3	7.27	110.87	69.55
131	25-07-2018 10:00	28.4	236.63	36.19	7.26	94.65	65.26
132	25-07-2018 11:00	21.76	181.3	36.25	7.26	72.52	64.59
133	25-07-2018 12:00	37.19	309.95	36.11	7.23	123.98	67.67
134	25-07-2018 13:00	34.26	285.53	12.25	7.27	114.21	33.29
135	25-07-2018 14:00	19.29	160.73	35.93	7.28	64.29	23.14

136	25-07-2018 15:00	21.26	177.13	35.89	7.3	70.85	28.33
137	25-07-2018 16:00	30.69	255.78	0	7.28	102.31	34.79
138	25-07-2018 17:00	34.29	285.75	0.06	7.29	114.3	26.35
139	25-07-2018 18:00	19.02	158.5	0	7.16	63.4	22.65
140	25-07-2018 19:00	40.88	340.7	0	7.22	136.28	52.76
141	25-07-2018 20:00	37.89	315.75	17.78	7.18	126.3	49.13
142	25-07-2018 21:00	29.72	247.68	17.98	7.18	99.07	48.9
143	25-07-2018 22:00	44.8	373.3	0	7.25	149.32	63.02
144	25-07-2018 23:00	57.84	482.03	27.6	7.28	192.81	75.98
145	26-07-2018 00:00	58.85	490.45	27.82	7.28	196.18	62.89
146	26-07-2018 01:00	46.26	385.53	27.77	7.29	154.21	52.37
147	26-07-2018 02:00	36.08	300.68	27.73	7.24	120.27	41.52
148	26-07-2018 03:00	31.82	265.2	38.29	7.19	106.08	35.76
149	26-07-2018 04:00	36.35	302.9	37.91	7.4	121.16	33.17
150	26-07-2018 05:00	34.61	288.45	0	7.42	115.38	40.96
151	26-07-2018 06:00	30.94	257.85	0	7.42	103.14	26.79
152	26-07-2018 07:00	47.69	397.43	28.03	7.41	158.97	28.38
153	26-07-2018 08:00	39.08	325.7	21.84	7.41	130.28	87.27
154	26-07-2018 09:00	35.53	296.1	31.31	7.39	118.44	32.37
155	26-07-2018 10:00	43.38	361.48	31.6	7.37	144.59	42.78
156	26-07-2018 11:00	45.11	375.93	0	7.33	150.37	50.14
157	26-07-2018 12:00	53.71	447.58	34.65	7.32	179.03	75.41
158	26-07-2018 13:00	67.31	560.93	34.86	7.31	224.37	47.77
159	26-07-2018 14:00	53.86	448.8	34.49	7.28	179.52	44.04
160	26-07-2018 15:00	57.89	482.43	34.46	7.25	192.97	79.71
161	26-07-2018 16:00	66.02	550.13	0	7.33	220.05	48.54
162	26-07-2018 17:00	42.57	354.75	0.21	7.29	141.9	52.5
163	26-07-2018 18:00	38.72	322.63	0	7.33	129.05	68.01
164	26-07-2018 19:00	45.18	376.48	22.98	7.31	150.59	82.23
165	26-07-2018 20:00	58.01	483.43	37.55	7.31	193.37	80.17
166	26-07-2018 21:00	63.66	530.5	0	7.3	212.2	74.8
167	26-07-2018 22:00	82.75	689.6	19.03	7.27	275.84	95.11
168	26-07-2018 23:00	74.41	620.05	31.28	7.28	248.02	77.44
169	27-07-2018 00:00	62.51	520.9	31.11	7.27	208.36	99.64
170	27-07-2018 01:00	58.63	488.6	31.51	7.27	195.44	45.92
171	27-07-2018 02:00	42.68	355.7	31.45	7.27	142.28	38.93
172	27-07-2018 03:00	43.14	359.48	19.97	7.26	143.79	32.45
173	27-07-2018 04:00	51.06	425.48	20.34	7.26	170.19	36.35
174	27-07-2018 05:00	50.06	417.2	0	7.32	166.88	26.09
175	27-07-2018 06:00	47.87	398.88	19.6	7.27	159.55	35.63
176	27-07-2018 07:00	41.19	343.25	31.92	7.27	137.3	48.7
177	27-07-2018 08:00	38.18	318.13	31.76	7.28	127.25	32.21
178	27-07-2018 09:00	39.3	327.48	17.57	7.27	130.99	27.53
179	27-07-2018 10:00	35.88	298.98	33.56	7.32	119.59	26.3
180	27-07-2018 11:00	49.52	412.65	33.64	7.38	165.06	28.69
181	27-07-2018 12:00	36.82	306.85	34.03	7.48	122.74	66.7
182	27-07-2018 13:00	52.49	437.38	36.6	7.42	174.95	50.62
183	27-07-2018 14:00	53.57	446.4	36.43	7.41	178.56	36.28

184	27-07-2018 15:00	44.6	371.68	36.62	7.52	148.67	30.11
185	27-07-2018 16:00	44.34	369.53	0	7.45	147.81	61.53
186	27-07-2018 17:00	45.6	380.03	0	7.57	152.01	28.23
187	27-07-2018 18:00	51.98	433.13	0.37	7.4	173.25	36.95
188	27-07-2018 19:00	43.08	359.03	0	7.4	143.61	50.68
189	27-07-2018 20:00	0	0	0	7.37	0	45.61
190	27-07-2018 21:00	35.46	295.5	0.15	7.38	118.2	43.35
191	27-07-2018 22:00	48.7	405.85	0	7.31	162.34	29.44
192	27-07-2018 23:00	26.71	222.55	0	7.36	89.02	76.57
193	28-07-2018 00:00	52.26	435.53	18.97	7.4	174.21	52.63
194	28-07-2018 01:00	34.71	289.23	36.49	7.35	115.69	99.58
195	28-07-2018 02:00	28.47	237.25	36.45	7.37	94.9	41.06
196	28-07-2018 03:00	42.19	351.6	36.39	7.39	140.64	37
197	28-07-2018 04:00	44.21	368.45	36.63	7.45	147.38	36.77
198	28-07-2018 05:00	45.35	377.95	17.24	7.46	151.18	69.73
199	28-07-2018 06:00	39.47	328.95	17.48	7.46	131.58	35.71
200	28-07-2018 07:00	35.6	296.65	29.47	7.43	118.66	33.6
201	28-07-2018 08:00	38.18	318.13	51.17	7.4	127.25	42.83
202	28-07-2018 09:00	42.31	352.6	49.17	7.38	141.04	56.41
203	28-07-2018 10:00	45.34	377.8	37.22	7.36	151.12	75.36
204	28-07-2018 11:00	55.18	459.85	37.01	7.33	183.94	76.36
205	28-07-2018 12:00	57	475	37.21	7.33	190	86.7
206	28-07-2018 13:00	56.94	474.48	36.98	7.39	189.79	47.33
207	28-07-2018 14:00	59.62	496.8	37.35	7.39	198.72	90.2
208	28-07-2018 15:00	67.33	561.1	37.22	7.34	224.44	99.64
209	28-07-2018 16:00	78.79	656.6	37.27	7.32	262.64	99.64
210	28-07-2018 17:00	67.43	561.95	0	7.29	224.78	96.14
211	28-07-2018 18:00	57.1	475.85	10.32	7.3	190.34	94.47
212	28-07-2018 19:00	45.89	382.43	0	7.3	152.97	41.7
213	28-07-2018 20:00	52.7	439.15	0.96	7.2	175.66	36.97
214	28-07-2018 21:00	40.51	337.6	15.69	7.25	135.04	80.4
215	28-07-2018 22:00	42.35	352.9	0	7.27	141.16	51.22
216	28-07-2018 23:00	34.23	285.23	12.56	7.21	114.09	45.12
217	29-07-2018 00:00	40.46	337.15	30.32	7.35	134.86	30.95
218	29-07-2018 01:00	30.35	252.9	30.09	7.35	101.16	99.61
219	29-07-2018 02:00	34.05	283.75	22.7	7.34	113.5	53.94
220	29-07-2018 03:00	25.16	209.65	32.48	7.37	83.86	32.83
221	29-07-2018 04:00	24.71	205.88	32.56	7.4	82.35	97.6
222	29-07-2018 05:00	27.69	230.75	32.38	7.43	92.3	83.59
223	29-07-2018 06:00	41.98	349.83	32.47	7.42	139.93	99.61
224	29-07-2018 07:00	46.07	383.9	32.71	7.43	153.56	54.09
225	29-07-2018 08:00	34.74	289.48	32.48	7.52	115.79	89.66
226	29-07-2018 09:00	43.64	363.65	32.54	7.54	145.46	31.29
227	29-07-2018 10:00	47.42	395.18	32.69	7.54	158.07	31.65
228	29-07-2018 11:00	38.69	322.45	21.93	7.58	128.98	28.97
229	29-07-2018 12:00	42.03	350.28	22.22	7.57	140.11	32.78
230	29-07-2018 13:00	47.62	396.8	29.96	7.54	158.72	31.8
231	29-07-2018 14:00	52.96	441.3	38.37	7.52	176.52	34.94

232	29-07-2018 15:00	51.2	[illegible]	18.89	7.54	170.65	29.36
233	29-07-2018 16:00	46.2	384.98	34.09	7.57	153.99	31.85
234	29-07-2018 17:00	47.13	392.78	35.58	7.51	157.11	49.91
235	29-07-2018 18:00	54.14	451.13	0	7.44	180.45	45.53
236	29-07-2018 19:00	62.73	522.75	0	7.32	209.1	59.73
237	29-07-2018 20:00	79.41	661.78	0	7.35	264.71	93.46
238	29-07-2018 21:00	67.28	560.63	10.81	7.3	224.25	49.8
239	29-07-2018 22:00	44.24	368.68	11.29	7.3	147.47	51.09
240	29-07-2018 23:00	75.48	629.03	38.75	7.33	251.61	43.45
241	30-07-2018 00:00	59.69	497.43	38.52	7.31	198.97	57.8
242	30-07-2018 01:00	48.44	403.68	38.62	7.29	161.47	49.44
243	30-07-2018 02:00	53.65	447.1	28.82	7.34	178.84	68.68
244	30-07-2018 03:00	60.58	504.83	28.99	7.33	201.93	57.95
245	30-07-2018 04:00	48.62	405.15	29.39	7.32	162.06	45.84
246	30-07-2018 05:00	0	0	29.5	7.22	0	42.24
247	30-07-2018 06:00	56.39	469.9	36.94	7.31	187.96	36.28
248	30-07-2018 07:00	62.4	519.98	36.77	7.3	207.99	36.46
249	30-07-2018 08:00	61.62	513.5	13.1	7.33	205.4	90.66
250	30-07-2018 09:00	55.67	463.95	29.98	7.42	185.58	83.23
251	30-07-2018 10:00	76.07	633.95	37.3	7.41	253.58	55.18
252	30-07-2018 11:00	48.93	407.78	15.74	7.33	163.11	59.19
253	30-07-2018 12:00	42.51	354.23	15.97	7.29	141.69	48.93
254	30-07-2018 13:00	46.42	386.83	33.43	7.26	154.73	43.09
255	30-07-2018 14:00	60.09	500.73	33.59	7.32	200.29	33.6
256	30-07-2018 15:00	62.52	520.98	33.17	7.33	208.39	79.73
257	30-07-2018 16:00	67.85	565.43	33.23	7.34	226.17	33.01
258	30-07-2018 17:00	64.65	538.75	0.2	7.33	215.5	26.35
259	30-07-2018 18:00	65.51	545.95	0	7.31	218.38	49.44
260	30-07-2018 19:00	0	0	16.22	7.27	0	70.55
[illegible]	30-07-2018 20:00	48.93	407.78	16.5	7.26	163.11	98.56
[illegible]	30-07-2018 21:00	67.97	566.43	33.02	7.26	226.57	88.01
[illegible]	30-07-2018 22:00	61.8	515.03	0.65	7.22	206.01	23.91
[illegible]	30-07-2018 23:00	51.66	430.5	31.13	7.27	172.2	41.19
[illegible]	31-07-2018 00:00	37.86	315.5	30.83	7.24	126.2	59.47
[illegible]	31-07-2018 01:00	31.25	260.4	30.94	7.21	104.16	47.62
267	31-07-2018 02:00	100.33	836.05 *	31.51	7.21	334.42	66.23
268	31-07-2018 03:00	0	0	26.29	7.2	0	45.28
269	31-07-2018 04:00	0	0	34.04	7.23	0	86.01
270	31-07-2018 05:00	0	0	33.93	7.23	0	68.24
271	31-07-2018 06:00	0	0	33.67	7.25	0	37.31
272	31-07-2018 07:00	0	0	33.58	7.26	0	36.35
273	31-07-2018 08:00	0	0	33.96	7.28	0	33.09
274	31-07-2018 09:00	0	0	33.78	7.29	0	40.29
275	31-07-2018 10:00	0	0	36.19	7.26	0	39.59
276	31-07-2018 11:00	0	0	35.92	7.2	0	35.61
277	31-07-2018 12:00	0	0	35.64	7.16	0	52.37
278	31-07-2018 13:00	0	0	35.62	7.14	0	99.64
279	31-07-2018 14:00	0	0	35.56	7.12	0	50.24

280	31-07-2018 15:00	0	0	21.91	7.09	0	60.65
281	31-07-2018 16:00	0	0	22.07	7.1	0	49.13
282	31-07-2018 17:00	0	0	34.86	7.03	0	43.32
283	31-07-2018 18:00	0	0	0	6.95	0	87.63
284	31-07-2018 19:00	0	0	0	7.17	0	36.17
285	31-07-2018 20:00	0	0	0	7.3	0	99.61
286	31-07-2018 21:00	0	0	0.03	7.19	0	40.08
287	31-07-2018 22:00	0	0	0	7.29	0	94.54
288	31-07-2018 23:00	0	0	0	7.19	0	53.94

* - Alert | M - Maintenance | S - Service | D - No Discharge | C - Calibration

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2008 Certified Company (MoEF Approved)
871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

DOC. NO.: LAB-FMT-050	LABORATORY TEST REPORT - EFFLUENT	
Effective Date:. 01-01-2015	Issue No.: 02	
REPORT NO.: JUL18/054/16	Issue Date: 01-01-2015	Revision Date: 01-01-2015

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 1731978246-054JL18EF01	3.	Client Representative: Mr.Jay Prakash
4.	Sample Date: 24.07.2018	5.	Sample Collected By: Parag Bhatt
6.	Analysis commenced on: 26.07.2018	7.	Analysis Completed on: 31.07.2018
8.	Reporting Date: 09.08.2018	9.	Test Requirement: effluent Analysis
10.	Packing Condition & Quantity: Sealed	11.	Sample Category: Grab
12.	Sampling Location: **ETP Outlet**	13.	ETP / STP Status: Working

TEST RESULTS

S.No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		:	7.34	6.5 – 8.5	APHA: (4500 H+ B) 23rd Edition
2.	Temperature	oC	:	29	40	APHA: (2550 B) 23rd Edition
3.	Colour	Pt-CO	:	10	100	APHA: (2120 B) 23rd Edition
4.	Suspended Solids	mg/L	:	12	200	APHA: (2540 D) 23rd Edition
5.	Oil & Grease	mg/L	:	<1	10	APHA: (5520 B) 23rd edition
6.	Phenolic Compound	mg/L	:	<0.02	1	APHA: (5530 D) 23rd Edition
7.	Cyanide	mg/L	:	<0.05	0.2	APHA: (4500 CN F) 23rd Edition
8.	Fluoride	mg/L	:	<0.05	2	APHA: (4500 F D) 23rd Edition
9.	Sulphides	mg/L	:	<1	2	APHA: (4500 SO4 E) 23rd Edition
10.	Ammonical Nitrogen	mg/L	:	41.76	50	IS : 3025 (PP 34)
11.	Arsenic	mg/L	:	<0.01	0.2	APHA: (3500 - As B) 23rd Edition
12.	Total Chromium	mg/L	:	<0.02	2	APHA: (3500 Cr) 23rd Edition
13.	Hexavalent Chromium	mg/L	:	<0.02	0.1	APHA: (3500 Cr) 23rd Edition
14.	Copper	mg/L	:	<0.03	3	APHA: (3500 Cu A) 23rd Edition
15.	Lead	mg/L	:	<0.02	0.1	APHA: (3500 Pb B) 23rd Edition
16.	Mercury	mg/L	:	<0.001	0.01	APHA: (3500 Hg) 23rd edition
17.	Zinc	mg/L	:	<0.03	5	APHA: (3500 Zn A) 23rd Edition
18.	Nickel	mg/L	:	<0.001	3	APHA: (3500 Ni) 23rd Edition
19.	Cadmium	mg/L	:	<0.01	2	APHA: (3500 - Cd) 23rd Edition
20.	Iron	mg/L	:	<0.05	3	APHA: (3500 - Fe B) 23rd Edition
21.	COD	mg/L	:	264	750	APHA: (5220 B) 23rd Edition
22.	BOD	mg/L	:	73	300	IS 3025 (PP-44)
23.	Chlorides	mg/L	:	241	600	APHA: (4500 Cl- B) 23rd Edition
24.	Sulphates	mg/L	:	267	1000	APHA: (4500 SO4 E) 23rd Edition
25.	Total Dissolved Solids	mg/L	:	1248	2100	APHA: (2540 C) 23rd Edition
26.	Insecticides/Pesticides	mg/L	:	Absent	Absent	Gas Chromatogram
27.	Sodium Absorption Ration		:	3.12	26	After Leachate Formation
28.	% Sodium	%	:	43.62	60	APHA Method
29.	Bio-Assay Test		:	Pass	90 % survival of fish	IS 6582 Part-2, 2001

Remark :

Authorized By -

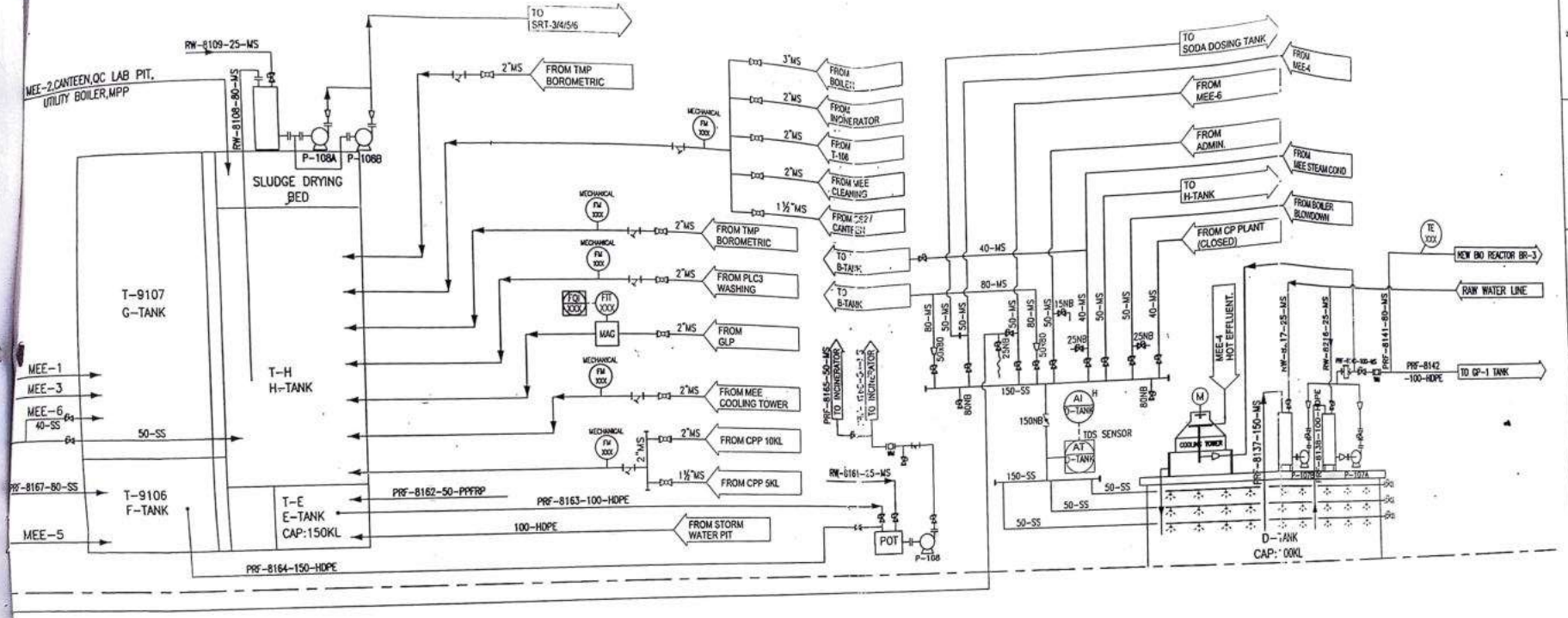
Name : Sapana Amin

Designation: Lab Incharge

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 15 days from the date of Report[illegible] from the supplier.

Annexure-B

EFFLUENT TREATMENT PLANT

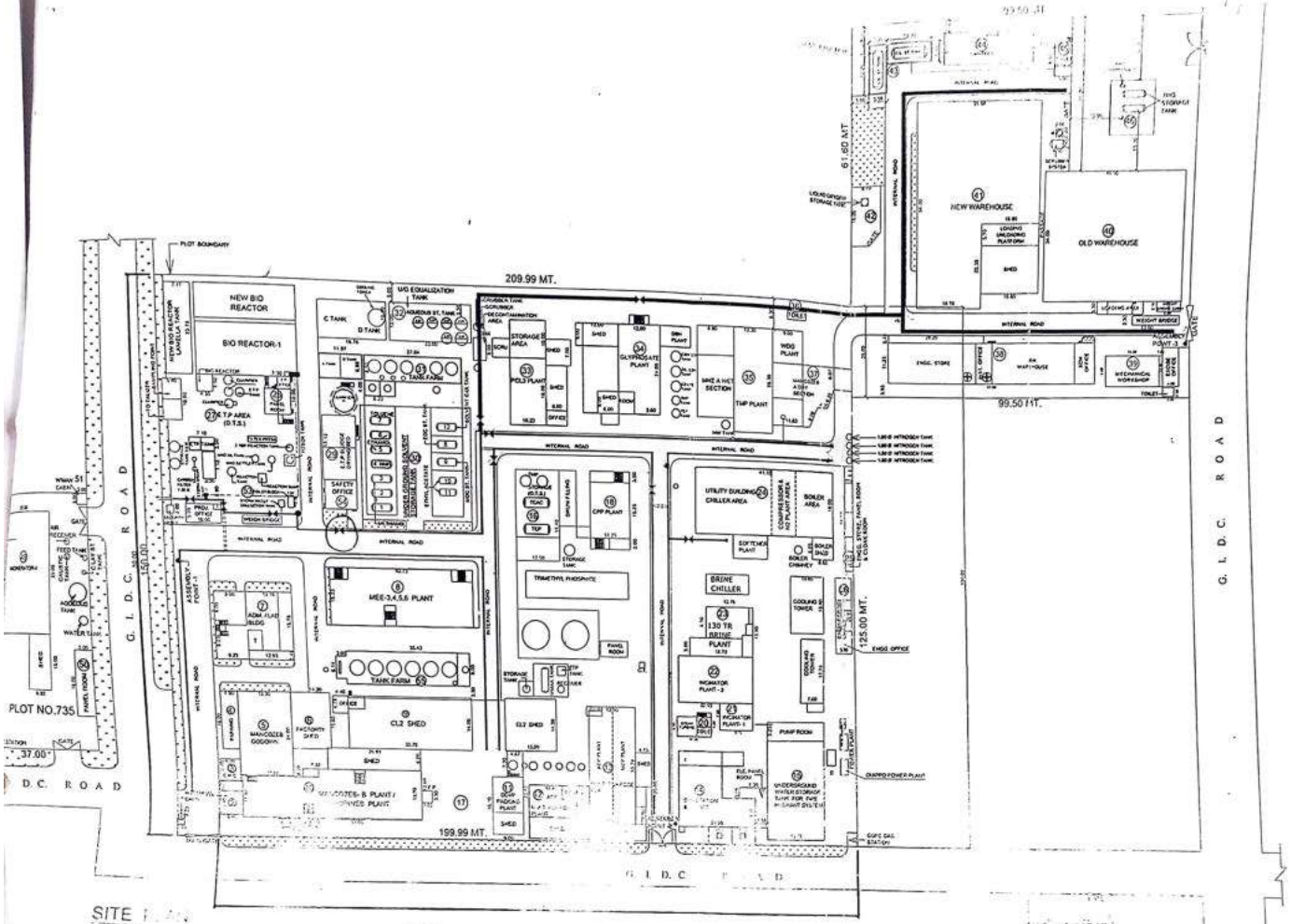


DRG SHEET NO. 1/34

Annexure - A

Notes:

SR NO.	SHEET NO	PLANT DESCRIPTION WITH BUILDING NO.
1	1/34	SITE PLAN & KEY PLAN
2	2/34	1. WATCHMAN C'ABIN 2. WATCHMAN C'ABIN 3. O. H. C 4. PARKING SHED 5. MANCOZEB GODOWN 6. STORAGE SHED
3.	3/34	7. ADM. OFFICE
4.	4/34	8. MEE-3,4,5,6 PLANT GR. FL. & FIRST FL. PLAN
5.	5/34	8. MEE-3,4,5,6 PLANT 2ND & THIRD FL.PLAN
6.	6/34	9. CHLORINE CYLINDER STORAGE SHED
7.	7/34	10. MANCOZEB-B PLANT GROUND FLOOR PLAN
8.	8/34	10. MANCOZEB-B PLANT FIRST TO FORTH FLOOR
9.	9/34	11. DDVP PACKING PLANT
10.	10/34	12. MULTY PURPOSE PLANT
11.	11/34	13. MULTY PURPOSE PLANT
12.	12/34	14. D.G. SET ROOM & SUB-TATION
13.	13/34	15. PUMP ROOM & U/G. FIRE WATER TANK
14.	14/34	16. STORAGE TANK FARM 17. STORAGE TANK FARM 52. TOILET BLOCK 53. PLAN FOR TOILET BLOCK 55. STORAGE TANK FARM
15.	15/34	18. PROP. TMP. PLANT EXPANSION
16.	16/34	19. NAHTCP PLANT
17.	17/34	20. STORE ROOM 21. INCINATOR-1 PLANT 22. INCINATOR- 3 PLANT
18.	18/34	23. 130 TR BRINE PLANT 24. UTILITY PLANT 25. ENGG. STORE, PANEL ROOM & CLOAK ROOM
19.	19/34	26. ENGINEERING OFFICE
20.	20/34	27. EFFLUENT TREATMENT PLANT
21.	21/34	28. PANEL ROOM 29. E.T.P. PLANT
22.	22/34	30. PET. CLASS 'A', 'B' & 'C' U/G. STORAGE TANK 31. TANK FARM 32. EQUALIZATION PLANT
23.	23/34	33. PCL3 PLANT
24.	24/34	34. GLYPHOSATE PLANT
25.	25/34	35. TMP PLANT GROUND FLOOR 36. TOILET BLOCK
26.	26/34	35. TMP PLANT FIRST FLOOR TO FORTH FLOOR
27.	27/34	37. NEW MANCOZEB PLANT
28.	28/34	38. OFFICE & STORE ROOM
29.	29/34	39. STORE, OFFICE & TOILET
30.	30/34	40. WARE HOUSE
31.	31/34	41. WARE HOUSE
32.	32/34	42. LIQUID OXYGEN STORAGE TANK 43. CS2 STORAGE TANK YARD 44. CANTEEN 45. TOILET BLACK 46. NH3 STORAGE TANK
33.	33/34	47. TANK FARM 47. FACTORY SHED 48. PCC ROOM 54. SAFETY OFFICE & STORE ROOM
34.	34/34	49. INCINERATOR- 2 PLANT 50. PANEL ROOM 51. WATCHMAN CABIN



- Steam drain gate valve

Total 5 Nos.

TRUE COPY
ADVOCATE

ANNEXURE-R-19

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

RECEIVED
Sign.
Date : 26-10-2018
G.P.C. BOARD SARIGAM.

October 10, 2018

PCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of Information against observation made during inspection by GPCB officials dated 15/09/2018 and 28/09/2018.
Ref. : GPCB letter no. GPCB/CCA-SRG-229(26)/ID-24285/471363 dated 05/10/2018

Dear Sir,
This has reference to above. We are submitting hereby Information against observation made during inspection by GPCB officials dated 15/09/2018 and 28/09/2018.

Sr. No.	Observations	Clarification
1.	Heavy White smoke emission observed from your stack and spreading into the atmosphere.	In incineration process CH_3Cl combustion took place, which converts it in to CO_2, HCl & H_2O. HCl & H_2O gets neutralized / condensed in caustic solution, only CO_2 along with steam goes in to atmosphere. GPCB official has visited site on 15.09.2018 and taken incinerator stack sample and the results of the same are well within prescribed limits. Copy of the analysis results attached as **Annexure – A**. Also GPCB official has checked incinerator online CEMS data and online monitoring data also in prescribed limits.
2.	Incenerator-1 was found in operation.	Incinerator – 1 is a gas incinerator as our DDVP & MCP production plants were in operation therefore gas incineration was also running.
3.	pH of scrubbing media of scrubber attached to incinerator was 4 on pH strip.	As we have two stages scrubbing system, first we call it Quencher & 2nd scrubber, the sample checked was of Quencher, whereas same time scrubber media was basic in nature even though to make process more robust, we will put online pH meters in 3 months time period.
4.	Foul odour was sensed from the unit on 15/09/2018.	We have already installed deodorant system in our factory but again we called the party for inspection and suggest improvement in the system. We have

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Crop Protection Division
Plot No. 2102, GIDC,
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W: www.coromandel.biz

11/10/18
Gujarat Pollution Control Board
Head Office
Sector No. 10-A,
Gandhinagar-382010

murugappa

		planned installation of 280 nozzles new system to make it more effective, same will be commissioned in one month time.

Sr. No.	Directions	Information/Action to be Taken
1.	You shall operate your APCM such as scrubber efficiently.	We are looking possibility of putting pH meters to all possible places.
2.	You shall periodically change the scrubbing media regularly.	We are regularly changing scrubbing media but now we will bring more operational discipline. To make process more robust we are looking possibility of putting pH meters to all possible places.
3.	You shall submit the action plan for control of air pollution, so that in future such incident won't occur again.	We will install pH meters to all possible places. Make SOPs, train our operators, and put alarm system for critical parameters so that operational discipline can be achieved. All our stacks are already covered for real time data monitoring and data is continually going in GPCB / CPCB server.
4.	You shall take concrete steps for control of foul odour and submit the action taken report.	We are raising metallic poles height on our boundary wall, a new deodorant system having 280 nozzles is ordered & will be put in place within one month.
5.	You shall regularly comply CCA conditions.	We confirm to meet compliance always.

We hope you would find the same in line with your requirement and oblige.

Thank You.

Yours Faithfully,
For **Coromandel International Limited**

(AVP and Unit Head)

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Gujarat Pollution Control Board
Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

Sample ID:242566 - **Analysis Completion:24/09/2018**

Pesticides (technical) (excluding formulation) / LAB Inward : **46794**

1. Name &	: **Coromandel International Limited - 24285**
2. Address of the Unit	: **2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM ,- SARIGAM - 396155,Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam**
3. Nature of Sample	: **REP-Representative/Grab , (Insp Type : COM-On Complaint)**
4. Sample Collected By	: **Mr. Valvi manojkumar m**
5. Date & Time of Collection & Receipt	: **15/09/2018, (1330 to 1410)**
6. Date of Start & Completion of Analysis	: **17/09/2018 & 24/09/2018**
7. Sampling Point	: **Sample is collected from common stack attached to Incinerator 1 (for Gas & Liquid) & J**
8. Fuel	: **Natural Gas**
9. APCM	: **Ventury alkali Scrubber**
10. Thimble & Weight (gm)	: **23/2252**
11. Temperature on Collection	: **95 & Volume-Absord Media : 50.0 ml**
12. Volume-Gas Passed	: **for PM - 710.80 lit, SO2- 73.07 lit & NOx - 1.374 lit**
13. Parameters	: **3 & Oper Time(Min) : 40**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	48
2	SO2-Stack (PPM)	PPM	IS: 11255 (Part – 2), 1985 (Reaffirmed 2009)	5 – 500 mg/NM3	11.95
3	NOX-Stack	PPM	IS:11255(Part-7), 2005	5 – 500 mg/NM3	9.47

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 24/09/2018

J.D.OZA, Lab Head

Field Observation :

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

October 25, 2018

PCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional Information against NOD dated 05.10.2018

Ref. : GPCB letter no. GPCB/CCA-SRG-229(26)/ID-24285/471363 dated 05/10/2018 and Vigilance officer's report dated 30.09.18

Dear Sir,
With reference to above letters we have completed suggested actions & therefore submitting existing status along with support document

Sr. No.	Directions	Action / Status as on 25.10.18
1.	You shall operate your APCM such as scrubber efficiently.	• We have removed top canopy of incinerator stack to improve dispersion. Now all smoke/water vapours are getting dispersed in less than 8-10-meter distance from stack top. • Incinerator adequacy has been conducted by Schedule 1 auditor & status is found good. Adequacy report attached as Annexure - 1. • All online pollutant measurement instruments are re-calibrated by the OEM, also post calibration all parameters are found OK. Calibration report attached as Annexure - 2. • Existing online data snap shot of DCS attached as Annexure – 3.
2.	You shall periodically change the scrubbing media regularly.	• While we are changing the media regularly but as an improvement we are going to install online pH meter, PO has been released for purchase of new pH meter, Performa invoice received, material is in transit, once received we will automate the process. PO of the same attached as Annexure – 4.

RECEIVED
Sign.
Date : 29-10-2018.
G.P.C. BOARD SARIGAM.

G.P.C. BOARD
Office of V.O.
RECEIVED COPY
Sign
Date 26/10/18

Coromandel International Limited
Crop Protection Division
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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

3.	You shall submit the action plan for control of air pollution, so that in future such incident won't occur again.	• This incinerator is operated fully as per guidelines issued by GPCB/CPCB. We promise that in case of any temporary weather effect if we notice any inversion then we ourselves will stop the operation of incinerator immediately.
4.	You shall take concrete steps for control of foul odour and submit the action taken report.	• New deodorant system installed (900 meter with 300 nozzles), which covers 3 side full boundary wall as well as internal plant area. Photo attached as annexure - 5.
5.	You shall regularly comply CCA conditions.	• We confirm to meet compliance always. • Full drainage system is emptied & dried. • Photos are attached as annexure 6.

As known the purpose of putting up the incinerator is to reduce pollution, seeing above facts regarding good operational condition of the incinerator, you are requested to kindly allow 24 hours operation of the incinerator.

We hope you would find the same in line with your requirement and oblige.

Thank You.

Yours Faithfully,
For Coromandel International Limited

COROMANDEL INTERNATIONAL LIMITED SARIGAM

Hrishanshu Kumar Shukla
(AVP and Unit Head)

CC:
1. Regional Officer, Gujarat Pollution Control Board – Sarigam.
2. Vigilance Office – Gujarat Pollution Control Board – Surat.

Coromandel International Limited
Crop Protection Division
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W: www.coromandel.biz

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VIDYABHARTI TRUST, UMRAKH
SITARAM BHAI ... Approved Schedule I Environment Auditor, ISO 9001:2008 Certified
INSTITUTE OF TECHNOLOGY AND ... Campus, At. Umrakh, Ta. ... Dist. Surat 394 345
Centre for Environmental ... Audit Cell, ... vidyabhartitrust@gmail.com ... www.vidyabhartitrust.org ... +91 95374 22112

Ref. No.: SNPIT/CE/...

Date: 25/10/2018

ADEQUACY & EFFICACY VARIFICATION OF INCINERATOR

The Environmental Audit Scheme was introduced by the Gujarat High Court vide its orders dated 20/12/96 & 13/3/97 and modified vide order dated 16/9/99, 22/04/2010 & 23/1/2015. We are recognised by GPCB, Gandhinagar as Schedule- I Environmental Auditor for compliance of the directions of the Hon'ble High Court in this matter and have carried out visit to check & study the adequacy of EMS & pollution load proposed by-

We have carried out adequacy study of Incinerator for **M/s. Coromandel International Limited, Plot No. 2102, GIDC Sarigam – 396155, Dist: Valsad, Gujarat, India.** The study report is enclosed herewith.

(A) M/s. Coromandel International Limited

Plot No.: 2102, GIDC Sarigam – 396155, Dist: Valsad, Gujarat, India

(B) DETAILS OF MANUFACTURING PRODUCTS

Sr. No.	Name of the Products	Capacity MT/Annum (As per CC&A)
GROUP A		
1	Mancozeb (Tech.)	38000
2	Mancozeb (Tech.) + Maneb (Tech.)	38000
3	Mancozeb (Tech.) + Zineb (Tech.)	38000
4	Mancozeb (Tech.) + Propineb (Tech.)	22116
	Total Production Capacity of Group A	**38000**
GROUP B		
1	Diethyl Thiophosphoryl Chloride (DETC)	3600
2	DMTC	2160
3	Diafenthiuron	1650
4	Thiamethoxam	1650
5	Pymetrozine	1650



GROUP M		
1	Phosphorous Acid	0
	Total Production capacity of Group M	**0**
GROUP N		
1	2-(4-Hydroxy phenoxy) Propionic Acid	429
2	2,3-Difluoro-5-chloro pyridine	353
3	Clodinafop propargyl (Tech.)	933
4	Triclopyr Acid (Tech.)	933
5	Triclopyr Butotyl Ester (Tech.)	933
6	Picloram (Tech.)	495
7	Pretilachlor (Tech.)	933
8	Bispyribac sodium (Tech.)	330
9	Azoxystrobin	52.8
10	Boscalid	660
11	Metalaxyl	933
12	Proclaraz	933
	Total Production capacity of Group N	**933**
GROUP O		
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861
2	Fipronil (Tech.)	933
3	Emmamectin Benzoate (Tech.)	495
4	Difenoconazole (Tech.)	660
5	Triazophos (Tech.)	933
6	Glufosinate Ammonium Salt	933
7	Metribuzin	933
	Total Production capacity of Group O	**933**
GROUP P		
1	Imidacloprid (Tech.)	990
2	Acetamiprid (Tech.)	990
	Total Production capacity of Group P	**990**
BY PRODUCTS		
1	Ammonium Chloride Powder (NH_4Cl)	13398
2	Sodium Chloride (NaCl)	8238
3	Sodium Sulphate (Na_2SO_4)	19779
4	Ammonium Sulphate $(NH_4)_2SO_4$	8370
Total Production capacity of all Groups and		**160277**

(C) SOURCE OF EMISSION AND AIR POLLUTION CONTROL MEASURES (APCM)

SOURCE OF FUEL GAS EMISSION AND APCM:

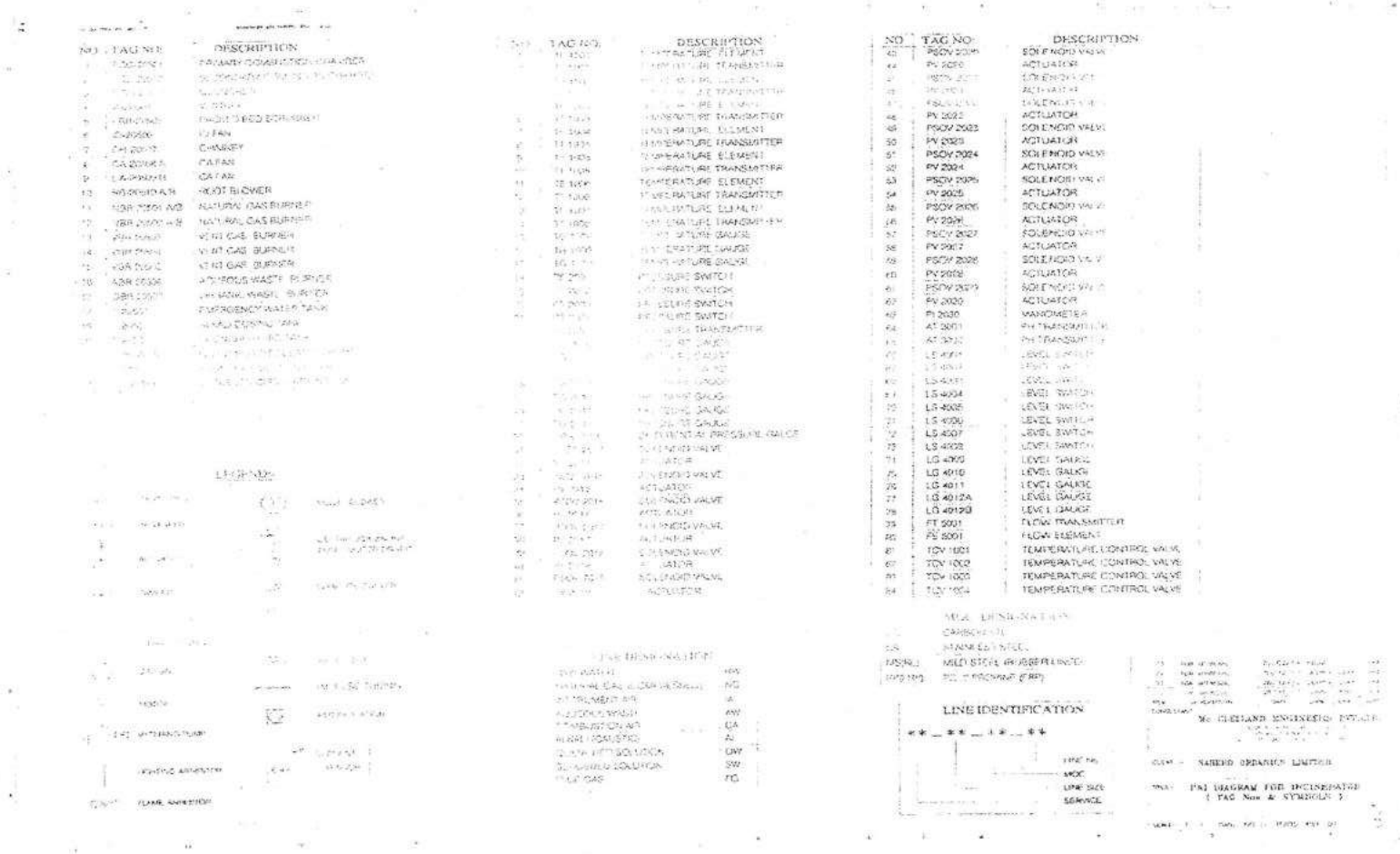
Sr No.	Stack attached to	Stack height in meter	Air pollution control system	Parameter	Permissible Limit
1	Boiler – 3 Nos.	50	...	PM	150 mg/Nm^3
2	DG sets (1 Nos. of 1000 KVA, 2 Nos.of 500 KVA & 1 Nos. of 200 KVA)	12	...	SO_2 NOx	100 ppm 50 ppm

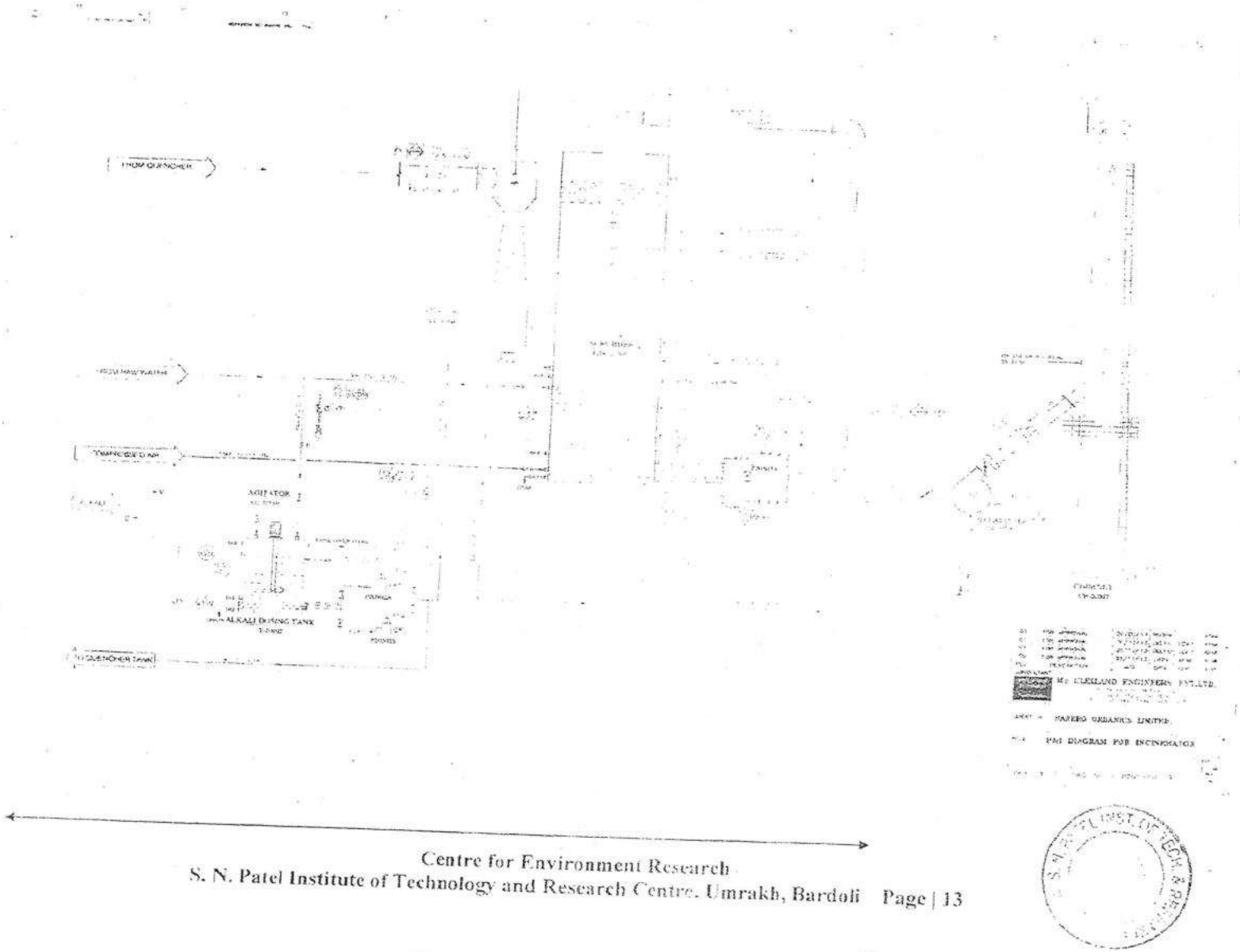
SOURCE OF PROCESS GAS EMISSION AND APCM:

Sr. no.	Plant	Stack attached to	Stack Height (m)	Air pollution control measures	Parameters	Permissible limit (mg/Nm^3)
1	Group A					
	Mancozeb	Mancozeb reactor	30	Air Blower/ Venury scrubber	CS2 PM SO2	180 20 40
	Mancozeb + Maneb	Maneb reactor				
	Mancozeb + Zineb	Zineb reactor				
	Mancozeb + Propineb	Spray dryer		Water scrubber		
2	Group B					
	Diethyl thiophosphoryl chloride (DETC) DMTC	Reactor of monoester & diester	20	Alkali scrubber	HCl	20
3	Group C					
	DMTC Amide	DMTC amide reactor	20	Acidic scrubber	NH3	30
4	Group D					
	Glyphosate (Tech.)	Slurry preparation	20	Water scrubber	NH3	30
5	Group E					
	Chlorpyriphos (Tech.)	HTCP REACTOR	20	Two scrubber in series water scrubber &	HCl	20

	2,3-Difluoro-5-chloro pyridine					
	Triclopyr acid/Triclopyr					
	Clodinafop Propargyl					
	Picloram	Picloram & Pretilachlor				
	Pretilachlor					
	Bispyribac Sodium					
13	Group O					
	5-amino-3-cyno-1-(2.6 dichloro-4-trifloro methyl phenyl) Pyrazole					
	Fipronil	Fipronil reactor	20	Alkali scrubber	HCl	20
	Emmamectin Benzoate					
	Difenoconazole					
	Triazophos					
14	NH_4Cl	NH_4Cl storage tank	11	Acid scrubber	NH3	30
15	Solvent Exhaust	All reaction vessels	26	Carbon Absorption System	Solvent	
	Others					
16	HCl Storage Tank	HCl Storage Tank	11	Alkali scrubber	HCl Cl2	20 5
17	Chlorine Shed	Chlorine Shed	13.5	Alkali scrubber	Cl2	5
18	Drum Filling Station	Drum Filling Station	11	Alkali scrubber	Odor	
19	Incinerators	3 Liquid Waste & One Solid Waste	52	Venturi alkali Scrubber	PM SO_2 NOx	50 200 400

Mc Clelland	CALCULATION	M/s. Sabero Organics
Residence time	3.18 sec.	
	QUENCHER	
Inlet temperature	1000-1050°C	
Outlet temperature	130°C	
Water evaporated	2545 Kg/Hr	
	SCRUBBING	
HCl generated	260 kg	
Neutraling agent	Caustic	
Caustic required	284 Kg/Hr (100% strength)	
Efficiency	90%	
Caustic actual required	315 Kg/Hr	
Salt generated (NaCl)	416 Kg/Hr	
Max.concentration of Circulation liquid	18%	
Effluent generated	2300 Ltr/Hr	





The adequacy study of the incinerator on the waste is mainly based on Guidelines for Common Hazardous Waste Incineration, published by CPCB, New Delhi. All the relevant data are provided by the client. Based on the study we certify that design and operation of incinerator is adequate and efficacious for the treatment of MaCl Gas generated.

25/10/18

Mr. Kamal D. Rana
(Co-Ordinator)

Mr.Vyom B.Pathak
(Head of Laboratory)

Audit Team member	Signature
Mr. Karan R.Bhandari B.E (Env.) Environmental Engg.	
Mr. Kamal D.Rana M.E. (Environment), B.E. Chemical), Chemical Engg.	
Mr. Dharmesh T.Patel B. Sc (Chemistry) Chemist	
Mr. Pinesh M. Maheta B.Sc. (Micro.), M.Sc.(Bio-tech) Microbiologist	

BHOOMI

An ISO 9001:2008 Certified Company

CERTIFICATE OF CALIBRATION

Make: - Bhoomi

Model: BI-7000

Product Type: - Continuous Emission Monitoring System

Serial No.:- 5000401

Customer: - Coromandel International Limited, Sarigam

Bhoomi Analyzers certifies that the above listed instrument was calibrated on date noted and was released from laboratory performing in accordance with specifications.

Our calibration system complies with the requirements of ISO 17025:2005 standard and traceable to the International System of Units.

Sr. No.	Gas Type	Certified Gas Concentration	Electronics Reading
1	Oxygen Low	1.97 %	1.98 %
2	Oxygen High	20.95 %	20.95%
3	Carbon Monoxide	714 ppm	713 ppm
4	Nitric Oxide	412 ppm	413 ppm
5	Sulphur Dioxide	437 ppm	436 ppm
6	Carbon Dioxide	12.20 %	12.22 %

Reference Gas Nos: O2-CSL-39193 Dt. 11-6-18, CO-CSL-38478 Dt. 08-09-18, NO-CSL-43217 Dt. 8-09-18, SO2 - CSL-39685 Dt. 11-06-2016, CO2-CSL-39193 Dt. 11-6-18

Bhoomi Analyzers Ambernath (E)

Calibration Date: - 04 October, 2016

Issued By: Aalishan Shaikh

Calibration Due Date: - 05 October, 2019

Calibrated By: Mr. Vivek Kadam

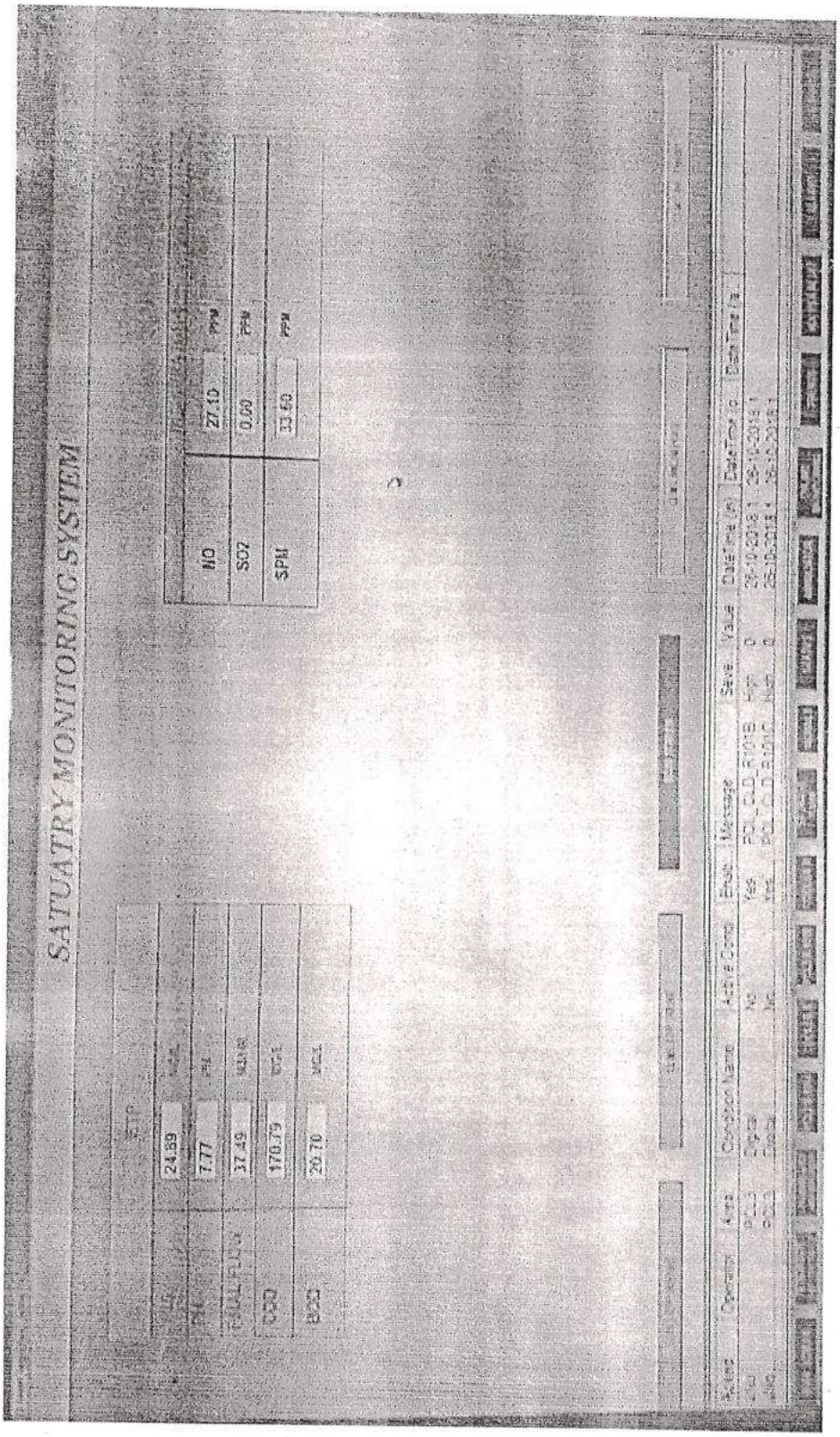
Bhoomi Analyzers

Head Office :
... Floor, Aviar, Nirmal Gala...
... Mumbai - 400080

Works Address :
Unit ... 208, C Wing, Udyog Bhavan-2
... Additional Ambernath Industrial Area,
... Sugar, MIDC, Ambernath (East),
...

Contact :
✆ : +91-22-25916858 / 6...
✆ : +91- 251-2620539
✉ : sales@bhoomiltd.com
🖷 : www.bhoomiltd.com

ANNEXURE-3


SATUATRY MONITORING SYSTEM
NO
27.10
SO2
0.00
SPM
33.60
21.69
1.77
17.69
170.79
29.70

To,
DHR HOLDING INDIA PRIVATE LIMITED
Lalbagh ROAD,
SP COMPLEX (GR.FLR), 16/1,
BANGALORE,BANGALORE,Karnataka
India Pin: 560027
Ph: 080-40322000 9713511535
PAN No: AACCD6672N
GSTIN:29AACCD6672N1Z0
Vendor code assigned to you ==> 345159

Purchase Order (Page 1 of 3)

PO Number/Date : 80762055 / 05.10.2018
Contact Name/Ph: Sarigam-Instrument /

Your Quote Ref : 80760393 / 01.10.2018

Our Particulars
PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
TIN : 24AAACC7852K1ZJ

Please deliver to:
Coromandel International Ltd.,
COROMANDEL INTERNATIONAL LIMITED
Plot No - 2102 ,GIDC ,Tal:UMERGAM
SARIGAM 396155
Valsad DISTRICT,Gujarat,India

Delivery Date : 19.11.201[illegible]
Po Validity: 05.10.2018 to [illegible].11.201[illegible]

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
1	4241310 *90278090*	PH TRANSMITTER 2 WIRE 0-14 ELECTRODE PH TRANSMITTER TYPE : FEILD MOUNTING TYPE POWER: 24 VDC LOOP POWERED OUTPUT: 4-20 MA MAKE: HACH MODEL1:GLI PRO	1 NO		3.000 Nos	
		BASIC PRICE		58692.00		176076.00
		Discount		10.000-%		17607.60-
		JIIG - IN: Integrated GST		18.00 %		28,524.31
		T O T A L				3.00 186992.71
2	4243827 *90278090*	PH SENSOR PH SENSOR MAKE:HACH	1 NO		3.000 Nos	

Purchase Order (Page 3 of 3)
PO Number/Date : 80762055 / 05.10.2018

liability that may arise due to such Non-compliance.

* In order to be eligible for payment, all invoices made by this Purchase/Service order have to be followed up by filing of complete supply data in GSTR-1 return for each month before 10th of subsequent month.
* Vendors are supposed to maintain Good Compliance rating track record as required under GST Law.
* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.

Shared Services Center,
Coromandel International Limited,
Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

Special Note: Vendors registered under GST are requested to submit the registration certificate immediately.

To,
DHR HOLDING INDIA PRIVATE LIMITED
Lalbagh ROAD,
SP COMPLEX (GR.FLR), 16/1,
BANGALORE,BANGALORE,Karnataka
India Pin: 560027
Ph: 080-40322000 9713511535
PAN No: AACCD6672N
GSTIN:29AACCD6672N1Z0

Vendor code assigned to you ==> 345159

Purchase Order (Page 1 of 3)

PO Number/Date : 80765081 / 11.10.2018
Contact Name/Ph: Sarigam-Instrument /

Your Quote Ref : 80762055 / 05.10.2018

Our Particulars
PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
TIN : 24AAACC7852K1ZJ

Please deliver to:
Coromandel International Ltd.,
COROMANDEL INTERNATIONAL LIMITED
Plot No - 2102 ,GIDC ,Tal:UMERGAM
SARIGAM 396155
Valsad DISTRICT,Gujarat,India

Delivery Date : 22.11.2018
Po Validity: 11.10.2018 To [illegible]

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
1	4241310 *90278090*	PH TRANSMITTER 2 WIRE 0-14 ELECTRODE PH TRANSMITTER TYPE : FEILD MOUNTING TYPE POWER: 24 VDC LOOP POWERED OUTPUT: 4-20 MA MAKE: HACH MODEL1:GLI PRO	1 NO		5.000 Nos	
		BASIC PRICE		58692.00		293460.00
		Discount		10.000-%		29346.00-
		JIIG - IN: Integrated GST		18.00 %		47,540.52
		T O T A L				0.00 311654.52
2	4243827 *90278090*	PH SENSOR PH SENSOR MAKE:HACH	1 NO		5.000 Nos	

Purchase Order (Page 3 of 3)
PO Number/Date : 80765081 / 11.10.2018

* Vendors are supposed to maintain Good Compliance rating track record as required under GST Law.
* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.

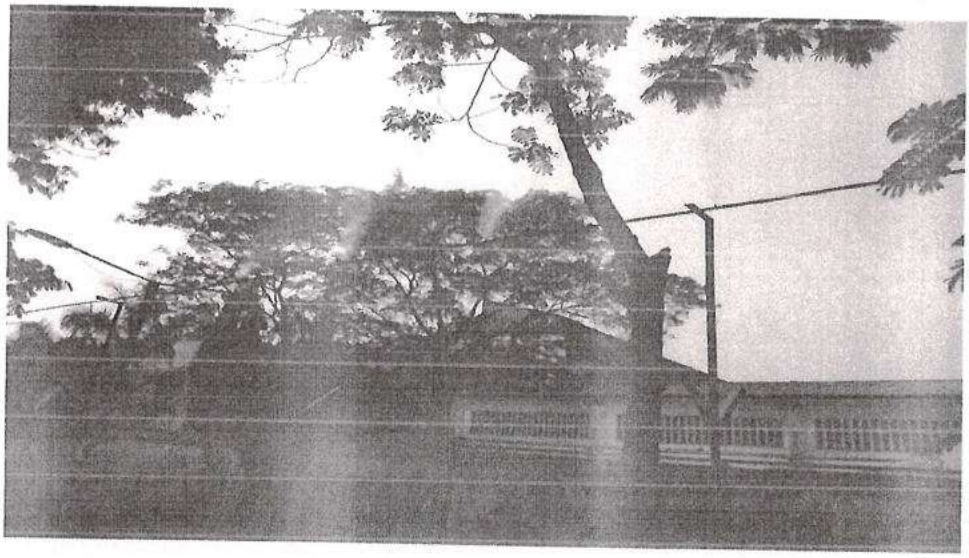
Shared Services Center,
Coromandel International Limited,
Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

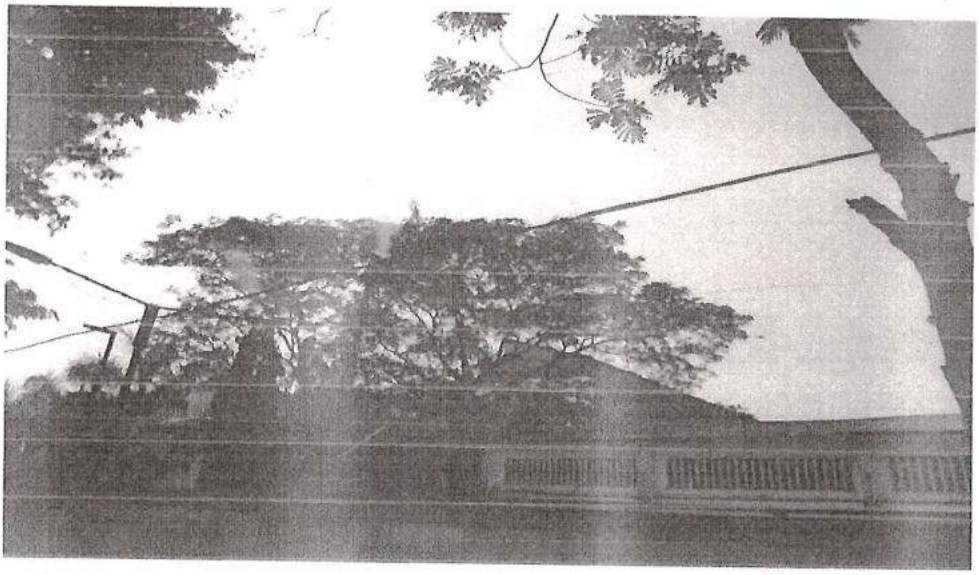
For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

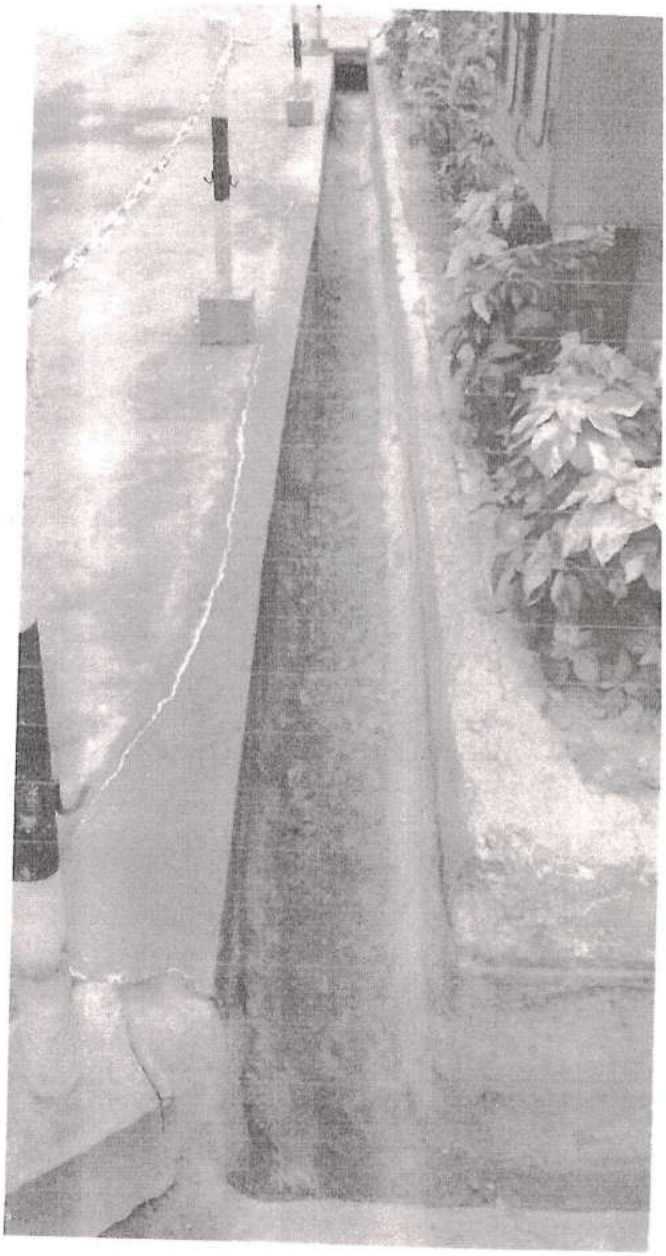
Special Note: Vendors registered under GST are requested to submit the registration certificate immediately.

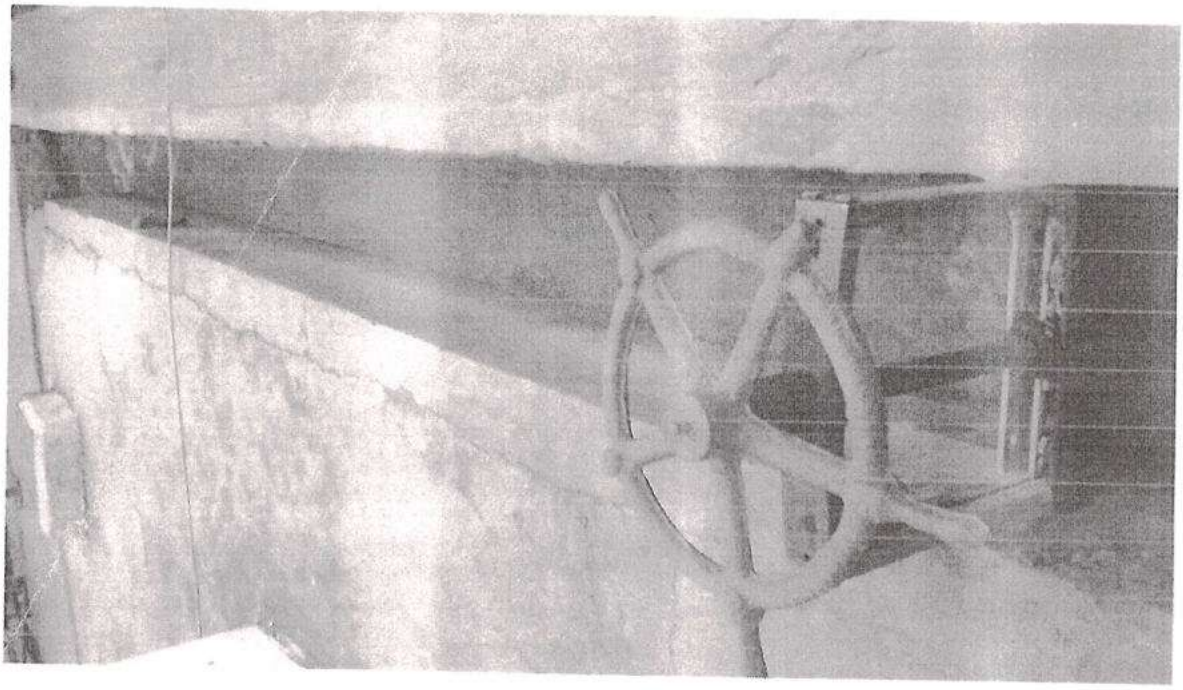














TRUE COPY
ADVOCATE

ANNEXURE-R-20

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

October 10, 2018

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of Revocation Application Against Closure Order
Ref : GPCB Closure Letter No. GPCB/CCA-SRG-229(26)/ID: 24285/471364 dated 05/10/2018

Dear Sir,
This has reference to the above. We are hereby submitting application for revocation application along with compliance for remedial measures taken against closure order issued by GPCB.

In line of the above, we request you to appreciate our corrective & preventive actions to prevent further occurrence of similar incident/s happen ever in future by issuing the revocation order at your earliest & oblige.

Thank You.

Yours Faithfully,
For **Coromandel International Limited**

(AVP and Unit Head)

RECEIVED
Sign.
Date : 26-10-2018
G.P.C. BOARD SARIGAM.

Encl:
1. Application for Revocation of Closure Order
2. Undertaking
3. Bank Guarantee

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board

11/10/18
Gujarat Pollution Control Board
Sector No. 10 A,
Gandhinagar - 382 010.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Application for Revocation of Closure Order

SR. NO.	DESCRIPTION		
1.	Full name and address of the unit	:	**M/s. Coromandel International Limited** Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Tal: Umbergaon, Dist. Valsad- 396155, Gujarat.
2.	GPCB ID	:	24285
3.	No. and date of closure for which the revocation is sought for	:	GPCB Closure Letter No. GPCB/CCA-SRG-229(26)/ID: 24285/471364 dated 05/10/2018
4.	Date of disconnection of electric supply	:	08/10/2018
5.	Date of disconnection of water supply	:	06/10/2018
6.	Remedial measures taken to control the pollution (in the table mentioned below)		

Sr. No.	Reason of closure	Remedial measures taken	Date of completion of the measures	Where compliance requires more than 7 days time, likely date of its completion
1.	You have installed additional spray dryer at Mancozed Plant-B.	• We are pleased to inform you that we have stopped usage of spray dryer and it is not in operation at present. The same has been fully disconnected & isolated from the running operations. We assure you that we shall start using spray dryer only after getting permission from GPCB. • Undertaking for the same is enclosed as an **Annexure-1**.	--	--
2.	You have yet not applied for EC-Amendment for the additional spray dryer.	We would like to inform you that we have started procedure to apply amendment in Environmental Clearance (EC) for the additional spray dryer. And we shall apply within 3 months.	--	--

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

3.	You are using additional spray dryer for production of Mancozed and propineb in the Mancozed Plant-B and not completely disconnected the additional spray dryer.	• We are pleased to inform you that we have stopped usage of spray dryer and it is not in operation at present. We assure you that we shall start using spray dryer only after getting permission from GPCB. • Undertaking for the same is enclosed as an **Annexure-1**. • Photographs of disconnected spray dryer are enclosed as an **Annexure-2**.	--	--

7.	Where remedial measure to mitigate pollution are likely to last more than 7 days, an undertaking (on stamp paper of Rs. 100/- duly signed and sealed by the Notary) shall be submitted to GPCB stating the measures and likely date of their completion. In addition to this, the company shall also undertaken to comply with all provisions of the Water Act, 1974, Air Act, 1981 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and shall also comply with the conditions stipulated in the Consolidated Consents and Authorization (CCA) by the Board:	:	Enclosed as an **Annexure-1**.
8	Letter of Bank Guarantee, if required	:	Enclosed as an **Annexure – 3.**
9	Status of CCA along with date of expiry	:	CC&A Order No. AWH-84402 date of issue: 22.02.2017, Valid up to 30.08.2021
10	Upto which period the water Cess is paid?	:	Water Cess amount paid up to year 2016-2017. We have filled return of water cess for April – June (2017) bill yet not generated.
11	Are Samples analysis charges Paid	:	Paid.
12	If the unit is critically dark Zone area, What is the source of water? If borewell is in use, can it be sealed? Explain with reasons.	:	Not Applicable as water supply is from GIDC.
13	Closure order(s) issued to the unit by the GPCB in last two years:	:	• DIR No. GPCB/CCA-SRG-229 (2)/ ID:24285/441746 dated 16.01.2018 • REV No. GPCB/CCA-SRG-229 (2)/ ID:24285/442958 dated 30.01.2018 and GPCB/CCA-SRG-229 (26)/ ID:24285/456841 dated 30.05.2018
14	Status of Monthly Report form	:	We have updated monthly patrak regularly till September –

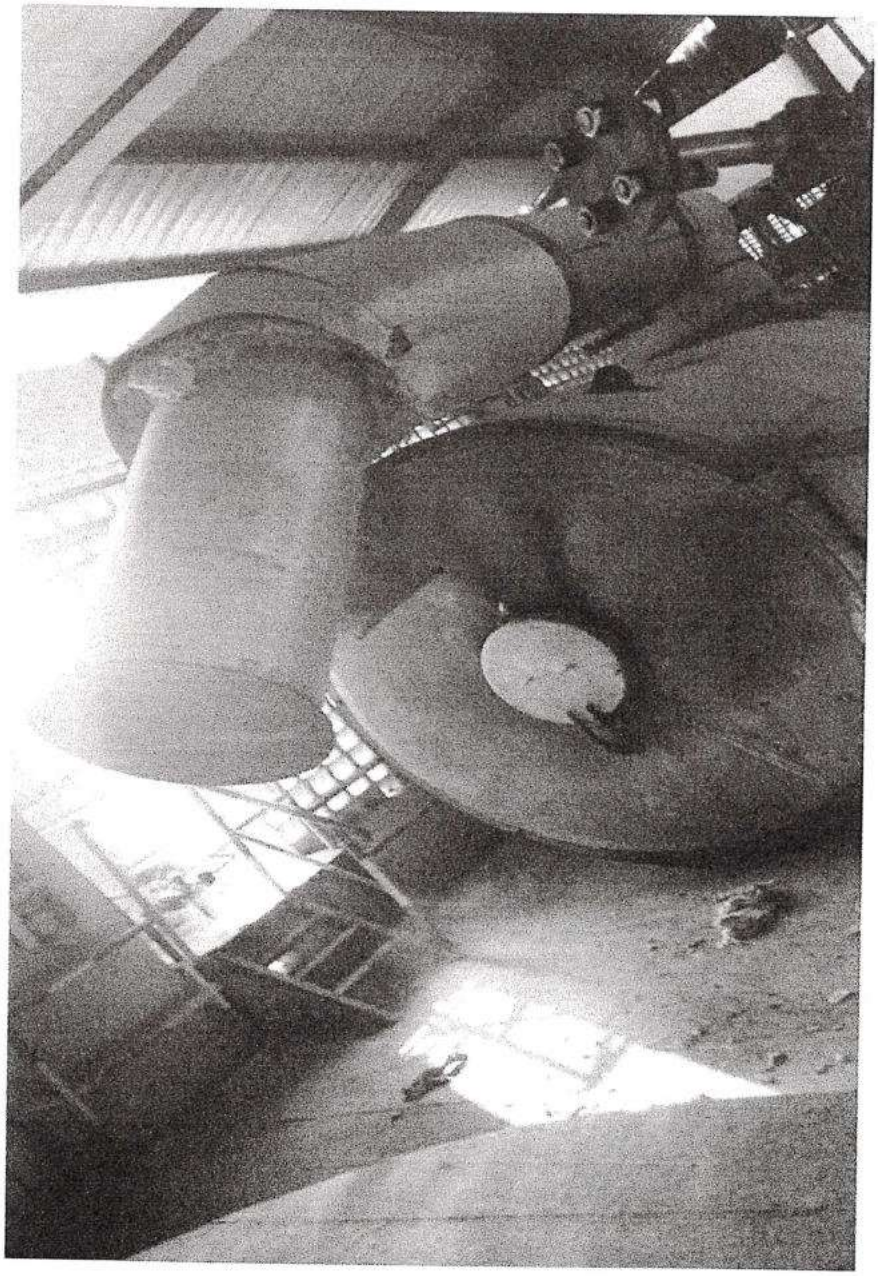
	Industry (Form-20)		2018.
15	Status of Annual Report form Industry (Form-21)	:	We have submitted annual report till Year 2017-2018.
16	Env. Audit Report (If applicable)	:	Environmental Audit Report submitted till Year 2017-2018.
17	Status of Env. Statement (Form-V, EP -Act.)	:	We have submitted Env. Statement till Year 2017-2018.

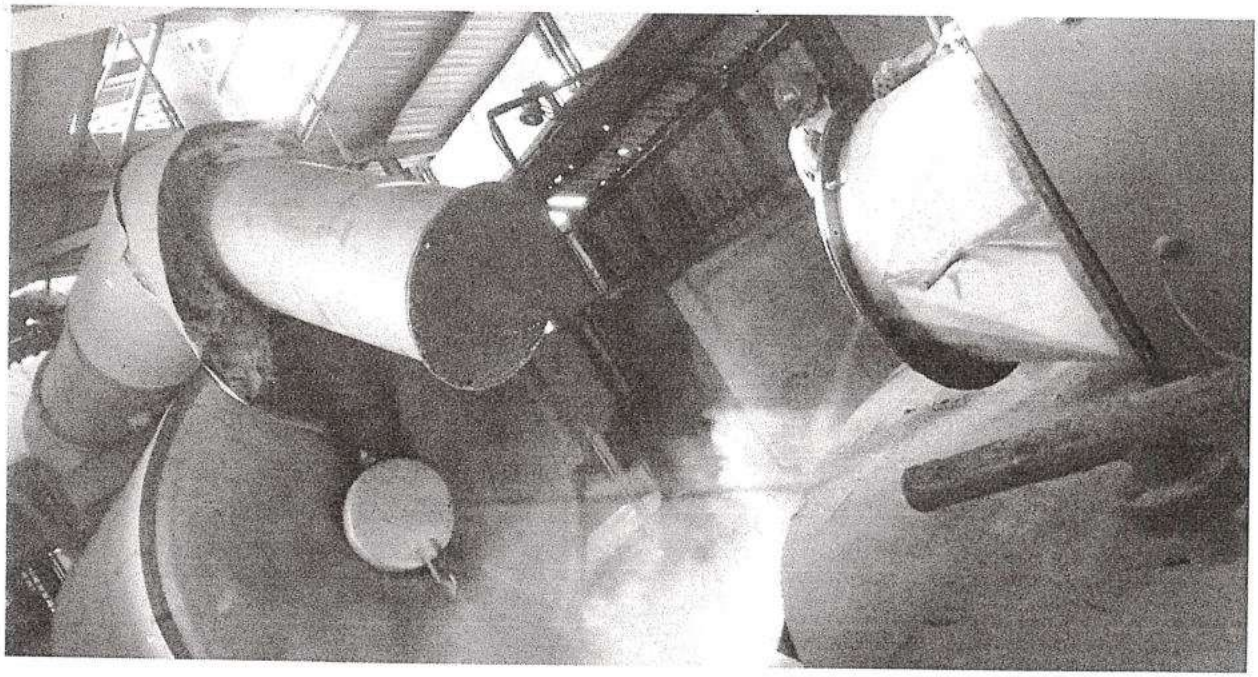
For **Coromandel International Limited**

AVP & Unit Head

Date : 10.10.2018
Place : Valsad

Annexure-2
Photographs







తెలంగాణ तेलंगाना TELANGANA

T 802706

BA[illegible]
Licensed [illegible]
LIC No. [illegible]
Fav. No. [illegible]
[illegible]
Himayathnagar, HY [illegible]
Cell: 9885998576, 8599552711

No. 2712 Date 11/09/2018 Rs. 100/-
Name D. Ramya Reddy
S/o. W/o. D/o. D. Shiva Ram Reddy
Whom H/s. Coromandel International Ltd. Sarigam

UNDERTAKING

I, undersigned, Mr. **Sameer Goel** aged 55 years, **Managing Director** of **M/s. Coromandel International Limited** located at Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Tal: Umbergaon, Dist. Valsad- 396155, Gujarat hereby solemnly undertake as below.

- We are pleased to inform you that we have stopped usage of spray dryer and it is not in operation at present. The same has been fully disconnected & isolated from the running operations. We assure you that we shall start using spray dryer only after getting permission from GPCB. Undertaking for the same is enclosed as an **Annexure-1**.

- We would like to inform you that we have started procedure to apply amendment in Environmental Clearance (EC) for the additional spray dryer and we shall apply within 3 months.

× Sam Goel

K. DEVADAS
NOTARY
ADVOCATE
APPOINTED BY
GOVT. OF [illegible] INDIA
Regd. No.
G.O. [illegible] (A.P.)
1017/1998
RANGA REDDY DIST., TELANGANA

- We are pleased to inform you that we have stopped usage of spray dryer and it is not in operation at present. We assure you that we shall start using spray dryer only after getting permission from GPCB. Undertaking for the same is enclosed as an **Annexure-1**. Photographs of disconnected spray dryer are enclosed as an **Annexure-2**.

What is stated above is true to the best of my knowledge and belief.

For **Coromandel International Limited**

Saw Gal.

(Managing Director)
(DIN - 07298938)

Place: Hyderabad
Date: 11.10.2018

R. DEVADAS ★ NOTARY ADVOCATE APPOINTED BY GOVT. OF T.S. INDIA NOTARIAL No. G.O.M.S. (A.P.) 317/1993 ★ RANGA REDDY DIST., TELANGANA

ATTESTED
R. DEVADAS
ADVOCATE & NOTARY
Appointed By Govt. of T.S. (India)
1-9-28/2, Temple Alwal,
SECUNDERABAD-500 010, T.S.

11 OCT 2018

सत्यमेव जयते
भारत सरकार

आधार

भारतीय विशिष्ट पहचान प्राधिकरण

भारत सरकार
Unique Identification Authority of India
Government of India

नामांकन क्रम / Enrollment No 1385/10013/68610

To,
समीर गोयल
Sameer Goel
S/O: Har Swarup Goel
Ban (62)
Ban Thanesar Kurukshetra
Haryana 136132
9619994573

16/03/2015

For Submission to GPCB.

Sam Goel
11/10/2018

Ref: 385 / 19C / 131839 / 131967 / P

SE580178839FT

आपका आधार क्रमांक / Your Aadhaar No. :

9909 4367 7376

आधार - आम आदमी का अधिकार

भारत सरकार
Government of India



समीर गोयल
Sameer Goel
जन्म तिथि / DOB : 19/01/1963
पुरुष / Male

For Submission to GPCB
Sam Goel
11/10/2018

9909 4367 7376

आधार - आम आदमी का अधिकार

Sr. No. 980383

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD

Ref. No :16340100009780
Date:10-10-2018

To,

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
SECTOR-10A,GANDHINAGAR-3820101
-

Dear Sirs,

BG No.	: 16340100009780
Date of Issue	: 10-10-2018
Amount of BG	: Rs. 35,00,000.00 (RUPEES THIRTY FIVE LAKHS ONLY)
Expiry Date	: 09-04-2019
Claim Expiry Date	: 09-07-2019
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED : COROMANDEL HOUSE : 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

2. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

3. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

4. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No. JIGAR JARDOSH
SS-11658

Encl: Bank Guarantee Number 16340100009780

AXIS BANK LTD.

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No.
RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

Utility Forms Pvt. Ltd/Mumbai/CTS-2010 16 - 02 - 2018



ગુજરાત गुजरात GUJARAT

BL 979408

નં. 5204 તારીખ 10/10/2018 રૂા. 100/-
અંકે રૂપિયા એક સો રૂપિયા પૂરા ની સ્ટેમ્પ ફી સંબંધ સાથે
રૂા. — અંકે રૂા. —
તે બાબ રોજ શ્રી/શ્રીમતી શ્રી એમ.કે. રાઠોડ
રહે. વાપી તા. વાપી ને વેચાણ આપ્યો

લે નારની સહી

Rathod H.T
હેતલ જે. રાઠોડ, સરીગામ લા.નં.૪/૧૭

BANK GUARANTEE NO.16340100009780 DATED 10th OCTOBER, 2018

TO

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
SECTOR-10A, GANDHINAGAR-3820101

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.

JIGAR JARDOSH
SS-11658

For. AXIS BANK LTD.

RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

Authorised Signatory
VAPI BRANCH.

RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

BANK GUARANTEE NO.16340100009780 DATED 10th OCTOBER, 2018

1. In consideration of the Chairman, Gujarat Pollution Control Board, Gandhinagar (hereinafter referred to as 'The Board') having agreed to grant M/s Coromandel International Limited for their unit located at Plot No. 2102, GIDC, Sarigam of the Gujarat State (hereinafter referred to as 'Company/Unit') time for the due compliance of consent conditions/directions for providing adequate and satisfactory pollution control devices as suggested/stipulated vide letter bearing no. **GPCB/CCA-SRG-229(2)/ID:24285/Outward No. 471364 dated 05.10.2018**, of the Board and as required under **section 33-A of Water Pollution (Regulation and Control) Act 1974**, on production of a Bank Guarantee for **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)** We **Axis Bank Limited, a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhakar Marg, Worli, Mumbai- 400 025 and one of its branch office at First Floor, No 6-3-879/B, Green Lands, Begumpet Road, Hyderabad- 500016** (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) at the request of the said **M/s. Coromandel International Limited**, (at whose request the Bank Guarantee is being issued), do hereby undertake to pay to the Board an amount not exceeding **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)** against any non-compliance of consent conditions/directions or damages etc. caused to the environment by reason of any breach of provisions of the said Acts, Notices, letters, instructions, etc. by the said Company/Unit.

2. We **Axis Bank Limited**, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board that the amount claimed is due for the reason of non-fulfillment of undertaking, non-compliance of directions/ notice/ letter/ instruction issued by the Board/ violation of provisions of any of the Bank shall be conclusive as regards the amount due and payment by the Bank under this Guarantee shall be restricted to an amount not exceeding **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only).**

3. We undertake to pay to the Board any money on demand not exceeding Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)not withstanding any dispute or disputes raised by the said Company/Unit in any suit or proceedings pending before any Court or Tribunal or Board against the Board relating thereto, our liability under this present being absolute and irrevocable.

4. The payment so made by us under this agreement shall be valid discharge of our liability and Company/Unit shall have no claim against us in making such payment.

5. We, **Axis Bank Limited** further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the undertaking / notice / letter etc. and that it shall continue to be enforceable till all of the dues of Government / Board under or by virtue of said undertaking / notice / letter etc. have been fully paid and its claims satisfied or discharged or till Government / Board certifies that the terms and conditions of the Directions / Undertaking / Notice / Letter / any provisions of relevant law have been fully and properly carried out and complied by the said Company / Unit and accordingly discharges this guarantee. Unless the demand or a claim under this guarantee is made on us in writing on or before 09-JUL-2019. we shall be discharged from all liability under this guarantee thereafter.

6. We, **Axis Bank Limited**, further agree with the Board that Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said undertaking / notice/letter, etc. or to extend time of compliance by the said Company/Unit from time to time or to

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
JIGAR JARDOSH
SS-11858

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

BANK GUARANTEE NO.16340100009780 DATED 10th OCTOBER, 2018

postpone for any time or from time to time any of the powers exercisable by the Board against the said Company/Unit and to forbear or enforce any of the terms and conditions relating to the said undertaking/notice/letter, etc. and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Company/Unit or for any forbearance, action, commission on the part of the Board or any indulgence by the Board to the Company/Unit or by any or such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of not relieving us. **However, our liability under this bank guarantee is restricted to Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)** and is valid up to expiry of this bank guarantee date **09-APR-2019.** Any claim received after this date will be treated as null and void.

7. The Guarantee will not be discharged during its validity due to the change in the constitution of the Bank or the Company/Unit.

8. We, **Axis Bank Limited**, undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything mentioned herein before,
   - Our liability under this guarantee shall not exceed **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only).**
   - This Bank Guarantee shall be valid up to Dt. **09-APR-2019** and
   - We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before Dt. **09-JUL-2019**

Executed this 10th day of October, 2018 at Hyderabad

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)**. This Bank Guarantee shall be valid up to **09-APR-2019** and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before **09-JUL-2019**.

All claims under the guarantee will be payable at Hyderabad branch at Bank House,Wholesale Banking Operations,2nd Floor, M.No.6-3-244/A & 246,Road No.1 , Banjara Hills, Hyderabad-500034.

This Guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled

Bank Guarantee confirmation No.GTEE/ , is an integral part of Bank Guarantee No. 16340100009780 DATED: 10.10.2018.

DATED 10.10.2018 AT VAPI, GUJARAT

For. AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.

JIGAR JARDOSH
SS-11858

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.

RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

Sr. No. 980385

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD

Ref. No :16340100009782
Date:10-10-2018

To,

GUJARAT POLLUTION CONTROL BOARD,
PARYAVARAN BHACAN
SECTORE10-A,GANDHINAGAR-3820101
-

Dear Sirs,

BG No.	: 16340100009782
Date of Issue	: 10-10-2018
Amount of BG	: Rs. 10,00,000.00 (RUPEES TEN LAKHS ONLY)
Expiry Date	: 09-04-2019
Claim Expiry Date	: 09-07-2019
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED : COROMANDEL HOUSE : 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

2. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

3. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

4. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: JIGAR JARDOSH
SS No. SS-11658

AXIS BANK LTD. VAPI BRANCH

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: RANJIT KUMAR BARNWAL
SS No. AVP & BRANCH HEAD
SS. No. 10349

Encl: Bank Guarantee Number 16340100009782

Utility Forms Pvt. Ltd/Mumbai/CTS-2010 16 - 02 - 2018

UTILITY FORMS PVT LTD(11/12)

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

रु. 100

ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

ગુજરાત गुजरात GUJARAT

BL 979406

નં. ૬૮૦૩ તારીખ ૧૦/૧૦/૨૦૧૮ રૂા. ૧૦૦/-

અંકે રૂપિયા એકસો રૂપિયા પુરા નો સ્ટેમ્પ પેપર સાથે

રૂા. — અંકે રૂા. —

ને આજ રોજ શ્રી/શ્રીમતી કોમલ ગોકળ ઈન્ટરનેશનલ

રહે. વાપી તા. ઉમરગામ ને વેચાણ આપ્યો

સ્ટેમ્પ વેન્ડરની સહી

Rathod H.J

હેતલ જે. રાઠોડ, લાઈસન્સ લા.નં.૪/૧૭

BANK GUARANTEE NO.16340100009782 DATED 10th OCTOBER, 2018

TO
GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
SECTOR-10A, GANDHINAGAR-3820101

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
JIGAR JARDOSH
SS-11658

AXIS BANK LTD. * HUNAPI BRANCH *

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

BANK GUARANTEE NO.16340100009782 DATED 10th OCTOBER, 2018

1. In consideration of the Chairman, Gujarat Pollution Control Board, Gandhinagar (hereinafter referred to as 'The Board') having agreed to grant M/s Coromandel International Limited for their unit located at Plot No. 2102, GIDC, Sarigam of the Gujarat State (hereinafter referred to as 'Company/Unit') time for the due compliance of consent conditions/directions for providing adequate and satisfactory pollution control devices as suggested/stipulated vide letter bearing no. **GPCB/CCA-SRG-229(2)/ID:24285/Outward No. 471364 dated 05.10.2018**, of the Board and as required under **section 33-A of Water Pollution (Regulation and Control) Act 1974**, on production of a Bank Guarantee for **Rs.10,00,000/-(Rupees Ten Lakhs Only)** We **Axis Bank Limited, a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhakar Marg, Worli, Mumbai- 400 025 and one of its branch office at First Floor, No 6-3-879/B, Green Lands, Begumpet Road, Hyderabad-500016** (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) at the request of the said **M/s. Coromandel International Limited**, (at whose request the Bank Guarantee is being issued), do hereby undertake to pay to the Board an amount not exceeding **Rs.10,00,000/-(Rupees Ten Lakhs Only)** against any non-compliance of consent conditions/directions or damages etc. caused to the environment by reason of any breach of provisions of the said Acts, Notices, letters, instructions, etc by the said Company/Unit.

2. We **Axis Bank Limited** do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board that the amount claimed is due for the reason of non-fulfillment of undertaking, non-compliance of directions/ notice/ letter/ instruction issued by the Board/ violation of provisions of any of the Bank shall be conclusive as regards the amount due and payment by the Bank under this Guarantee shall be restricted to an amount not exceeding **Rs.10,00,000/-(Rupees Ten Lakhs Only)**

3. We undertake to pay to the Board any money on demand not exceeding **Rs.10,00,000/-(Rupees Ten Lakhs Only)** not withstanding any dispute or disputes raised by the said Company/Unit in any suit or proceedings pending before any Court or Tribunal or Board against the Board relating thereto, our liability under this present being absolute and irrevocable.

4. The payment so made by us under this agreement shall be valid discharge of our liability and Company/Unit shall have no claim against us in making such payment.

5. We, **Axis Bank Limited**, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the undertaking / notice / letter etc. and that it shall continue to be enforceable till all of the dues of Government / Board under or by virtue of said undertaking / notice / letter etc have been fully paid and its claims satisfied or discharged or till Government / Board certifies that the terms and conditions of the Directions / Undertaking / Notice / Letter / any provisions of relevant law have been fully and properly carried out and complied by the said Company / Unit and accordingly discharges this guarantee. Unless the demand or a claim under this guarantee is made on us in writing on or before **09-JUL-2019**. we shall be discharged from all liability under this guarantee thereafter.

6. We, **Axis Bank Limited**, further agree with the Board that Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said undertaking / notice/letter,

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
JIGAR JARDOSH
SS-11658

AXIS BANK LTD. * VAPI BRANCH *

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.
RANJIT KUMAR BARNWAI
AVP & BRANCH HEAD
SS. No. 10349

BANK GUARANTEE NO.16340100009782 DATED 10th OCTOBER, 2018

etc or to extend time of compliance by the said Company/Unit from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Company/Unit and to forbear or enforce any of the terms and conditions relating to the said undertaking/notice/letter, etc and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Company/Unit or for any forbearance, action, commission on the part of the Board or any indulgence by the Board to the Company/Unit or by any or such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of not relieving us. However, our liability under this bank guarantee is restricted to **Rs.10,00,000/-(Rupees Ten Lakhs Only)** and is valid upto expiry of this bank guarantee date **09-APR-2019**. Any claim received after this date will be treated as null and void.

7. The Guarantee will not be discharged during its validity due to the change in the constitution of the Bank or the Company/Unit.

8. We, **Axis Bank Limited** undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything mentioned herein before,
   - Our liability under this guarantee shall not exceed **Rs.10,00,000/-(Rupees Ten Lakhs Only).**
   - This Bank Guarantee shall be valid up to Dt. **09-APR-2019** and
   - We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before Dt. **09-JUL-2019**

Executed this 10th day of October, 2018 at Hyderabad

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.10,00,000/-(Rupees Ten Lakhs Only).** This Bank Guarantee shall be valid up to **09-APR-2019** and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before **09-JUL-2019.**

All claims under the guarantee will be payable at Hyderabad branch at Bank House,Wholesale Banking Operations,2nd Floor, M.No.6-3-244/A & 246,Road No.1 , Banjara Hills, Hyderabad-500034.

This Guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled

Bank Guarantee confirmation No.GTEE/ , is an integral part of Bank 16340100009782
DATED 10th OCTOBER, 2018

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.

JIGAR JARDOSH
SS-11853

AXIS BANK LTD. * HIJMIBRAMIA * VAPI

For, AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH.

RANJIT KUMAR BARNWAL
AVP & BRANCH HEAD
SS. No. 10349

596

Conditional Revocation

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

BY RPAD

REVOCATION OF CLOSURE ORDER ISSUED UNDER SECTION 33-A OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155.

AND WHEREAS Board has issued Consolidated Consent & Authorization (CC&A), AWH – 84402, dated 22/02/2017 valid upto 30/09/2021 with certain conditions.

AND WHEREAS closure direction was issued under Section 33-A of the Water (Prevention and Control of Pollution) Act, 1974, as amended from time to time vide letter no. GPCB/CCA-SRG-229(26)/ID : 24285/471364 dated 05/10/2018 for the reason stated therein.

AND WHEREAS, you have applied for revocation of closure direction along with relevant details as per that your unit was inspected on 11/10/2018 under Section-23 of the Water Act by the authorized officers of the Board, and observed that:

1. Unit is having two spray dryer at Mancozeb Plant-B & out of which one additional spray dryer is disconnected.
2. Unit has disconnected additional spray dryer by disconnecting (i) Spray Dryer bottom duct line going to Baghouse (ii) Inlet and outlet of blower connected to Baghouse. (3) Feed tank and slurry feed line was disconnected by removing feed pump (iv) Feed line was disconnected from top of spray dryer. (v) Compressed air line from top of spray dryer was disconnected. (vi) Feed ring from top of spray dryer was removed (vii) HAG inlet line going to spray dryer was disconnected and (vii) HAG gas line was disconnected.

AND WHEREAS you have submitted undertaking on Rs 100/- stamp paper dated 11/10/2018.

AND WHEREAS you have submitted the Bank Guarantee of Rs. 45,00,000/- of Axis Bank Limited valid upto 09/10/2019.

Outward No:471241, 16/10/2018

Under the circumstances, I, **Sushil Vegda, Senior Environment Engineer,** Gujarat Pollution Control board is directed to revoke the closure direction dated 05/10/2018 for three months from the date of issue of order with following conditions:

1) You shall apply for EC-Amendment for the additional spray dryer within 3 months and submit the copy of the same.
2) You shall keep your additional spray dryer in complete isolation till you get EC-amendment and CTE.
3) You shall comply with CCA conditions.
4) This order is granted on trial of 3 months.

For and on behalf of
Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-SRG-229(27)/ID:24285/ dated :

Issued to:
M/S. Coromandel International Limited
Plot No. 2102,2104/1,735& 2112/2113,
GIDC Estate, Sarigam,
Tal : Umbergaon, Dist ; Valsad – 396 155.

COPY TO: -

1. **The Deputy Engineer, (O & M),**
Dakshin Gujarat Vij Company Ltd
GIDC Sarigam, Dist : Valsad.

With a request to Re-connect the supply of electricity with immediate effect from the date of issue of this order for three months of **M/S. Coromandel International Limited,** Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

Outward No: [illegible]

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

2. **The Deputy Engineer**
   Gujarat Industrial Development Corporation
   Sarigam, Dist : Valsad.

With a request to Re-connect the water supply with immediate effect from the date of issue of this order for three months of **M/S. Coromandel International Limited,** Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

3. **Regional Officer**
   Gujarat Pollution Control Board
   Sarigam

   For monitoring and sampling under Environmental laws and verify compliances submitted by unit.

For and on behalf of

Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

Outward No:472431,16/10/2018

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

November 21, 2018

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

RECEIVED
Sign.
Date : 26-11-2018
G.P.C. BOARD SARIGAM.

Subject : Submission of Revocation order status.
Ref : GPCB Revocation Letter No. GPCB/CCA-SRG-229(27)/ID: 24285/472431 dated 16/10/2018

Dear Sir,
This has reference to the above. We are hereby submitting status of revocation order along with compliance for remedial measures taken regarding to revocation order issued by GPCB.

Sr. No.	Conditions	Status on 21.11.2018
1.	You shall apply for EC-Amendment for the additional spray dryer within 3 months and submit the copy of the same.	We have applied for EC amendment wide proposal no IA/GJ/IND2/85794/2018. Acknowledgment slip for ToR is attached here for your reference as Annexure – A.
2.	You shall keep your additional spray dryer in complete isolation till you get EC amendment and CTE.	We are pleased to inform you that we have stopped usage of additional spray dryer and it is in completely isolated and not in operation since 10.10.2018. We assure you that we shall start using additional spray dryer only after getting permission from GPCB.
3.	You shall comply with CCA conditions.	We are complying all CCA conditions.
4.	This order is granted on trial of 3 months.	We have applied for EC amendment.

In view of the above, you are kindly requested for permanent revoke of closure order. On account of the same Rs. 4500000/- bank guarantee (Axis Bank BG No. 16340100009780 and BG No. 16340100009782) may kindly be returned.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

26/11/18
Gujarat Pollution Control Board
Sector No. 10 A,
Gandhinagar - 382 010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003. Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz
murugappa

Gmail Coromandel International Limited Sarlgam <coromandel.sarlgam@gmail.cor

Acknowledgement Slip for TOR application

2 messages

monitoring-ec@nic.in <monitoring-ec@nic.in>
To: sk.smree66@nic.In, coromandel.sarigam@gmail.com
Cc: monitoring-ec@nic.in, rupesh.pal@nic.In

Wed, Nov 21, 2018 at 2:46 F

Acknowledgement Slip for TOR

This is to acknowledge that the proposal has been successfully uploaded on the portal of the Ministry. The proposal shall be examined in the Ministry to ensure that required information has been submitted. An email will be sent for seeking additional information , if any, within 5 working days. Once verified, an acceptance letter shall be issued to the project proponent .

Following should be mentioned in further correspondence

1. **Proposal No.** : IA/GJ/IND2/85794/2018
2. **Category of the Proposal** : Industrial Projects - 2
3. **Project/Activity applied for** : 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
4. **Name of the proposal** : M/s. COROMANDEL INTERNATIONAL LIMITED
5. **Date of submission for TOR** : 19 Nov 2018
6. **Name of the Project proponent along with contact details**

   a) **Name of the proponent** : COROMANDEL INTERNATIONAL LIMITED
   b) **Mobile No.** : 7574801724
   c) **State** : Gujarat
   d) **District** : Valsad
   e) **Pincode** : 396155

Sr. No. 936814
Page 1 of 1

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD

Ref.No: 16340100009780
Date : 11-10-2018

To,
GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
SECTOR-10A,GANDHINAGAR-3820101

Dear Sir,

BG No.	: 16340100009780
Date of Issue.	: 10-10-2018
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED COROMANDEL HOUSE 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD
Date of Amendment	: 11-10-2018
Amended Amount of BG	:Rs. 35,00,000.00 (RUPEES THIRTY FIVE LAKHS ONLY)
Amended Expiry Date	: 09-10-2019
Amended Claim Expiry Date	: 09-10-2019

We forward herewith the amendment to the above Inland Bank Guarantee in original issued by us in your favour.

All other terms, conditions and clauses of original Bank Guarantee shall stand unaltered and remain in force till the date of expiry.

Please Note:

The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (Tel/Fax: 022-71315803)

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No.

DIPAN CHOKSHI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No.

P.N. Vaghela
PRIYANKA VAGHELA
MANAGER
EMP No : 60089
S. S. No. - 18725

Encl:Amendment to Bank Guarantee Number 16340100009780

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

ONE HUNDRED

₹.100

भारत INDIA

INDIA NON JUDICIAL

ગુજરાત गुजरात GUJARAT

રૂ. ની ૧૧/૧૦/૨૦૧૮

સ્ટેમ્પ વેન્ડરનો સહી

પટેલ ધર્મેન્દ્રકુમાર જશુભાઇ

ડીસ્ટ્રીક્ટ

Amendment No.01 Dated 11-10-2018

Bank Guarantee No: 16340100009780 Dated 10-10-2018

To

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
SECTOR-10A,GANDHINAGAR-3820101

Extension to our Bank Guarantee No: 16340100009780 Dated 10-10-2018 Issued in your favor behalf of COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED)

DIPAN CHOKSI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

[illegible] VAGHELA
MANAGER
EMP No : 80089
S. S. No. 18725

Amendment No.01 Dated 11-10-2018

Bank Guarantee No: 16340100009780 Dated 10-10-2018

With reference to our Guarantee No: 16340100009780 Dated 10-10-2018 issued in your favor by us on behalf of **COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED)** has been amended as below:

Particulars	Existing	To be read as
Expiry date	09/04/2019	09/10/2019
Claim date	09/07/2019	09/10/2019

All other terms and conditions of our original Guarantee No: 16340100009780 Dated 10-10-2018 remains unchanged.

This amendment forms integral part of our aforesaid guarantee and should be presented along with the original guarantee.

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.35,00,000/-(Rupees Thirty Five Lakhs Only)**. This Bank Guarantee shall be valid up to **09/10/2019** and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before **09/10/2019**.

DATE: 11-10-2018
PLACE: GANDHINAGAR, GUJARAT

DIPAN CHOKSHI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

P.N.Vaghela
PRIYANKA V[illegible]
MANAGER
EMP No : 66080
S. S. No. - 18[illegible]

Amendment No.01 Dated 11-10-2018

Bank Guarantee No: 16340100009780 Dated 10-10-2018

With reference to our Guarantee No: 16340100009780 Dated 10-10-2018 issued in your favor by us on behalf of **COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED)** has been amended as below:

Particulars	Existing	To be read as
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DATE: 11-10-2018
PLACE: GANDHINAGAR, GUJARAT

DIPAN CHOKSHI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

P.N.Vaghela
PRIYANKA V...
MANAGER
EMP No : 60080
S. S. No. - 18726

Sr. No. 936815

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD

Ref.No: 16340100009782
Date : 11-10-2018

To,
GUJARAT POLLUTION CONTROL BOARD,
PARYAVARAN BHACAN
SECTORE10-A,GANDHINAGAR-3820101

Dear Sir,

BG No.	: 16340100009782
Date of Issue.	: 10-10-2018
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED COROMANDEL HOUSE 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD
Date of Amendment	: 11-10-2018
Amended Amount of BG	:Rs. 10,00,000.00 (RUPEES TEN LAKHS ONLY)
Amended Expiry Date	: 09-10-2019
Amended Claim Expiry Date	: 09-10-2019

We forward herewith the amendment to the above Inland Bank Guarantee in original issued by us in your favour

All other terms, conditions and clauses of original Bank Guarantee shall stand unaltered and remain in force till the date of expiry.

Please Note:

The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: DIPAN CHOKSHI
SS No. BRANCH MANAGER
Emp No.81164
S.S. No.17070

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: PRIYANKA VAGHELA
SS No. MANAGER
EMP No : 63089
S. S. No. - 18725

Encl:Amendment to Bank Guarantee Number 16340100009782



ગુજરાત गुजरात GUJARAT

BN 257874

સ્ટેમ્પવેન્ડરની સહી.....
પટેલ [illegible] કાર જશુભાઇ
ડીસ્ટ્રીક્ટ ગાંધીનગર (ઉ.ગુ.)
લા.નં. ૮/૨૦૧૮

Amendment No.01 Dated 11-10-2018

Bank Guarantee No: 16340100009782 Dated 10-10-2018

To

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
SECTOR-10A,GANDHINAGAR-3820101

Extension to our Bank Guarantee No: 16340100009782 Dated 10-10-2018 Issued in your favor behalf of COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED)

DIPAN CHOKSHI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

P.N.Vaghela

[illegible] Page 1 of 2

[illegible] : 50089
S. S. No. - 18735

Amendment No.01 Dated 11-10-2018

Bank Guarantee No: 16340100009782 Dated 10-10-2018

With reference to our Guarantee No: 16340100009782 Dated 10-10-2018 issued in your favor by us on behalf of **COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED)** has been amended as below:

Particulars	Existing	To be read as
Expiry date	09/04/2019	09/10/2019
Claim date	09/07/2019	09/10/2019

All other terms and conditions of our original Guarantee No: 16340100009782 Dated 10-10-2018 remains unchanged.

This amendment forms integral part of our aforesaid guarantee and should be presented along with the original guarantee.

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.10,00,000/-(Rupees Ten Lakhs Only)**. This Bank Guarantee shall be valid up to 09/10/2019 and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before 09/10/2019.

DATE: 11-10-2018
PLACE: GANDHINAGAR, GUJARAT

DIPAN CHOKSHI
BRANCH MANAGER
Emp No.81164
S.S. No.17070

P.N. Vaghela
PRIYANKA VAGHELA
MANAGER
EMP No : 60089
S. S. No. - 18725

NidhiVanparia-Sr.Officer-EMS-Sarigam-Coromandel

From: RahulTyagi-AGM-EMS-Sarigam-Coromandel
Sent: 20 April 2023 13:06
To: NidhiVanparia-Sr.Officer-EMS-Sarigam-Coromandel
Subject: FW: EDS Letter

FYI

From: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel <ShuklaH@coromandel.murugappa.com>
Sent: 17 December 2019 17:06
To: Dr.KamleshP-Sr.Mgr-QC-Sarigam-Coromandel <PatelK@coromandel.murugappa.com>
Subject: FW: EDS Letter

---------- Forwarded message ---------
From: <sk.smree66@nic.in>
Date: Tue, Nov 27, 2018 at 5:21 PM
Subject: EDS Letter
To: <coromandel.sarigam@gmail.com>; shuklah@coromandel.murugappa.com
Cc: <monitoring-ec@nic.in>

Email alert to proponent, if any, other details are sought by concerned Member Secretary after forwarding proposal to MS by proponent

A proposal for TOR, as per the details given below has been examined by the Member Secretary

1. Proposal No.	:	IA/GJ/IND2/85794/2018
2. Category of the Proposal	:	Industrial Projects - 2
3. Project/Activity applied for	:	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
4. Name of the proposal	:	M/s. COROMANDEL INTERNATIONAL LIMITED
5. Date of submission for TOR	:	19 Nov 2018

6. Name of the Project proponent along with contact details

a) Name of the proponent	:	COROMANDEL INTERNATIONAL LIMITED
b) Mobile No.	:	7574801724
c) State	:	Gujarat
d) District	:	Valsad
e) Pincode	:	396155

Please refer para 7 (ii) of the EIA Notification, 2006. As such the present proposal may not require EC from the Ministry.

609

Permanent Revocation

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

BY RPAD

REVOCATION OF CLOSURE ORDER ISSUED UNDER SECTION 33-A OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist : Valsad – 396 155.

AND WHEREAS Board has issued Consolidated Consent & Authorization (CC&A), AWH – 84402, dated 22/02/2017 valid upto 30/09/2021 with certain conditions.

AND WHEREAS closure direction was issued under Section 33-A of the Water (Prevention and Control of Pollution) Act, 1974, as amended from time to time vide letter no. GPCB/CCA-SRG-229(26)/ID : 24285/471364 dated 05/10/2018.

AND WHEREAS above mentioned closure direction was revoked for three months vide letter no.: GPCB/CCA-SRG-229(27)/ID:24285/472431 dated 16/10/2018 for three months with certain conditions.

AND WHEREAS, you have kept the additional spray dryer in isolation.

AND WHEREAS you have submitted undertaking on Rs 100/- stamp paper dated 18/01/2018.

AND WHEREAS you have submitted the Bank Guarantee of Rs. 15,00,000/- valid upto 30/06/2020.

Under the circumstances, I, **Sushil Vegda, Senior Environment Engineer,** Gujarat Pollution Control board is directed to permanently revoke the closure direction from the date of issue of order with following conditions:

1) You shall kept your additional spray dryer in isolation till you obtained CTE.
2) You shall always comply CCA conditions.

For and on behalf of
Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer
Dated :

NO: GPCB/CCA-SRG-229(26)/ID:24285/
Issued to,

M/S. Coromandel International Limited
Plot No. 2102,2104/1,735& 2112/2113,
GIDC Estate, Sarigam.
Tal : Umbergaon, Dist : Valsad – 396 155.

Outward No: 526[illegible]/10/2018

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

COPY TO: -

1. **The Deputy Engineer, (O & M),**
   Dakshin Gujarat Vij Company Ltd
   GIDC Sarigam, Dist : Valsad.

With a request not to dis-connect and continue the supply of electricity with immediate effect from the date of issue of this order of **M/S. Coromandel International Limited**, Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

2. **The Deputy Engineer**
   Gujarat Industrial Development Corporation
   Sarigam, Dist : Valsad.

With a request not to dis-connect and continue the water supply with immediate effect from the date of issue of this order of **M/S. Coromandel International Limited**, Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

For and on behalf of
Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

Outward No:526019, 05/11/2019



ANNEXURE-R-21

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

- M/s. Fesh for record. 14/11/18

RPAD

NOTICE OF DIRECTION UNDER SECTION 31-A OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT-1981. (HEREINAFTER REFERRED TO AS THE "AIR ACT") AS AMENDED FROM TIME TO TIME.

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155.

AND WHEREAS Board has issued Consolidated Consent & Authorization (CC&A), AWH – 84402, dated 22/02/2017 valid upto 30/09/2021 with certain conditions.

And whereas during the inspection of your industrial plant on 30/09/2018 and 28/09/2018 under Section-24 of the Air Act-1981 by the authorized officers of the Board, it has been noticed that:

1. During inspection it was observed that In TMP plant, acidic scrubber for control of pollutants such as NH3 gases, found in operation however scrubbing media pH found @ 9 to 10 pH on pH strip, due to which resulting NH3 gases sensed during inspection.
2. Foul/Bad Odour observed in premises and outside premises.
3. You have provided fogger (De-odarant) system, which was found not in operation during inspection.
4. EA residues/MDC residues kept in HDPE drums in open area on road side of acephate plant.

NOW, therefore the Gujarat Pollution Control Board proposes to issue directions under Section-31 A of the Air Act-1981 as under:-

1. You shall operate your APCM regularly.
2. You shall operate your De-odarant system regularly.
3. You shall submit the action taken report for the control of emission and odour as mentioned above.

4. You shall periodically change the scrubbing media regularly and activated carbon in carbon tower.
5. You shall regularly comply CCA conditions.

You are hereby directed to reply within 15 days on receipt of this notice failing which directions as proposed above will be deemed to be passed without further reference to you.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-SRG-229(27)/ID:24285/ 474945 dated : 05/11/18

Issued to:
M/S. Coromandel International Limited
Plot No. 2102,2104/1,735& 2112/2113,
GIDC Estate, Sarigam,
Tal : Umbergaon, Dist ; Valsad – 396 155.

Copy to:
1. The Regional Officer, Gujarat Pollution Control Board, Sarigam…..To keep close watch on this unit.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

PCB ID: 24285

November 5, 2018,

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of Information against observation made during inspection by GPCB officials dated 28/09/2018 and 30/09/2018.
Ref. : GPCB letter no. GPCB/CCA-SRG-229(26)/ID-24285/474945 dated 05/11/2018

Dear Sir,
This has reference to above. We are submitting hereby Information against observation made during inspection by GPCB officials dated 28/09/2018 and 30/09/2018.

Sr. No.	Observations	Clarification
1.	During inspection it was observed that in TMP plant, acidic scrubber for Control of pollutants such as NH3 gases, found in operation however scrubbing media pH found @ 9 to l0 pH on pH strip, due to which resulting NH3 gases sensed during inspection.	• We have online monitoring system for NH3 scrubber is in place. Its shows all data are well within norms of GPCB prescribed limits. • Further, we have installed online pH meter to monitor scrubber media pH.
2.	Foul/Bad Odour observed in premises and outside premises.	• New deodorant system installed (900 meter with 300 nozzles), which covers 3 side full boundary wall as well as internal plant area. Photo attached as Annexure -1.
3.	You have provided fogger (De-odarant) system which was found not in operation during inspection.	• We are operating deo odorant system continually 24 hrs. • New deodorant system installed (900 meter with 300 nozzles), which covers 3 side full boundary wall as well as internal plant area. Photo attached as Annexure -1.

06/11/18
Gujarat Pollution Control Board
Sector No. 10-A,
Gandhinagar-382010

RECEIVED
G P C Board Sarigam
Sign. Patel Dt. 14/11/18

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE

CIN : L24120TG1961PLC000892

4.	EA residues/MDC residues kept in HDPE drums in open area on road side of acephate plant.	• All 20 nos. of drums have been disposed off & any further generated residue is kept at designated place.

Sr. No.	Directions	Information/Action to be Taken
1.	You shall operate vour APCM regularly.	• We have removed top canopy of incinerator stack to improve dispersion. Now all smoke/water vapours are getting dispersed in less than 8-10 meter distance from stack top. • Incinerator adequacy has been conducted by Schedule 1 auditor & status is found good. Annexure -2 • All online pollutant measurement instrument are re-calibrated by the OEM, also post calibration all parameters are found OK. Report of the same attached as Annexure -3 • Existing online data snap shot of DCS attached as Annexure - 4. • We have installed online pH meter in TMP scrubber and also we are going to install online pH meter in all scrubbers.
2.	You shall operate your De-odorant system regularly.	• We are operating deo odorant system continually 24 hrs. • New deodorant system installed (900 meter with 300 nozzles), which covers 3 side full boundary wall as well as internal plant area. Photo attached as annexure 1.
3.	You shall submit the action taken report for the control of emission and odour as mentioned above.	• All online pollutant measurement instrument are re-calibrated by the OEM, also post calibration all parameters are found OK. Annexure 3. • This incinerator is operated fully as per guidelines issued by GPCB/CPCB. We promise that in case of any temporary weather effect if we notice any inversion then we ourselves will stop the operation of incinerator immediately.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		• We have installed online pH meter in TMP plant scrubber. Also, we are going to install online pH meter in all scrubbers.
4.	You shall periodically change the scrubbing media regularly and activated carbon in carbon tower.	• We are periodically changing scrubbing media regularly. • We have installed online pH meter to TMP plant scrubber and also we are going to install online pH meter in all scrubber. • We are changing carbon in carbon tower regularly.
5.	You shall regularly comply CCA conditions.	• We confirm to meet compliance always.

As known the purpose of putting up the incinerator is to reduce pollution, seeing above facts regarding good operational condition of the incinerator, you are requested to kindly allow 24 hours operation of the incinerator.

We hope you would find the same in line with your requirement and oblige.

Thank You.

Yours Faithfully,
For **Coromandel International Limited**

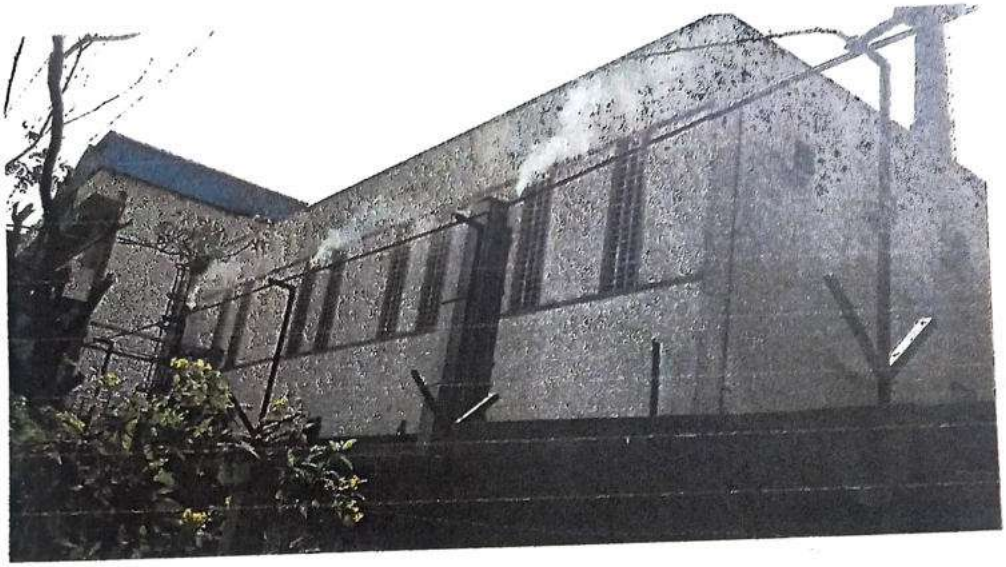
(AVP and Unit Head)

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board

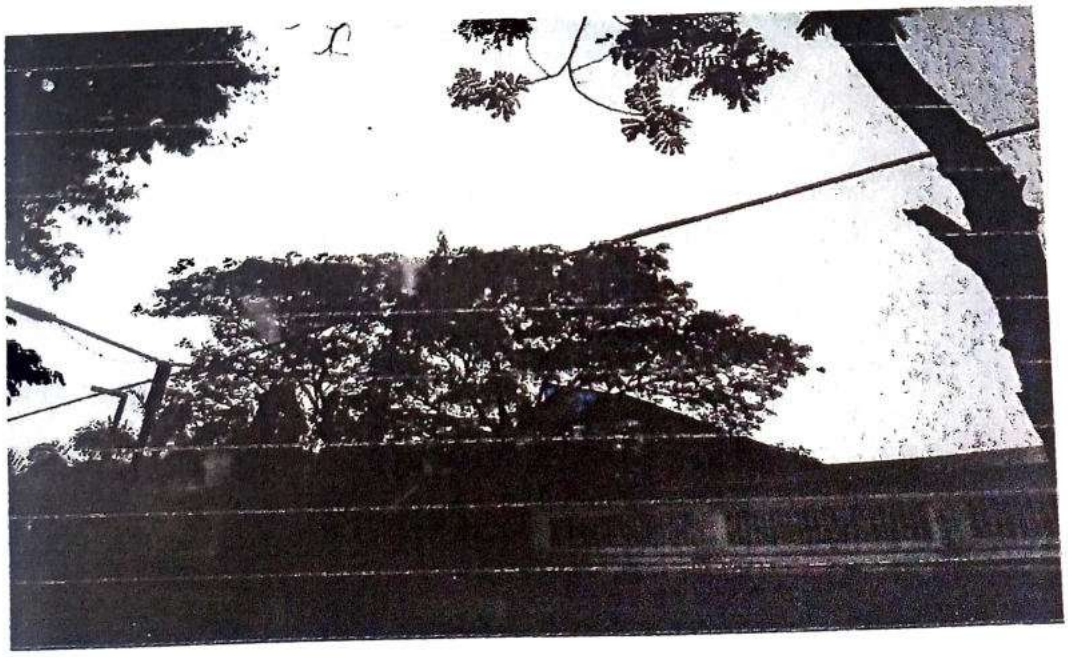
Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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W: www.coromandel.biz

murugappa







VIDYABHARTI TRUST, UMRAKH
SITARAMBHAI NARANJI PATEL
INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE, UMRAKH
Centre for Environmental Research (Environment Audit Cell)

GPCB Approved Schedule I Environment Auditor ISO 9001:2008 Certified
Vidyabharti Campus, At. Umrakh, Ta. Bardoli, Dist. Surat 394 345
Ph. 02622-224581, 220581 Fax. 02622-227481, 225458
email : audit09eac@gmail.com
Visit us on : www.vidyabhartitrust.org Mo. : +91 95374 22112

Ref. No.: SNPIT/CER/18/1144

Date: 25/10/2018

ADEQUACY & EFFICACY VARIFICATION OF INCINERATOR

The Environmental Audit Scheme was introduced by the Gujarat High Court vide its orders dated 20/12/96 & 13/3/97 and modified vide order dated 16/9/99, 22/04/2010 & 23/1/2015. We are recognised by GPCB, Gandhinagar as Schedule- I Environmental Auditor for compliance of the directions of the Hon'ble High Court in this matter and have carried out visit to check & study the adequacy of EMS & pollution load proposed by:

We have carried out adequacy study of Incinerator for **M/s. Coromandel International Limited, Plot No. 2102, GIDC Sarigam – 396155, Dist: Valsad, Gujarat, India.**The study report is enclosed herewith.

(A) M/s. Coromandel International Limited

Plot No.: 2102, GIDC Sarigam – 396155, Dist: Valsad, Gujarat, India

(B) DETAILS OF MANUFACTURING PRODUCTS

Sr. No.	Name of the Products	Capacity MT/Annum (As per CC&A)
GROUP A		
1	Mancozeb (Tech.)	38000
2	Mancozeb (Tech.) + Maneb (Tech.)	38000
3	Mancozeb (Tech.) + Zineb (Tech.)	38000
4	Mancozeb (Tech.) + Propineb (Tech.)	22116
	Total Production capacity of Group A	**38000**
GROUP B		
1	Diethyl Thiophosphoryl Chloride (DETC)	3600
2	DMTC	2160
3	Diafenthiuron	1650
4	Thiamethoxam	1650
5	Pymetrozine	1650

S.N. PATEL INST. OF TECH. & RESEARCH CENTRE UMRAKH Tal. Bardoli Dist. Surat

6	Diflubenzuron	1650
	Total Production capacity of Group B	**3600**
GROUP C		
1	DMTC Amide	4796
	Total Production capacity of Group C	**4796**
GROUP D		
1	Glyphosate (Tech.)	5000
2	PMIDA	3300
	Total Production capacity of Group D	**5000**
GROUP E		
1	Chlorpyriphos (Tech.)	5000
	Total Production capacity of Group E	**5000**
GROUP F		
1	Acephate (Tech.)	7000
	Total Production capacity of Group F	**7000**
GROUP G		
1	Monocrotophos (Tech.)	7000
2	Dicrotophos (Tech)	1485
	Total Production capacity of Group G	**7000**
GROUP H		
1	DDVP (Tech.)	6000
	Total Production capacity of Group H	**6000**
GROUP I		
1	Phosphorous Trichloride (PCl3)	13000
	Total Production capacity of Group I	**13000**
GROUP J		
1	Trimethyl Phosphite (TMP)	9240
2	Triethyl Phosphite (TEP)	5940
	Total Production capacity of Group J	**9240**
GROUP K		
1	Phosphorous Sulphochloride (PSCl3)	2000
	Total Production capacity of Group K	**2000**
GROUP L		
1	Methamidafos (Tech.)	0
	Total Production capacity of Group L	**0**

S. N. PATEL INST. OF TECH. & RESEARCH CENTRE UMRAKH Tal. Bardoli Dist. Surat

GROUP M		
1	Phosphorous Acid	0
	Total Production capacity of Group M	**0**
GROUP N		
1	2-(4-Hydroxy phenoxy) Propionic Acid	429
2	2,3-Difluoro-5-chloro pyridine	353
3	Clodinafop propargyl (Tech.)	933
4	Triclopyr Acid (Tech.)	933
5	Triclopyr Butotyl Ester (Tech.)	933
6	Picloram (Tech.)	495
7	Pretilachlor (Tech.)	933
8	Bispyribac sodium (Tech.)	330
9	Azoxystrobin	52.8
10	Boscalid	660
11	Metalaxyl	933
12	Proclaraz	933
	Total Production capacity of Group N	**933**
GROUP O		
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861
2	Fipronil (Tech.)	933
3	Emmamectin Benzoate (Tech.)	495
4	Difenoconazole (Tech.)	660
5	Triazophos (Tech.)	933
6	Glufosinate Ammonium Salt	933
7	Metribuzin	933
	Total Production capacity of Group O	**933**
GROUP P		
1	Imidacloprid (Tech.)	990
2	Acetamiprid (Tech.)	990
	Total Production capacity of Group P	**990**
BY PRODUCTS		
1	Ammonium Chloride Powder (NH4Cl)	13398
2	Sodium Chloride (NaCl)	8238
3	Sodium Sulphate (Na2SO4)	19779
4	Ammonium Sulphate (NH4)2SO4	8370
Total Production capacity of all Groups and		**160277**

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By-Product	

LIST OF FORMULATION PRODUCT

Sr. No.	FORMULATION PRODUCTS	Qty. MT/Annum
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
	LIQUID FORMULATIONS	
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+ Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650
20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% + Cypermethrine 5% EC	1650
23	Cypermethrin 10% EC	1650
24	Cypermethrin 25% EC	1650
25	Maneb 80% WP	8910
26	Propineb 70% WP	9240
27	Zineb 80% WP	8910
28	Triclopyr Butotyl ester 480 gm/lit	990
29	Methamidophos 600 gm/lit SL	5280
30	Imidaclopyrid 17.8% SL	8580
31	Clodinafop propargyl 15% WP	10230
	Total	**243210**

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(C) SOURCE OF EMISSION AND AIR POLLUTION CONTROL MEASURES (APCM)

SOURCE OF FUEL GAS EMISSION AND APCM:

Sr No.	Stack attached to	Stack height in meter	Air pollution control system	Parameter	Permissible Limit
1	Boiler – 3 Nos.	50	...	PM	150 mg/Nm^3
2	DG sets (1 Nos. of 1000 KVA, 2 Nos.of 500 KVA & 1 Nos. of 200 KVA)	12	...	SO_2 NOx	100 ppm 50 ppm

SOURCE OF PROCESS GAS EMISSION AND APCM:

Sr. no.	Plant	Stack attached to	Stack Height (m)	Air pollution control measures	Parameters	Permissible limit (mg/Nm^3)
1	**Group A**					
	Mancozeb	Mancozeb reactor	30	Air Blower/ Ventury scrubber	CS2 PM SO2	180 20 40
	Mancozeb + Maneb	Maneb reactor				
	Mancozeb + Zineb	Zineb reactor				
	Mancozeb + Propineb	Spray dryer		Water scrubber		
2	**Group B**					
	Diethyl thiophosphoryl chloride (DETC) DMTC	Reactor of monoester & diester	20	Alkali scrubber	HCl	20
3	**Group C**					
	DMTC Amide	DMTC amide reactor	20	Acidic scrubber	NH3	30
4	**Group D**					
	Glyphosate (Tech.)	Slurry preparation	20	Water Scrubber	NH3	30
5	**Group E**					
	Chlorpyriphos (Tech.)	HTCP REACTOR	20	Two scrubber in series water scrubber &	HCl	20

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				alkali scrubber		
6	**Group F**					
	Acephate (Tech.)	Ammonia solution preparation reactor	20	1st Scrubber: Water scrubber 2nd with Acid Media	NH3	30
		Acephate packing area	12	Water scrubber	Odour	Nil
7	**Group G**					
	Monocrotophos or Dicrotophos	Chlorination reactor &neutrilizer	20	Alkaliscrubber	HCl Cl2	20 5
8	**Group I**					
	Phosphorous Trichloride (PCl3)	PCl3 plant reactor & Storage tank	11	Alkali scrubber	HCl Cl2 PCl3	20 5 9
9	**Group J**					
	Trimethyl Phosphite (TMP) or Triethyl Phosphite (TEP)	1)TMP plant reactor & storage tank	20	Acid scrubber	NH3	30
		2)TMP/DETC products storage tank	11	Acid scrubber	Odor	Nil
10	**Group K**					
	Phosphorous Sulphochloride (PSCl3)	PSCl3 plant reactor & storage tank	22	Alkali scrubber	HCl PCl3	20 9
11	**Group M**					
	Phosphoric Acid	Phosphorous acid reactor	20	Water scrubber	HCl	20
12	**Group N**					
	2-(4-Hydroxy phenoxy) propionic		20	Alkali scrubber	HCl	20

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	2,3-Difluoro-5-chloro pyridine					
	Triclopyr acid/Triclopyr					
	Clodinafop Propargyl					
	Picloram	Picloram & Pretilachlor				
	Pretilachlor					
	Bispyribac Sodium					
13	**Group O**					
	5-amino-3-cyno-1-(2,6 dichloro-4-trifloro methyl phenyl) Pyrazole					
	Fipronil	Fipronil reactor	20	Alkali scrubber	HCl	20
	Emmamectin Benzoate					
	Difenoconazole Triazophos					
14	NH_4Cl	NH4Cl storage tank	11	Acid scrubber	NH3	30
15	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent	
	Others					
16	HCl Storage Tank	HCl Storage Tank	11	Alkali scrubber	HCl Cl2	20 5
17	Chlorine Shed	Chlorine Shed	13.5	Alkali scrubber	Cl2	5
18	Drum Filling Station	Drum Filling Station	11	Alkali scrubber	Odor	
19	**Incinerators**	3 Liquid Waste & One Solid Waste	52	Ventury alkali Scrubber	PM SO_2 NOx	50 200 400

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Technical Details of Incinerator

Mc Clelland CALCULATION M/s. Sabero Organics

INCINERATOR – I

Waste	:	Methyl Chloride
Heat Value	:	3200 Kcal/Kg
Feed rate	:	360 Kg/Hr max.
Total heat generated	:	115. 2000 Kcal/Hr
Air required	:	1725 Kg/Hr
Excess air	:	30%
Operating temperature	:	900°C

Combustion products

CO_2	:	315 Kg
H_2O	:	128 Kg
HCl	:	260 Kg
O_2	:	177 Kg
N_2	:	1722 Kg
Heat in flue gas	:	75 X 10^4 Kcal
Heat loss	:	5%

SECONDARY CHAMBER

Operating temperature	:	1000-1100°C
Air added	:	800 M^3/Hr
Gas required	:	122 Nm^3/Hr
Flue gas volume	:	21213 M^3/Hr
Chamber dia	:	2.35 m
Gas velocity	:	1.35 m/s
Chamber height effective.		4.30 m

1

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Mc Clelland		CALCULATION	M/s. Sabero Organics
Residence time	:	3.18 sec.	
		QUENCHER	
Inlet temperature	:	1000-1050°C	
Outlet temperature	:	130°C	
Water evaporated	:	2545 Kg/Hr	
		SCRUBBING	
HCl generated	:	260 Kg	
Neutraling agent	:	Caustic	
Caustic required	:	284 Kg/Hr (100% strength)	
Efficiency	:	90%	
Caustic actual required	:	315 Kg/Hr	
Salt generated (NaCl)	:	416 Kg/Hr	
Max.concentration of Circulation liquid	:	18%	
Effluent generated	:	2300 Ltr/Hr	

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S.N. PATEL INST. OF TECH. & RESEARCH CENTRE
UMRAKH
Dist. Surat

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INTERLOCK DETAILS

1	PSOV-2016 (emergency Cooling water valve)	1	QUENCHER TEMP. TE-1006 High	≥	150	°C	Ok	Valve PSOV-2016 opens
2	Natural Gas Burner-1,2,3,4	1	QUENCHER outlet TEMP. TE-1006 High	≥	160	°C	Ok	Natural Gas Burner-1,2,3,4 trips
		2	Scrubber outlet duct temp TE-1007 high	≥	90	°C	Ok	
		3	PCC (20501) pressure high	≥	+15 mmWC	kg/cm2	Ok	
		4	SCC (20502) pressure high	≥	+15 mmWC	kg/cm2	Ok	
		5	Quencher pump stops	-	-	-	-	
		6	ID fan (ID-20506) trips	-	-	-	-	
		7	Combustion Air fan trips 30HP	-	-	-	-	
		8	PCC (20501) Temperature High	≥	850	°C	OK	
		9	SCC (20502) Temperature High	≥	1150	°C	OK	
			PCC (20501) Temperature Low	≤	825	°C	OK	Start command to NG burner start
		7	SCC (20502) Temperature Low	≤	1125	°C	OK	
3	MeCl gas feeding valve	1	QUENCHER TEMP. TE-1006 High	≥	160	°C	Ok	MeCl valve closed
		2	Scrubber outlet duct temp TE-1007 high	≥	90	°C	Ok	
		3	PCC (20501) pressure high	≥	+15 mmWC	kg/cm2	Ok	
		4	SCC (20502) pressure high	≥	+15 mmWC	kg/cm2	Ok	
		5	Quencher pump stops	-	-	-	-	
		6	ID fan (ID-20506) trips	-	-	-	-	
		7	Root Blower stops	-	-	-	-	
4	Vent valve of Primary (XV-2014) and secondary chamber (XV-2015)	1	PCC (20501) pressure high PS-2001	≥	+15 mmWC	kg/cm2	Ok	Vent valve opens
		2	SCC (20502) pressure high PS-2002	≥	+15 mmWC	kg/cm2	Ok	
		3	Quencher pump stops	-	-	-	-	
		4	NG burner-1,2,3,4 trips	-	-	-	-	
		5	ID fan (ID-20506) trips	-	-	-	-	
5	Root Blower	1	Combustion Air fan trips 15 HP					Root Blower stops
6	Feed water valve in Alkali tank	1	LS-4005 level switch low, alkali tank level low	-	-	-	-	Water valve will open
		2	LS-4006 level switch high, alkali tank level high	-	-	-	-	Water valve will close
7	SCRUBBER CIRCULATION PUMP	1	LS-4007 level switch low-scrubber level low	-	-	-	-	Pump trips
8	Audio/Visual Alarm	1	All NG burner trip	-	-	-	-	Hooter activates
		2	Vent valve of PCC (XV-2014) open	-	-	-	-	
		3	Vent valve of SCC (XV-2015) open	-	-	-	-	
				-				

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NO	TAG NO:	DESCRIPTION
1	PCC-20501	PRIMARY COMBUSTION CHAMBER
2	SCC-20502	SECONDARY COMUSTION CHAMBER
3	QCH-20503	QUENCHER
4	V-20504	VENTURI
5	PBR-20505	PACKED BED SCRUBBER
6	ID-20506	ID FAN
7	CH-20507	CHIMNEY
8	CA-20508 A	CA FAN
9	CA-20508 B	CA FAN
10	RB-20510 A/B	ROOT BLOWER
11	NBR 20501 A/B	NATURAL GAS BURNER
12	NBR 20502 A/B	NATURAL GAS BURNER
13	VBR 20503	VENT GAS BURNER
14	VBR 20504	VENT GAS BURNER
15	VBR 20505	VENT GAS BURNER
16	ABR 20506	AQUEOUS WASTE BURNER
17	OBR 20507	ORGANIC WASTE BURNER
18	T-20501	EMERGENCY WATER TANK
19	T-20502	ALKALI DOSING TANK
20	T-20503	QUENCHER CIRC.TANK
21	P-20507 A/B	QUENCHER CIRCULATION PUMP
22	P-20508 A/B	ALKALI CIRCULATION PUMP
23	P-20509 A/B	SCRUBBER CIRCULATION PUMP

LEGEND:-

- VALVE (TYP.)
- ACTUATOR
- DAMPER
- SPECIAL VALVE
- Y-TYPE STRAINER
- CA FAN
- MOTOR
- METERING PUMP
- LIGHTNING ARRESTOR
- FLAME ARRESTOR
- ROOTS BLOWER
- CENTRIFUGAL/INLINE PUMP (MOTOR DRIVEN)
- GRAPHITE COOLER
- INTERLOCK
- SOLENOID VALVE
- RATIO TPDL
- IMPULSE TUBING
- PLC INDICATION
- C- CLIENT
- V- VENDOR

NO	TAG NO:	DESCRIPTION
1	TE 1001	TEMPERATURE ELEMENT
2	TT 1001	TEMPERATURE TRANSMITTER
3	TE 1002	TEMPERATURE ELEMENT
4	TT 1002	TEMPERATURE TRANSMITTER
5	TE 1003	TEMPERATURE ELEMENT
6	TT 1003	TEMPERATURE TRANSMITTER
7	TE 1004	TEMPERATURE ELEMENT
8	TT 1004	TEMPERATURE TRANSMITTER
9	TE 1005	TEMPERATURE ELEMENT
10	TT 1005	TEMPERATURE TRANSMITTER
11	TE 1006	TEMPERATURE ELEMENT
12	TT 1006	TEMPERATURE TRANSMITTER
13	TE 1007	TEMPERATURE ELEMENT
14	TT 1008	TEMPERATURE TRANSMITTER
15	TG 1008	TEMPERATURE GAUGE
16	TG 1009	TEMPERATURE GAUGE
17	TG 1010	TEMPERATURE GAUGE
18	PS 2001	PRESSURE SWITCH
19	PS 2002	PRESSURE SWITCH
20	PS 2003	PRESSURE SWITCH
21	PS 2004	PRESSURE SWITCH
22	PT 2005	PRESSURE TRANSMITTER
23	PG 2006	PRESSURE GAUGE
24	PG 2007	PRESSURE GAUGE
25	PG 2008	PRESSURE GAUGE
26	PG 2009	PRESSURE GAUGE
27	PG 2010	PRESSURE GAUGE
28	PG 2011	PRESSURE GAUGE
29	PG 2012	PRESSURE GAUGE
30	DPG 2013	DIFFERENTIAL PRESSURE GAUGE
31	PSOV 2014	SOLENOID VALVE
32	PV 2014	ACTUATOR
33	PSOV 2015	SOLENOID VALVE
34	PV 2015	ACTUATOR
35	PSOV 2016	SOLENOID VALVE
36	PV 2016	ACTUATOR
37	PSOV 2017	SOLENOID VALVE
38	PV 2017	ACTUATOR
39	PSOV 2018	SOLENOID VALVE
40	PV 2018	ACTUATOR
41	PSOV 2019	SOLENOID VALVE
42	PV 2019	ACTUATOR

NO	TAG NO:	DESCRIPTION
43	PSOV 2020	SOLENOID VALVE
44	PV 2020	ACTUATOR
45	PSOV 2021	SOLENOID VALVE
46	PV 2021	ACTUATOR
47	PSOV 2022	SOLENOID VALVE
48	PV 2022	ACTUATOR
49	PSOV 2023	SOLENOID VALVE
50	PV 2023	ACTUATOR
51	PSOV 2024	SOLENOID VALVE
52	PV 2024	ACTUATOR
53	PSOV 2025	SOLENOID VALVE
54	PV 2025	ACTUATOR
55	PSOV 2026	SOLENOID VALVE
56	PV 2026	ACTUATOR
57	PSOV 2027	SOLENOID VALVE
58	PV 2027	ACTUATOR
59	PSOV 2028	SOLENOID VALVE
60	PV 2028	ACTUATOR
61	PSOV 2029	SOLENOID VALVE
62	PV 2029	ACTUATOR
63	PI 2030	MANOMETER
64	AT 3001	PH TRANSMITTER
65	AT 3002	PH TRANSMITTER
66	LS 4001	LEVEL SWITCH
67	LS 4002	LEVEL SWITCH
68	LS 4003	LEVEL SWITCH
69	LS 4004	LEVEL SWITCH
70	LS 4005	LEVEL SWITCH
71	LS 4006	LEVEL SWITCH
72	LS 4007	LEVEL SWITCH
73	LS 4008	LEVEL SWITCH
74	LG 4009	LEVEL GAUGE
75	LG 4010	LEVEL GAUGE
76	LG 4011	LEVEL GAUGE
77	LG 4012A	LEVEL GAUGE
78	LG 4012B	LEVEL GAUGE
79	FT 5001	FLOW TRANSMITTER
80	FE 5001	FLOW ELEMENT
81	TCV 1001	TEMPERATURE CONTROL VALVE
82	TCV 1002	TEMPERATURE CONTROL VALVE
83	TCV 1003	TEMPERATURE CONTROL VALVE
84	TCV 1004	TEMPERATURE CONTROL VALVE

LINE DESIGNATION

RAW WATER	: RW
NATURAL GAS (COMPRESSED)	: NG
INSTRUMENT AIR	: IA
AQUEOUS WASTE	: AW
COMBUSTION AIR	: CA
ALKALI (CAUSTIC)	: AL
QUENCHED SOLUTION	: QW
SCRUBBED SOLUTION	: SW
FLUE GAS	: FG

MOC DESIGNATION

CS	: CARBON STEEL
SS	: STAINLESS STEEL
MS(RL)	: MILD STEEL (RUBBER LINED)
PP(FRP)	: POLY PROPINE (FRP)

LINE IDENTIFICATION

____**__**

LINE NO.
MOC
LINE SIZE
SERVICE

M/s CLELAND ENGINEERS PVT.LTD.

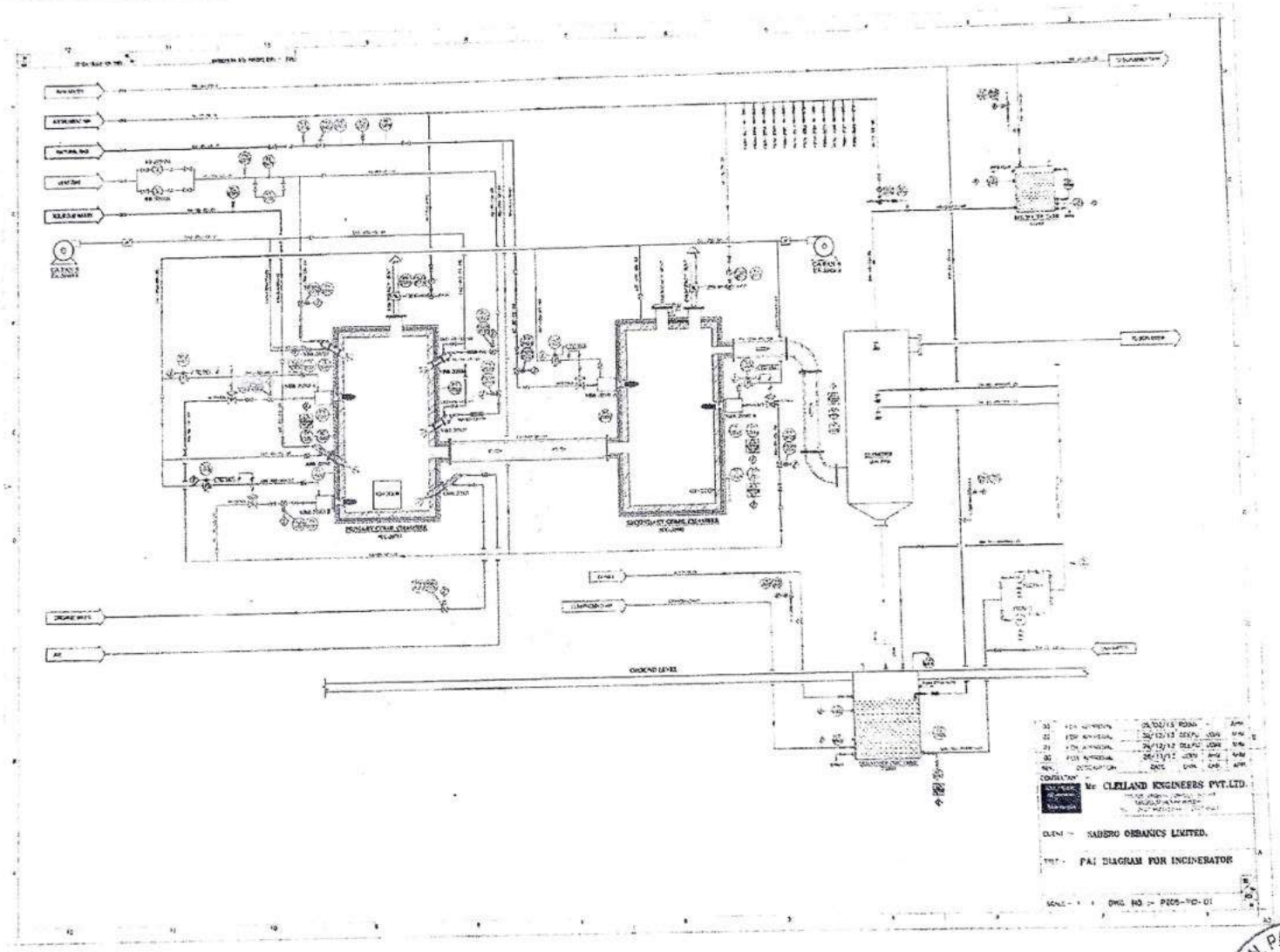
CLIENT : SABERO ORGANICS LIMITED

TITLE : P&I DIAGRAM FOR INCINERATOR (TAG Nos & SYMBOLS)

627

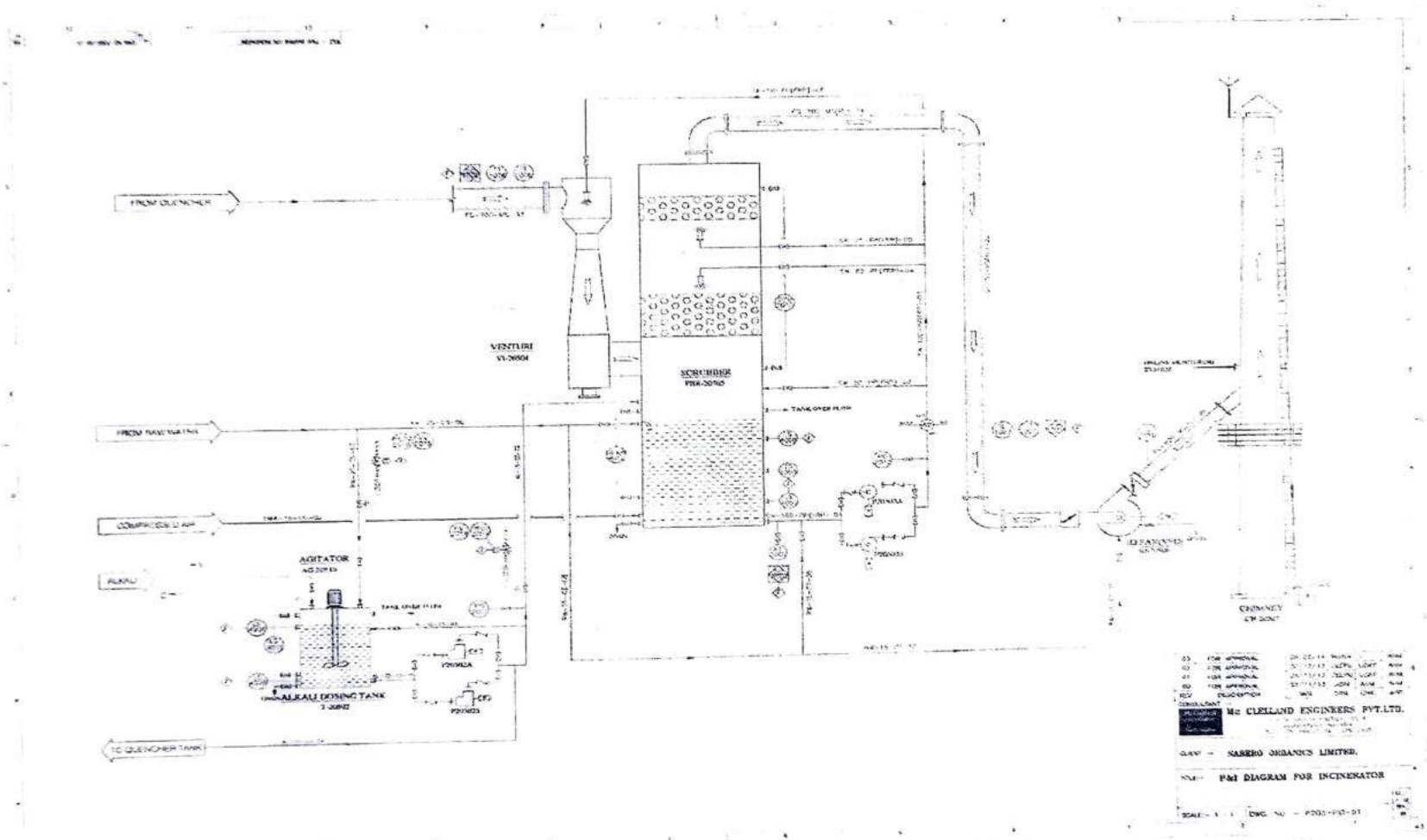
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S. N. PATEL INST. OF TECH. & RESEARCH CENTRE

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TEST REPORT

Customer's Name and Address:

M/s Coromandel International Limited
2102, GIDC Sarigam – 396155, Dist: Valsad, Gujarat, India

DETAILS OF STACK VENT

Sr. No.	Description	Unit	Data
1.	Stack Height	meter	52
2.	Temperature of Flue Gas	°C	92
3.	Velocity of Flue Gas	m/sec.	6.60
4.	Type of Fuel	---	Natural Gas

RESULT TABLE

Sr. No.	Parameter	Unit	GPCB Norms	Result	Test Method
1.	Particulate Matter	mg/Nm^3	50	48.05	IS 11255 (Part 1) (1985, Reaffirmed 2012)
2.	Sulphur Dioxide (SO_2)	ppm	200	16.72	IS 11255 (Part 2) (1985, Reaffirmed 2009)
3.	Nitrogen Oxide (NO_X)	ppm	400	10.6	IS 11255 (Part 7) (2005, Reaffirmed 2012)

The adequacy study of the incinerator of the waste is mainly based on Guidelines for Common Hazardous Waste Incineration, published by CPCB, New Delhi. All the relevant data are provided by the client. Based on the study we certify that design and operation of incinerator is adequate and efficacious for the treatment of MaCl Gas generated.

K D Rana 25/10/18

Mr. Kamal D. Rana
(Co-Ordinator)

Mr.Vyom B.Pathak
(Head of Laboratory)

Audit Team member	Signature
Mr. Karan R.Bhandari **B.E (Env.)** Environmental Engg.	
Mr. Kamal D.Rana **M.E. (Environment), B.E. (Chemical),** Chemical Engg.	K D Rana
Mr. Dharmesh T.Patel **B. Sc (Chemistry)** Chemist	
Mr. Pinesh M. Maheta **B.Sc. (Micro.), M.Sc.(Bio-tech)** Microbiologist	

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BHOOMI®

An ISO 9001:2008 Certified Company

CERTIFICATE OF CALIBRATION

Make: - Bhoomi

Model: BI-7000

Product Type: - Continuous Emission Monitoring System

Serial No.:- 5000401

Customer: - Coromandel International Limited, Sarigam

Bhoomi Analyzers certifies that the above listed instrument was calibrated on date noted and was released from laboratory performing in accordance with specifications.

Our calibration system complies with the requirements of ISO 17025:2005 standard and traceable to the International System of Units.

Sr. No.	Gas Type	Certified Gas Concentration	Electronics Reading
1	Oxygen Low	1.97 %	1.98 %
2	Oxygen High	20.95 %	20.95%
3	Carbon Monoxide	714 ppm	713 ppm
4	Nitric Oxide	412 ppm	413 ppm
5	Sulphur Dioxide	437 ppm	436 ppm
6	Carbon Dioxide	12.20 %	12.22 %

Reference Gas Nos: O2-CSL-39193 Dt. 11-6-18, CO-CSL-38478 Dt. 08-09-18, NO-CSL-43217 Dt. 8-09-18, SO2 - CSL-39685 Dt. 11-06-2016, CO2-CSL-39193 Dt. 11-6-18

Bhoomi Analyzers ★ Ambernath (E) ★

Calibration Date: - 06 October, 2018 Issued By: Aalishan Shaikh

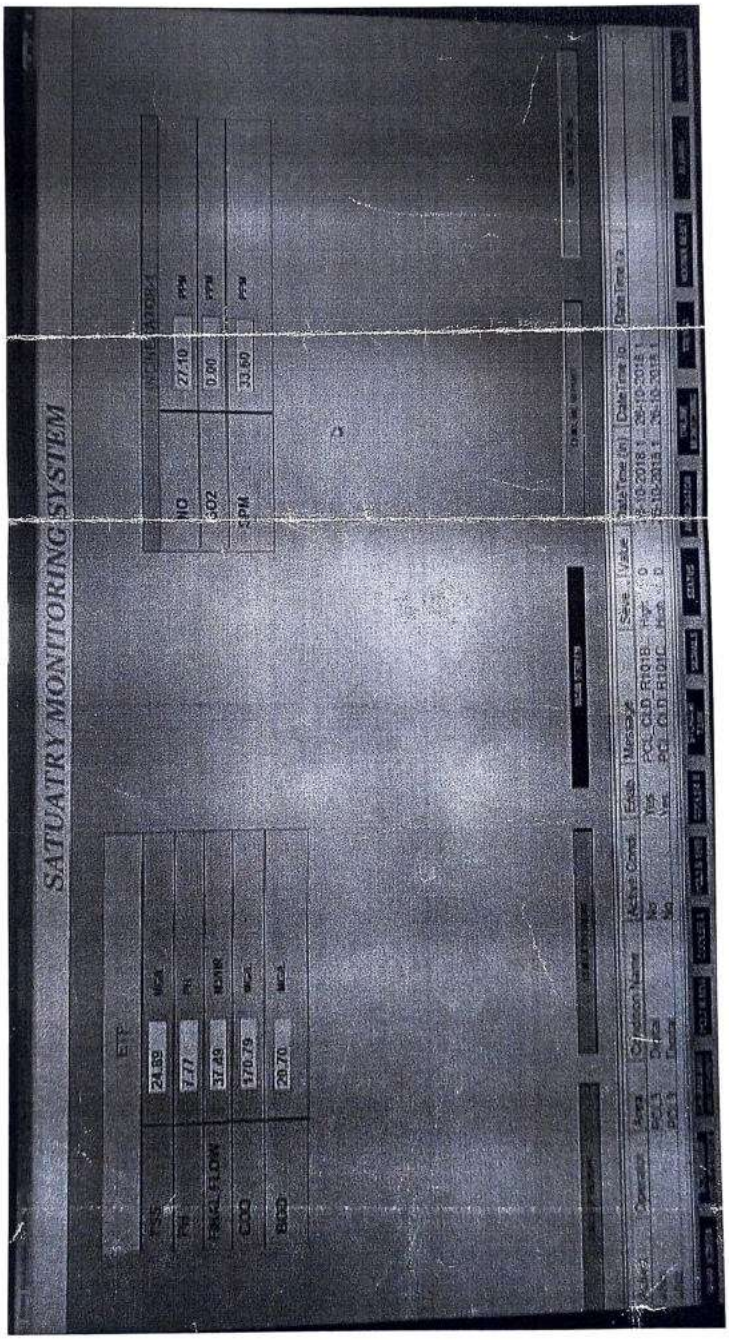
Calibration Due Date: - 05 October, 2019 Calibrated By: Mr. Vivek Kadam

Bhoomi Analyzers

Head Office :
209, 4th Floor, Avior, Nirmal Galaxy,
Mulund (W) Mumbai - 400080

Works Address :
Unit No. 207/208, G Wing, Udyog Bhavan-2,
Plot No. K-3, Additional Ambernath Industrial Area,
Near Ananad Nagar, MIDC, Ambernath (East),
Thane - 421506 Maharashtra.

Contact :
✆ : +91-22-25916858 / 6916
✆ : +91- 251-2620539
✉ : sales@bhoomiltd.com
🌐 : www.bhoomiltd.com


SATUATRY MONITORING SYSTEM
ETP
PH
TSS
COD
BOD
TRIAL FLOW
21.89
7.77
37.49
170.79
20.70
NH3
2.10
0.00
33.60
TRUE COPY
ADVOCATE

ANNEXURE-R-22

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(173)

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

15th April, 2019

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of Revocation Application Against Closure Order
Ref : GPCB Closure Letter No. GPCB/CCA-SRG-229(26)/ID: 24285/492844 dated 29/01/2019

Dear Sir,
This has reference to the above. We are hereby submitting application for revocation application along with compliance for remedial measures taken and to be taken against closure order issued by GPCB.

In line of the above, we request you to appreciate our corrective & preventive actions to prevent further occurrence of similar incident in future by issuing the revocation order at your earliest & oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

Encl:
1. Application for Revocation of Closure Order.
2. Undertaking

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

RECEIVED
Sign.
Date : 16-04-2019
G.P.C. BOARD SARIGAM.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

(175)

Application for Revocation of Closure Order

SR. NO.	DESCRIPTION		
1.	Full name and address of the unit	:	**M/s. Coromandel International Limited** Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate Sarigam, Tal: Umbergaon, Dist. Valsad- 396155, Gujarat.
2.	GPCB ID	:	24285
3.	No. and date of closure for which the revocation is sought for	:	GPCB Closure Letter No. GPCB/CCA-SRG-229(26)/ID: 24285/492844 dated 29/01/2019
4.	Date of disconnection of electric supply	:	04/02/2019
5.	Date of disconnection of water supply	:	12/02/2019
6.	Remedial measures taken to control the pollution (in the table mentioned below)		

Sr. No.	Reason of closure	Remedial measures taken	Date of completion of the measures	Where compliance requires more than 7 days time, likely date of its completion
1.	Fire accident occurred at 03:30 pm at product storage godown - B having stock of Mancozeb@ 500 MT & Acephate@ 100 MT.	We have taken following remedial measures. a) Firefighting was carried out by our employees using the internal fire hydrant system. In addition, we were also supported by the fire brigades/fire tenders from Notified Areas of Sarigam, Vapi, Umbergaon and Daman and also from close-by industries like Reliance Industries, Alok Industries and Huber Group. b) We ensured that fire did not spread outside the godown by taking appropriate preventive measures like activating the water curtains, switching off the electrical power, shutting down the production plants, etc. c) After controlling the fire with water, foam and sand were applied to prevent the unburnt material from	Completed	--

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		completion by 31st July, 2019. c) We will install turbo-ventilators for evacuating flammable vapours in warehouse. Target completion by 15th May, 2019. d) We will install CCTVs in the warehouses and in other critical locations in the factory for early detection of abnormalities. Procurement action has already been initiated and installation will be completed by 31st May, 2019.		2019. 15th May, 2019. 31st May, 2019.
5.	Still you have failed to control air pollution due to such accident.	After extinguishing fire, we have immediately covered material with sand media and controlled air pollution due to fire incident. We would like to inform you that We have provided leak detectors in CS2, ammonia & Chlorine storage area. Scrubber systems are provided in ammonia, chlorine & HCl storage area. Water curtain is provided in ammonia & chlorine area for any containment.	Completed	--
6.	You have also failed to control water pollution due to such accident.	During firefighting, very small quantity of the water found its way outside the premises, which was immediately contained by putting sand bags. The water which went out was also brought back and stored in ETP storage tanks, in the presence of local GPCB officials.	Completed	--
7.	Where remedial measure to mitigate pollution are likely to last more than 7 days, an undertaking (on stamp paper of Rs. 100/- duly signed and sealed by the Notary) shall be submitted to GPCB stating the measures and likely date of their completion. In addition to this, the company shall also undertaken to comply with	:	Enclosed as an **Annexure-1**.	

(79)

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

भारत INDIA

INDIA NON JUDICIAL

తెలంగాణ తెలంగానా TELANGANA U 467959

S.NO: 1092 DATE:28/03/2019 RS 100/-
SOLD TO : D RANGA REDDY
W/D/S/O : D SHIVA RAM REDDY
FOR WHOM:M/S COROMANDEL INTERNATIONAL LIMITED
R/O : SEC BAD

The Advocate's Co-op Society
Rep by. Prahlad Patil, Licenced Stamp Vendor
Lic No. 1609-025 of 2014
Renewal License No 16-07-040/2017
City Civil Court Premises, Secunderabad,
Telangana State

UNDERTAKING

I, the undersigned, Mr. **Sameer Goel S/o Mr. Har Swarup Goel**, aged 56 Years, **Managing Director and Occupier** of **M/s. Coromandel International Limited** having its Registered office situated at Coromandel House, 1-2-10, Sardar Patel Road, Secunderabad, Telangana and a factory located at Plot No. 2102, 2104/1, 735 & 2112/2113, GIDC Estate, Sarigam - 396155, Tal: Umbergaon, Dist. valsad, Gujarat, hereby solemnly undertake and submit as below :

That:

1. When the fire incident took place at the said factory on 28/01/2019, we handled the situation effectively by containing the fire within the godown, prevented spreading of fire and avoided any injury or casualty. We ensured that there was no damage caused to any nearby properties / facilities, by taking the following measures promptly:

R. DEVADAS NOTARY ADVOCATE APPOINTED BY GOVT. OF A.P. INDIA RANGA REDDY TELANGANA

Samer Goel

(181)

b) In addition to the safety systems we had already provided in godowns, we plan to install water sprinkler system as additional safety measure. Target completion by 31st July, 2019.
c) We will install additional turbo-ventilators for evacuating flammable vapours in warehouse. Target completion by 15th May, 2019.
d) We plan to cover the warehouse with CCTVs for early detection. Procurement action has already been initiated and installation will be completed by 31st May, 2019.

As part of improving safety in the factory, we have already provided
i. leak detectors in CS2, ammonia and chlorine storage area,
ii. scrubber systems are in place in ammonia, chlorine and HCl storage areas,
iii. water curtain system is installed in ammonia and chlorine areas

M/s DuPont India has been engaged to improve safety culture in the organization, for strengthening the behavioural aspects of our people.

Whatever is stated above are true and correct to the best of my knowledge and belief.

For **Coromandel International Limited**

COROMANDEL INTERNATIONAL LTD. SECUNDERABAD

Sameer Goel

Sameer Goel
(Managing Director)
(DIN – 07298938)

Place: Secunderabad
Date: 13th April, 2019

R. DEVADAS NOTARY ADVOCATE APPOINTED BY GOVT. OF T.S. INDIA Regd No. C.O.NOS/A.P./R.R./1017/1 98 RANGA REDDY DIST., TELANGANA

ATTESTED
13/4/2019
R. DEVADAS
ADVOCATE & NOTARY
Appointed By Govt. of T.S. (India)
1-9-28/2, Temple Alwal,
SECUNDERABAD-500 010, T.S

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000852

May 28, 2019

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 - A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents for revocation purpose

Dear Sir,
This has reference to the above. We are hereby submitting following additional documents as asked by your good office for revocation purpose.

1. Compliance reports of Directorate of industrial safety and Health - DISH (Visit remarks dated :02.02.2019) along with supporting documents
2. Compliance report of Fire adequacy audit by M/s. Chola MS along with supporting document
3. Compliance Report of Hazop Critical Points along with supporting document
4. Fire NOC from Notified area office
5. NOC from Electrical department.
6. Copy of agreement with Dupont for long term engagement

In line of the above, we request you to appreciate our corrective & preventive actions to prevent further occurrence of similar incident in future by issuing the revocation order at your earliest & oblige.

RECEIVED
Sign.
Date : 30-05-2019
G.P.C. BOARD SARIGAM.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

29/05/19
Gujarat Pollution Control Board
Head Office
Sector No. 10-A,
Gandhinagar-382010.

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Compliance reports of Directorate of industrial safety and Health (DISH)

With reference to DISH visit remarks dated 02.02.2019, please find attached here with the compliance report

Sr. No.	Visit remarks	Compliance status dated 14.5.2019	Status date 24.05.2019
1	The activities like dismantling of MS Structure and disposal of semi-burnt material of warehouse-B should be carried out under experienced manpower including persons from Mechanical, Civil, Chemical and Safety Dept. and by following Permit to Work System.	Complied – MS structure and material disposal had been carried out under the strict and continuous supervision of experienced manpower from Mechanical, Civil, Chemical and Safety Dept. and the Permit to Work System was being followed strictly. Attached photographs of warehouse – B area as Annexure-1.	Complied (Annexure – 1)
2	For re-construction of warehouse – B, company has to take prior Plan Approval from DISH	Noted and will be compiled, whenever re-construction is planned.	Noted & Complied
3	After re-construction of Warehouse – B as per approved plan, take Stability Certificate from Competent Person with Load calculation details as per Form No. 1A prescribed under Rule – 3C of GFR 1963.	Noted and will be compiled whenever re construction is planned.	Noted & Complied
4	In Warehouses, install material racks by keeping appropriate distance from the side walls	Noted and will be implemented in due course.	Noted & Complied.
5	Install smoke detectors inside the warehouse to cover all the material racks	Noted, smoke Detectors will be installed by 31.07.2019.	Purchase orderplaced on 2.5.2019, Erection scheduled by 31.7.2019, till then manpower will be placed on 24 hours basis. Annexure – 2
6	Make provision of water sprinkler system inside / outside the warehouse for fire protection purpose	Plan is made for providing water sprinkler system in warehouse work in under progress, will be installed by 30.06.2019.	Purchase order placed on 11.5.2019, Erection under progress & will be completed by 31.5.2019, till then manpower will be placed on 24 hours basis.Annexure – 3.
7	Electrical fittings / cabling should be of flameproof type.	All fittings used in warehouse is of flame proof nature.	Complied

Annexure – I

SOLID WASTE PHOTOS

BEFORE



Top view from (Mancozeb plant) East to West direction



View from (warehouse-C) north to south direction

AFTER



Top view from (Mancozeb plant) East to West direction



View from (warehouse-C) north to south direction

To,
M/S. SHAYONA TECHNOLOGIES
NR.UPVAN LANE,THANE(W)
1201, VENUS GAWAND BAUG,
MUMBAI,MUMBAI,Maharashtra
India Pin: 400610
Ph: 022-25383825 9820774792
PAN No: AOOPP7141M
GSTIN:27AOOPP7141M1Z8

Vendor code assigned to you ==> 444257

Purchase Order (Page 1 of 11)

PO Number/Date : 3723327 / 02.05.2019
Contact Name/Ph: Sarigam-Project /

Your Quote Ref : 28876 / 02.03.2019

Our Particulars
PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
GSTIN : 24AAACC7852K1ZJ

Please deliver to:
Coromandel International Ltd.,
COROMANDEL INTERNATIONAL LIMITED
Plot No - 2102 ,GIDC ,Tal:UMERGAM
SARIGAM 396155
Valsad DISTRICT,Gujarat,India

Po Validity: 14.05.2019 To 31.12.2019

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
1	4244160 *85319000*	FIRE ALARM CONTROL PANEL, MODEL 200-2/2 FIRE ALARM SYSTEM,MAKE: 854 character display SUITABLE FOR 6 LOOP AND EXPANDABLE UPTO 8 LOOP, NETWORKABLE PANEL , WITH POWER BACK UP BATTERIES	1 NO		1.000 Nos	
		BASIC PRICE		553500.00		553500.00
		JIIG - IN: Integrated GST		18.00 %		99,630.00 0.00
		T O T A L Delivery Date : 02.07.2019				653130
2	4242645 *84713090*	MODULAR TYPE WORK STATIONS Trusite Work station - without PC- Specs to be given	1 NO		1.000 Nos	
		BASIC PRICE		186300.00		186300.00
		JIIG - IN: Integrated GST		18.00 %		33,534.00 0.00

Purchase Order (Page 2 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		T O T A L				219834
		Delivery Date : 09.07.2019				
3	4244161 *85319000*	ACTIVE REPEATER PANEL, MODEL NRP01 FIRE ALARM SYSTEM,MAKE:FAS,640 character Repeater Panel	1 NO		6.000 Nos	
		BASIC PRICE		49000.00		294000.00
		JIIG - IN: Integrated GST		18.00 %		52,920.00
						0.00
		T O T A L				346920
		Delivery Date : 02.07.2019				
4	4302866 *85319000*	SMOKE DETECTOR NON FLP WITH ACCESSORIES Non FLP Smoke Detector with accessories Sensor technology: Optical Power supply: Through Main Panel Mounting: Ceiling Body Enclosure: Safe area	1 NO		166.000 Nos	
		BASIC PRICE		2900.00		481400.00
		JIIG - IN: Integrated GST		18.00 %		86,652.00
						0.00
		T O T A L				568052
		Delivery Date : 02.07.2019				
5	4302867 *85319000*	HEAT DETECTOR NON FLP WITH ACCESSORIES Non FLP Heat Detector with accessories Sensor technology: Thermister Sensing Type: Addressable Power supply: Through Main Panel Mounting: Ceiling Body Enclosure: Safe area	1 NO		20.000 Nos	
		BASIC PRICE		2900.00		58000.00
		JIIG - IN: Integrated GST		18.00 %		10,440.00
						0.00
		T O T A L				68440
		Delivery Date : 02.07.2019				

Purchase Order (Page 3 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
6	71839 *85311020*	MANUAL CALL STATION FIRE ALARM SYSTEM,MAKE:FAS,MODEL NO:ADDRESSABLE MANUAL CALL POINT FOR SAFE AREA WITH ALL ACCESSORIES WITH BACK BOX FOR INSTALLATION BASIC PRICE JIIG - IN: Integrated GST T O T A L Delivery Date : 02.07.2019	1 NO	 3800.00 18.00 %	12.000 Nos	 45600.00 8,208.00 0.00 53808
7	4302895 *85319000*	NON FLP HOOTER/SOUNDER WITH ACCESSORIES Non FLP Hooter/Sounder with accessories Type: Addressable Sound level in dB: 90dB Tone facility: Multi Tone Power supply: Through main panel Mounting: Wall/ ceiling Body enclosure: Safe area BASIC PRICE JIIG - IN: Integrated GST T O T A L Delivery Date : 02.07.2019	1 NO	 4800.00 18.00 %	9.000 Nos	 43200.00 7,776.00 0.00 50976
8	4304039 *85319000*	ADDRESSABLE CONTROL MODULE FOR FAS FIRE ALARM SYSTEM,MAKE:FAS,MODEL NO:UL LISTED ADDRESSABLE CONTROL MODULE BASIC PRICE JIIG - IN: Integrated GST T O T A L Delivery Date : 24.07.2019	1 NO	 3550.00 18.00 %	9.000 Nos	 31950.00 5,751.00 0.00 37701
9	4304040 *85319000*	FAULT ISOLATER MODULE FOR FAS	1 NO		20.000 Nos	

Purchase Order (Page 4 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		FIRE ALARM SYSTEM,MAKE:FAS,MODEL NO:FAULT ISOLATER MODULE FOR ISOLATION OF LOOP FAS				
		BASIC PRICE		3550.00		71000.00
		JIIG - IN: Integrated GST		18.00 %		12,780.00
						0.00
		T O T A L				83780
		Delivery Date : 25.07.2019				
10	4296304 *85381010*	Back Box	1 NO		335.000 Nos	
		FIRE ALARM SYSTEM, METALIC JUNCTION BACK BOXES FOR DETECTORS SUITABLE TO MULTI AND SMOKE DETECTOR INSTALLATION				
		BASIC PRICE		450.00		150750.00
		JIIG - IN: Integrated GST		18.00 %		27,135.00
						0.00
		T O T A L				177885
		Delivery Date : 24.07.2019				
11	4304041 *85319000*	ADDRESSABLE MONITOR MODULE FOR FAS	1 NO		142.000 Nos	
		FIRE ALARM SYSTEM,MAKE:FAS,MODEL NO:ADDRESSABLE MONITOR MODULE FOR FLAME PROOF MCP FOR FIRE ALARM SYSTEM				
		BASIC PRICE		3200.00		454400.00
		JIIG - IN: Integrated GST		18.00 %		81,792.00
						0.00
		T O T A L				536192
		Delivery Date : 25.07.2019				
12	4139681 *85319000*	Manual call point FLP for Fire alarm	1 NO		142.000 Nos	
		FIRE ALARM SYSTEM,FLAMEPROOF MANUAL CALL POINT FOR HAZARDOUS AREA				

Purchase Order (Page 5 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Nat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		BASIC PRICE		3700.00		525400.00
		JIIG - IN: Integrated GST		18.00 %		94,572.00
						0.00
		T O T A L				619972
		Delivery Date : 16.07.2019				
13	4243748 *85319000*	RELAY CARD FIRE ALARM SYSTEM,MAKE:FAS,MODEL NO:},UL LISTED ADDRESSABLE RELAY MODULE	1 NO		23.000 Nos	
		BASIC PRICE		3800.00		87400.00
		JIIG - IN: Integrated GST		18.00 %		15,732.00
						0.00
		T O T A L				103132
		Delivery Date : 17.07.2019				
14	4298720 *85319000*	SOUNDER EX-PROOF FOR FAS FLAMEPROOF HOOTER FOR FIRE ALARM SYSTEM	1 NO		23.000 Nos	
		BASIC PRICE		10000.00		230000.00
		JIIG - IN: Integrated GST		18.00 %		41,400.00
						0.00
		T O T A L				271400
		Delivery Date : 02.07.2019				
15	4243572 *85044010*	SMPS 230/24V- 5Amp SMPS	1 NO		10.000 Nos	
		BASIC PRICE		2800.00		28000.00
		JIIG - IN: Integrated GST		18.00 %		5,040.00
						0.00
		T O T A L				33040
		Delivery Date : 09.07.2019				
16	71881 *85311020*	RESPONSE INDICATOR	1 NO		28.000 Nos	

Purchase Order (Page 6 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Nat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		Response Indicator				
		BASIC PRICE		350.00		9800.00
		JIIG - IN: Integrated GST		18.00 %		1,764.00
						0.00
		T O T A L				11564
		Delivery Date : 24.07.2019				
17	4244164 *85319000*	FLP BEAM DETECTOR, MODEL D-9105RExd Beam detector in FLP Housing with monitor module & control module	1 NO		8.000 Nos	
		BASIC PRICE		130000.00		1040000.00
		JIIG - IN: Integrated GST		18.00 %		187,200.00
						0.00
		T O T A L				1227200
		Delivery Date : 02.07.2019				
18	4302868 *85319000*	SMOKE DETECTOR FLP WITH ACCESSORIES FLP Smoke Detector with accessories Sensor technology: Optical Type: Addressable Power supply: Through Main Panel Mounting: Ceiling Body Enclosure: Hazardous area	1 NO		87.000 Nos	
		BASIC PRICE		9800.00		852600.00
		JIIG - IN: Integrated GST		18.00 %		153,468.00
						0.00
		T O T A L				1006068
		Delivery Date : 02.07.2019				
19	4302869 *85319000*	HEAT DETECTOR FLP WITH ACCESSORIES FLP Heat Detector with accessories Sensor technology: Thermistor Type: Addressable Power supply: Through Main Panel Mounting: Ceiling Body Enclosure: Hazardous area	1 NO		50.000 Nos	

Purchase Order (Page 7 of 11)

PO Number/Date : 3723327 / 02.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		BASIC PRICE		9800.00		490000.00
		JIIG - IN: Integrated GST		18.00 %		88,200.00
						0.00
		T O T A L				578200
		Delivery Date : 02.07.2019				
20	4304042 *85319000*	ADDRESS ZONE MODULE	1 NO		137.000 Nos	
		Address Zone Module				
		BASIC PRICE		4100.00		561700.00
		JIIG - IN: Integrated GST		18.00 %		101,106.00
						0.00
		T O T A L				662806
		Delivery Date : 24.07.2019				
21	4243955 *85389000*	FLP JUNCTION BOX	1 NO		50.000 Nos	
		FLP J.B for housing zener barrier and power supply				
		BASIC PRICE		4100.00		205000.00
		JIIG - IN: Integrated GST		18.00 %		36,900.00
						0.00
		T O T A L				241900
		Delivery Date : 23.07.2019				
22	4243823 *85049090*	Power Supply Module	1 NO		50.000 Nos	
		24 VDC,3AMP power supply				
		BASIC PRICE		2000.00		100000.00
		JIIG - IN: Integrated GST		18.00 %		18,000.00
						0.00
		T O T A L				118000
		Delivery Date : 24.07.2019				
		Grand Total				7670000.00

Grand Total (in words) RUPEES SEVENTY SIX LAKH SEVENTY THOUSAND ONLY

Email ID: aphelpdesk@coromandel.murugappa.com & Toll Free No : 1800-425-5696

GENERAL PO TERMS FOR ALL PO ITEMS

Terms of Delivery: FOR - Our Stores FOR SARIGAM PLANT

Terms of Payment : Payment terms as per text

Header Text

REFERENCE AS PER YOUR OFFER: AFC-R01-28876 DTD: 02.03.2019 AND OUR LOI DATED 30.04.2019.

IO No. 611212

Documentation: shall furnish following documents along with supply of material as a part of supply -

a. Performance test certificates
b. Performance guarantee parameters for the model
c. Guarantee card mentioning the date of supply and validity of Guarantee period
d. Operation& maintenance manual
e. Other relevant test certificates

Please round off the GST Tax amounts (e.g. for example 100.50 or above it should be Rs.101 and if 100.49 or below it should be Rs.100) as per Page no. 98, clause number 170 of notification for Central Goods and Services Tax Act, 2017. Invoices not in conformity shall be rejected along with likely rejection of the Goods.

Terms Of Delivery

TERMS OF DELIVERY:

All Material shall be transported with packing suitable for the mode of transport. Rates mentioned above are on FOR/FOT Site basis (i.e. inclusive of P&F and Freight)

Terms Of Payment

90% after receipt of material at site and 10% after successful commissioning and submission of PBG of same value valid for the warranty period.

Penalty For Breach Of Contract

LIQUIDATED DAMAGES (LD):

Delivery is the essence of this contract. In the event of delay in delivery beyond the scheduled delivery date plus one week, LD shall be applicable at the rate of 0.5% of the basic order value per week of delay or part thereof subject to a maximum 5% of the total basic Purchase Order Value.

Guarantees

GUARANTEE CLAUSE:

All materials/equipment supplied shall be guaranteed for a period of 12 months from date of commissioning or 18 months from the date of supply, whichever is earlier. Inspection by CIL/Consultant/Third Party shall not absolve the VENDOR.

Other Contractual Stipulations

Installation & Commissioning is under scope of M/s. SHAYONA TECHNOLOGIES.

1 Year Free AMC post Warranty Period.

Inbound Delivery
WITHIN 6-8 WEEKS OF RECIEPT OF PO/LOI.
Vendor Memo (General)

FIRM PRICE PO:
The rates in this PO are firm till the execution of this order and shall not be subject to any escalation whatsoever.

SECRECY:
VENDOR/CIL (PARTIES) shall maintain secrecy and shall not disclose any information related to this PO to any third party which one of both considers proprietary and confidential, including, but not limited to, information regarding its PO, Plans and strategies, cost and pricing information, data, know-how, designs, drawings, specifications, technical information, future projection, business plans, general business operation, engineering data. The drawings, data and technical information furnished by Coromandel International Limited to VENDOR in connection with PO remains the property of the respective party and the other party shall not copy, abstract the information and divulge to any third parties. The PARTIES to ensure secrecy even by the third party. The parties shall not disclose the existence of this PO and Coromandel Internaional Limited's name in connection with this PO.

Names and email addresses of CIL personnel for technical matters, as below:
Ms. Vaishnavi Shah <ShahV@coromandel.murugappa.com>
Mr. Jitendra Kumar <BeheraJ@coromandel.murugappa.com>
Mr. Jitendra Sinha <SinhaJ@coromandel.murugappa.com>

Names and email addresses of CIL personnel for commercial matters:
Mr. Saurabh Shukla - <shuklas@coromandel.murugappa.com>
Mr. Abhishek Singh <SinghA@coromandel.murugappa.com>
Mr. Vijayan Nair <vijayannair@coromandel.murugappa.com>

Advance Delivery intimation:
In all cases that transit insurance is in Coromandel International Limited scope, it is mandatory for the Vendor to immediately, on dispatch, send mail to the technical and commercial teams (email addresses are as mentioned above) with dispatch particulars so that insurance cane be covered. The contact number of the Procurement/Stores person may be given to the transporter to facilitate easy entry and exit from the site premises. Additionally, the mail should also specify when the dispatched material is likely to reach the site and whether any specific material handling equipment is required to unload the same. If the Vendor does not comply with above, liability of any damage/loss of the material shall remain with the vendor in addition to the likelihood of transport vehicle getting detained at site.

Names and email addresses of CIL personnel for Stores & Material unloading related matters:
Mr. Prashant Bhangale
P +91 260 2780852/395/396
M +91 7573005726/27/28/29
E Prashant Bhangale <BhangaleP@coromandel.murugappa.com>

Vehicle Reporting:

Purchase Order (Page 10 of 11)
PO Number/Date : 3723327 / 02.05.2019

All Vehicle should report at Gate-C of Coromandel International Limited, Sarigram.

VENDOR shall submit the following documents along with material. In absence of any/all documents CIL's store department may not accept the material:
Delivery Challan/Packing List.
Invoice copies (Original and Duplicate for Transporter) and VENDOR to ensure #SOLD to# and #SHIP to# details strictly as per delivery address mentioned in PO (refer the first page of this PO).
Test and warranty certificates, Inspection release notes from TPI, O&M manuals, Final as-built drawings etc as applicable.
Description on the documents shall be strictly as per the PO.
Any other documents as mentioned in the order specifications.

Important Note:
Along with material following document are mandatory.
a. Original for Buyer (OFB)
b. Duplicate for Transporter (DFT)
c. Triplicate Invoice Copy &
d. Original Challan Copy

This is to inform you all as per company system following valid documents required with vehicle for gate entry, in case any vehicle reported to gate without proper document, we cannot allow the vehicle.
a. RC Book/Road permit.
b. Valid fitness certificate
c. Valid insurance certificate.
d. Valid goods carry certificate
e. PUC certificate.
f. Driver's valid license.

* Purchase Order number should be indicated in the Tax Invoice and credit note.
* All invoices to be raised in the name and address of respective plant or locations which are receiving the goods or services and Invoices to be accompanied with the goods.
* All Invoices have to separately be explicit on Taxable Values, CGST & SGST, or , IGST and other charges as per purchase order terms given to you.
* All invoices and other documents to mention Purchase / service order number, GST registration number, Vendor number, HSN / SAC code and HSN / SAC description clearly.
* All dispatches of goods is to be supported with E-Way bills as required by relevant statues in force on the dispatch date.
* In case the Input tax credit of GST is denied or demand is recovered from Coromandel International Ltd., on account of Non-Compliance by supplier, including non-payment of GST charged and recovered by you, then you shall indemnify Coromandel International Ltd., in respect of all claims of tax, penalty, interest, costs, expenses and liability that may arise due to such Non-compliance.
* In order to be eligible for payment, all invoices made by this Purchase/Service order have to be followed up by filing of complete supply data in GSTR-1 return for each month before 10th of subsequent month.
* Vendors are supposed to maintain Good Compliance rating track record as required under GST Law.
* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.
Shared Services Center,
Coromandel International Limited,

Purchase Order (Page 11 of 11)
PO Number/Date : 3723327 / 02.05.2019

Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

Special Note: vendors registered under GST are requested to submit the registration certificate immediately.

To,
M/S. SURE SAFETY (INDIA) LIMITED
BESIDE ZENITHTIN N.H. NO.8,CHHANI
YOGI NAGAR TOWNSHIP,
VADODARA - 391740
PLOT NO.42, A/B YOGINAGAR TOWNSHIP
VADODARA,VADODARA,Gujarat
India Pin: 391740
Ph: 0265-2760150 09380531464
Fax: 0265-2774824
PAN No: AASCS4853Q
GSTIN:24AASCS4853Q1ZE

Our Particulars

PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
GSTIN : 24AAACC7852K1ZJ

Purchase Order (Page 1 of 5)

PO Number/Date : 3723418 / 11.05.2019
Contact Name/Ph: Sarigam-Project /

Please deliver to:
Coromandel International Ltd.,
COROMANDEL INTERNATIONAL LIMITED
Plot No - 2102 ,GIDC ,Tal:UMERGAM
SARIGAM 396155
Valsad DISTRICT,Gujarat,India

Delivery Date : 31.05.2019
Po Validity: 11.05.2019 To 31.12.2019

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
1	4304293 *73063090*	PIPES FOR FIRE SUPPRESION SYSTEM LOT-1 Lot- 1 Pipes for Fire Suppresion System	1 SE		1.000 Sets	
		BASIC PRICE		1004984.00		1004984.00
		JISG - IN: State GST		9.00 %		90448.56
		JICG - IN: Central GST		9.00 %		90,448.56
						0.00
		T O T A L				1185881.12
2	4304294 *72101190*	STRUCTURE OF FIRE SUPPRESION SYS.LOT-2 Lot-2 Structures for Support work of the Fire Suppresion System	1 SE		1.000 Sets	
		BASIC PRICE		136900.00		136900.00
		JISG - IN: State GST		9.00 %		12321.00
		JICG - IN: Central GST		9.00 %		12,321.00
						0.00
		T O T A L				161542
3	4304295	VALVES FOR FIRE SUPPRESION SYS.-LOT-3	1 SE		1.000	

Purchase Order (Page 2 of 5)

PO Number/Date : 3723418 / 11.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
	84818010	Lot3- Valves for Fire Suppresion System			Sets	
		BASIC PRICE		17800.00		17800.00
		JISG - IN: State GST		9.00 %		1602.00
		JICG - IN: Central GST		9.00 %		1,602.00
		T O T A L				0.00 21004
4	4304296 *72101190*	HANGERS FOR FIRE SUPPRESION SYSTEM-LOT-	1 SE		1.000 Sets	
		Lot-4 Hangers for Fire Suppresion System piping				
		BASIC PRICE		25740.00		25740.00
		JISG - IN: State GST		9.00 %		2316.60
		JICG - IN: Central GST		9.00 %		2,316.60
		T O T A L				0.00 30373.2
5	4304297 *85446090*	CABLE FOR FIRE SUPPRESION SYSTEM-LOT-5	1 SE		1.000 Sets	
		Lot-5 Cable with Accessories for Fire Suppresion System				
		BASIC PRICE		318500.00		318500.00
		JISG - IN: State GST		9.00 %		28665.00
		JICG - IN: Central GST		9.00 %		28,665.00
		T O T A L				0.00 375830
6	4304298 *85311020*	ALARM VALVE FOR FIRE SUPPRESION SY-LOT-	1 SE		1.000 Sets	
		Lot-6 Alarm Control Valve for Fire Suppresion System				
		BASIC PRICE		162500.00		162500.00
		JISG - IN: State GST		9.00 %		14625.00
		JICG - IN: Central GST		9.00 %		14,625.00
						0.00

Purchase Order (Page 3 of 5)

PO Number/Date : 3723418 / 11.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		T O T A L				191750
7	4304299 *85311020*	SOLENOID VALVES FIRE SUPPRESION-LOT-7 Lot-7 Solenoid Valves for Fire Suppresion System	1 SE		1.000 Sets	
		BASIC PRICE		742500.00		742500.00
		JISG - IN: State GST		9.00 %		66825.00
		JICG - IN: Central GST		9.00 %		66,825.00
						0.00
		T O T A L				876150
8	4304380 *84241000*	SPRINKLER NOZZLES FIRE SUPPRESION-LOT-8 Lot-8 Sprinkler Nozzles of Fire Suppresion System	1 SE		1.000 Sets	
		BASIC PRICE		33480.00		33480.00
		JISG - IN: State GST		9.00 %		3013.20
		JICG - IN: Central GST		9.00 %		3,013.20
						0.00
		T O T A L				39506.4
9	4304381 *84241000*	ESFR SPRINKLERS FIRE SUPPRESION-LOT-9 Lot-9 ESFR Sprinkler For Fire Suppresion System	1 SE		1.000 Sets	
		BASIC PRICE		516987.00		516987.00
		JISG - IN: State GST		9.00 %		46528.83
		JICG - IN: Central GST		9.00 %		46,528.83
						0.00
		T O T A L				610044.66
10	73382 *84241000*	CONTROL PANEL-SPRINKLER SYSTEM WAREHOUS Control Panel With Push buttons for Warehouse A; Warehouse C; MNZ Godown	1 SE		1.000 Sets	
		BASIC PRICE		159627.00		159627.00
		JISG - IN: State GST		9.00 %		14366.43

Purchase Order (Page 4 of 5)

PO Number/Date : 3723418 / 11.05.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		JICG - IN: Central GST		9.00 %		14,366.43
						0.00
		T O T A L				188359.86
		Grand Total				3680441.24

Grand Total (in words) RUPEES THIRTY SIX LAKH EIGHTY THOUSAND FOUR HUNDRED AND FORTY ONE AND PAISE TWENTY FOUR ONLY

Email ID: aphelpdesk@coromandel.murugappa.com & Toll Free No : 1800-425-5696

GENERAL PO TERMS FOR ALL PO ITEMS

Terms of Delivery: FOR - Our Stores FOR SARIGAM PLANT

Terms of Payment : Payment terms as per text

Header Text

AS PER OFFER & SUBSEQUENT DISCUSSIONS

Terms Of Payment

FOR MATERIAL : 90% ON MATERIAL AT SITE & 10% AGAINST PBG FOR 1 YEAR WARRANTY PERIOD

Warranties

1 YEAR

* Purchase Order number should be indicated in the Tax Invoice and credit note.
* All invoices to be raised in the name and address of respective plant or locations which are receiving the goods or services and Invoices to be accompanied with the goods.
* All Invoices have to separately be explicit on Taxable Values, CGST & SGST, or , IGST and other charges as per purchase order terms given to you.
* All invoices and other documents to mention Purchase / service order number, GST registration number, Vendor number, HSN / SAC code and HSN / SAC description clearly.
* All dispatches of goods is to be supported with E-Way bills as required by relevant statues in force on the dispatch date.
* In case the Input tax credit of GST is denied or demand is recovered from Coromandel International Ltd., on account of Non-Compliance by supplier, including non-payment of GST charged and recovered by you, then you shall indemnify Coromandel International Ltd., in respect of all claims of tax, penalty, interest, costs, expenses and liability that may arise due to such Non-compliance.
* In order to be eligible for payment, all invoices made by this Purchase/Service order have to be followed up by filing of complete supply data in GSTR-1 return for each month before 10th of subsequent month.
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* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.

Shared Services Center,
Coromandel International Limited,
Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

Purchase Order (Page 5 of 5)
PO Number/Date : 3723418 / 11.05.2019

For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

Special Note: Vendors registered under GST are requested to submit the registration certificate immediately.

COMPLIANCE REPORT

OF

Fire Adequacy Audit by M/S Chola

Coromandel

COROMANDEL INTERNATIONAL LTD.

GIDC SARIGAM, GUJARAT

The following table presents the recommended actions and current status of audit conducted by M/S Chola, a renowned consultant for designing for fire protection system and current status

Table 1: Recommendation List with current status

Sr No	Reference Standard	Observation	Recommendation	Status	Status as on 28.05.2019
01	TACFP Manual/IS13039	As per the performance test of existing pumps conducted during the site visit, it was observed that the pumps are not conforming to the standard requirements of a fire pump.	It is recommended to replace the existing pumps with new pumps as per following details: Main Pump 1- 273 m3/hr Main Pump 2- 171 m3/hr Drive- Electric Operation- Both running on same time	Order placed, drawing approved, expected delivery by 13th June 2019, commissioning will be done before 31st July 2019	PO placed on 12.04.2019. Annexure 1
02	TAC FP Manual	Negative suction is provided for the fire pumps.	If negative suction has to be provided, an automatic priming arrangement shall be provided. The priming system shall consists of a tank ((having a capacity at least three times that of the suction pipe from the pump to the foot valve subject to a minimum of 1000	Automated Priming with 1000 Ltr priming pot is considered and commissioning will be done before 31st July 2019	Priming tank Provided. Complied. Annexure -2

Sr No	Reference Standard	Observation	Recommendation	Status	Status as on 28.05.2019
			liters) connected to the delivery side of the pump by a metal pipe having a minimum internal diameter of 100mm with a stop valve and a non-return valve therein of the same size.		
03	IS 12469	The design and installation of medium velocity water spray system for NH3 bullets is not meeting the guidelines of IS 15325.	Medium velocity water spray system is recommended for NH3 bullets and tanker unloading area. It is recommended to reinstall the system as per the design details provided by M/S CHOLA	Design of Medium velocity water spray system is completed, order placed and first lot of material received on 13th May 2019, commissioning will be done before 31st July 2019	Fabrication work under progress. Annexure 3
04	Good Engineering Practices	There is no fire suppression system provided for the tanker unloading areas of Class A tank farm and Carbon disulphide.	It is recommended to provide manual operated water spray system for the tanker unloading areas of Class A tank farm and Carbon disulphide.	Design of Medium velocity water spray system is completed, order placed and first lot of material received on 13th May 2019, commissioning will be done before 31st July 2019	Fabrication work under progress. Annexure 3

Sr No	Reference Standard	Observation	Recommendation	Status	Status as on 28.05.2019
05	IS 3594/ IS 15105/ NFPA 13	There are no automatic fire suppression system provided for the warehouses.	It is recommended to provide automatic water sprinkler system in the warehouses as detailed in this document.	Automatic water sprinkler system and manualwater sprinkler system design completed, material received and Installation in warehouse A is under progress, will be completed for all W/H by 31st July 2019	Fabrication work under progress. 24 hrs. manpower will be deputed till completion of installation. Annexure 3
06	IS 3594	Water reactive chemicals and hygroscopic materials are found stored along with normal materials inside the warehouse.	It is highly recommended to segregate the storage of water reactive chemicals. Water based fire suppression systems shall not be applied for such materials.	Segregation of chemical as per chemical compatibility is done – Completed.	Complied. Annexure 4
07	Good Engineering Practice/ NFPA 13	The water curtain system provided for Chlorine shed is not covering the south west side of Shed-01.	It is recommended to provide additional water curtain nozzles at south west side to ensure the complete coverage of water curtain system.	Civil brick wall construction completed, design of water curtain system is done, order placed and material received, Installation preparation under progress and	Civil brick wall made as a permanent measure for fire protection. Complied. Annexure – 5.

Sr No	Reference Standard	Observation	Recommendation	Status	Status as on 28.05.2019
				commissioning will be completed before 31st July 2019	
08	IS 13039 / TAC FP Manual	There are no hydrant provided for the extension factory shed for incinerator, located across the road. Points	It is recommended to provide yard hydrants around the extension factory shed, by taking tap-off from the hydrant ring main of the plant. Layout is attached with this document.	As incinerator 4 is not operated for last 2 years and we have applied for allowing us to remove this facility permanently therefore this point is no more valid	Complied.
09	IS13039	The hydrant mains of warehouse area, canteen and NH3 bullet area are not forming a ring main, in the existing network.	Hydrant system shall be provided in a ring main format to ensure the availability of the system even in case of temporary isolation of part network. It is recommended to provide additional hydrant line connection with isolation valve to form a ring main network for the area. Layout is	First lot of Material received for new Hydrant system as per recommendation, implementation and commissioning of entire system will be done before 30th June 2019	Erection under progress, completion by 31.5.2019, till completion we will depute man power on 24 hrs. Annexure - 6

Sr No	Reference Standard	Observation	Recommendation	Status	Status as on 28.05.2019
			attached with this document.		
10	TAC FP Manual	The fire brigade inlets provided at two way inlets.	It is recommended to provide 04 way 6 mm instantaneous inlets for the network.	04 way instantaneous inlets for fire brigade is provided at main entries of site	Complied. Annexure - 7
11	IS 13309/ TAC FP Manual	The line sizes of hydrant mains are not meeting standard guidelines at multiple locations. For example, more than 05 no. of hydrants valves are connected on an 80 mm dia. line at the south west boundary of the plant.	It is recommended to provide line sizes to meet the standard requirements. Only one single headed hydrant shall be provided on 80mm line. Up to two yard hydrants can be provided on 100mm dia. line. The modified layout meeting the standard guidelines and verified by hydraulic analysis is attached along with this document.	First lot of Material received for new Hydrant system as per recommendation, implementation and commissioning of entire system will be done before 27th Sep 2019	Fabrication job under progress. Annexure – 8.

SR No 1 PO COPY FOR FIRE HYDRANT PUMPS

Sl. No 01, 2

TO,
M/S. SAHYADRI DIESEL
SN 121/11/2,66 KVA ROAD,SILVASSA
SILVASSA,SILVASSA,Dadra, Nagarhaveli
India Pin: 396230
Ph: 0260-2630030 09725045081
PAN No: ACRPK1138Q
GSTIN:26ACRPK1138Q1ZO

Vendor code assigned to you ==> 348620

Purchase Order (Page 1 of 4)

PO Number/Date : 3723133 / 12.04.2019
Contact Name/Ph: Sarigam-Project /

Your Quote Ref : 468/REV-01 / 19.03.2019

Our Particulars
PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
GSTIN : 24AAACC7852K1ZJ

Please deliver to:
Coromandel International Ltd.,
COROMANDEL INTERNATIONAL LIMITED
Plot No - 2102 ,GIDC ,Tal:UMERGAM
SARIGAM 396155
Valsad DISTRICT,Gujarat,India

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./HSN /SAC Code	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
1	43028049 84137010	FIRE WATER PUMP CAP:273 M3/HR,HEAD-88 M Fire Water Pump with motor Main Pump as per Following Details Capacity- 273 m3/hr Head- 88 mwc MOC- CI with Closed Impeller Seal Type- Single Mechanical Seal TYPE: HORIZONTAL SPLIT CASE PUMP MODEL: IHT12CA MAKE: KIRLOSKAR SEALING: MECHANICAL SEAL - HIFAB MAKE MOTOR: NFLP MAKE: KIRLOSKAR RPM: 2900 COUPLING: FLEXIBLE BASE FRAME: MS SKID MOUNTED IMPELLER MOC: BRONZE SUPPLY INCLUDES: PUMP + BASE FRAME + MOTOR + COUPLING + COUPLING GUARD ETC. BASIC PRICE Discount	1 NO	599800.00 13.000-%	2.000 Nos	1199600.00 155948.00-

27/05

Purchase Order (Page 2 of 4)

PO Number/Date : 3723133 / 12.04.2019

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(INR)
		JIIG - IN: Integrated GST		18.00 %		187,857.36
		T O T A L				0.00 1231509.36
2	4302850 *84137010*	DEISEL OPERATED FIRE PUMP CAP-273M3/ER Deisel Engine Driven Pump Capacity-273 m3/hr Type- Vertical Turbine Head- 88 mwc Dxive- Deisel Engine with Panel PUMP MODEL:BHR 28-30.4 STG MAKE: KIRLOSKAR SEALING: GLAND PACKING ENGINE: KIRLOSKAR MAK2 DIESEL ENGINE,149 HP @ 1500 RPM COUPLING: FLEXIBLE BOLSET TYPE BASE FRAME: MS SKID FABRICATE SCOPE OF SUPPLY: COMPLETE PUMPSET CONSISTING OF KIRLOSAKAR MAKE VERTICAL TURBINE PUMP RIGHT ANGLE DRIVE COUPLED WITH KIRLOSKAR DIESEL ENGINE MOUNTED ON MS SKID ALONG WITH FUEL TANK OF 200 LTR CAPACITY, SILENCER, ETC WITH MANUAL START ENGINE.	1 NO		1.000 Nos	
		BASIC PRICE		2528571.00		2528571.00
		Discount		13.000-%		328714.23-
		JIIG - IN: Integrated GST		18.00 %		395,974.22
		T O T A L				0.00 2595830.99
		Grand Total				3827340.35

Grand Total (in words) RUPEES THIRTY EIGHT LAKH TWENTY SEVEN THOUSAND THREE HUNDRED AND FORTY AND PAISE THIRTY FIVE ONLY

Email ID: aphelpdesk@coromandel1.murugappa.com & Toll Free No : 1800-425-5696

Purchase Order (Page 3 of 4)
PO Number/Date : 3723133 / 12.04.2019

GENERAL PO TERMS FOR ALL PO ITEMS

Terms of Delivery: FOR - Our Stores FOR SARIGAM

Terms of Payment : Payment terms as per text

Price Basis

FOR SARIGAM

Deadlines

L/D APPLICABLE - MIN 0.5% PER WEEK TO 5% MAX ON PO VALUE

Terms Of Delivery

FOR SARIGAM

Shipping Instructions

INSURANCE TO TO BOURNE BY SUPPLIER

Terms Of Payment

30% ADVANCE AGAINST ABG + 60% AGAINST PI + 10% PBG FOR WARRANTY PERIOD

Warranties

1 YEAR

Other Contractual Stipulations

T/C & WARRANTY CERTIFICATES - MANDATORY ALONG WITH SUPPLY.

* Purchase Order number should be indicated in the Tax Invoice and credit note.
* All invoices to be raised in the name and address of respective plant or locations which are receiving the goods or services and Invoices to be accompanied with the goods.
* All Invoices have to separately be explicit on Taxable Values, CGST & SGST, or , IGST and other charges as per purchase order terms given to you.
* All invoices and other documents to mention Purchase / service order number, GST registration number, vendor number, HSN / SAC code and HSN / SAC description clearly.
* All dispatches of goods is to be supported with E-Way bills as required by relevant statues in force on the dispatch date.
* In case the Input tax credit of GST is denied or demand is recovered from Coromandel International Ltd., on account of Non-Compliance by supplier, including non-payment of GST charged and recovered by you, then you shall indemnify Coromandel International Ltd., in respect of all claims of tax, penalty, interest, costs, expenses and liability that may arise due to such Non-compliance.
* In order to be eligible for payment, all invoices made by this Purchase/Service order have to be followed up by filing of complete supply data in GSTR-1 return for each month before 10th of subsequent month.
* Vendors are supposed to maintain Good Compliance rating track record as required under GST Law.
* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.

Shared Services Center,
Coromandel International Limited,
Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

Purchase Order (Page 4 of 4)
PO Number/Date : 3723133 / 12.04.2019

Special Note: Vendors registered under GST are requested to submit the registration certificate immediately.

Sr no 2 1000 litres Priming pot for fire hydrant pump



Sr. No 3, 4, 5


Sr. no 3,4, 5: Design of Medium velocity water spray system is completed, first lot of material received
23/05/2019 11:38

Interactions between chemicals – Raw Material

(Include all the chemicals as in from 1a)

Form No 1d

Chemicals	1,2 Propylene diamine	Ortho Chlorophenol	Hexamine	Hydrogen peroxide	Sodium Lingo sulphonate (SLS)	Phosphorus Penta sulphide	Yellow phosphorus	Soda Ash	Urea	PMIDA
Chemicals										
1,2 Propylene diamine	-	(+)	-	+	-	(+)	-	(+)	-	(+)
Ortho Chlorophenol	(+)	-	(+)	(+)	-	-	-	(+)	-	-
Hexamine	-	(+)	-	+	-	(+)	-	-	-	(+)
Hydrogen peroxide	+	(+)	+	-	(+)	(+)	+	(+)	(+)	(+)
Sodium Lingo sulphonate (SLS)	-	-	-	(+)	-	-	-	-	-	-
Phosphorus Penta sulphide	(+)	-	(+)	(+)	-	-	-	-	-	-
Yellow phosphorus	-	-	-	+	-	-	-	-	-	-
Soda Ash	(+)	(+)	-	(+)	-	-	-	-	-	(+)
Urea	-	-	-	(+)	-	-	-	-	-	-
PMIDA	(+)	-	(+)	(+)	-	-	-	(+)	-	-

1. *+ for Undesired Hazardous reaction,*
2. *(+) for desired reaction within process or undesired but non-hazardous reaction*
3. *– for no reaction*
4. *Add details (products, hazards, conditions) for all the mixtures with + (undesired hazardous reaction)*

Interactions between chemicals – Finished Good

(Include all the chemicals as in from 1a)

Form No 1d

Chemicals		Mancozeb	Propineb	Acephate	Monocrotophos	Trimehyl Phosphite
Mancozeb	1	-	-	-	-	-
Propineb	2	-	-	-	-	-
Acephate	3	-	-	-	-	-
Monocrotophos	4	-	-	-	-	-
Trimehyl Phosphite	5	-	-	-	-	-

1. *+ for Undesired Hazardous reaction,*
2. *(+) for desired reaction within process or undesired but non-hazardous reaction*
3. *– for no reaction*
4. *Add details (products, hazards, conditions) for all the mixtures with + (undesired hazardous reaction)*

Sr. no 7



Sr. No 9


Sr no 9: Fire Hydrant ring main work under progress
23/05/2019 11:40

Sr. no 10

Sr. no 10 : 04 way instantaneous inlets for fire brigade (MAINGATE-A)



Sr. no 10 : 04 way instantaneous inlets for fire brigade (GATE-B)



Sr. no 10 : 04 way instantaneous inlets for fire brigade (GATE-C)



Sr. No 11


Sr. no 11: Material received for new Hydrant system as per recommendation
23/05/2019 11:39

COMPLIANCE REPORT

OF

HAZOP CRITICAL RECOMMENDATION POINTS

SARIGAM UNIT

Coromandel

COROMANDEL INTERNATIONAL LTD.

GIDC SARIGAM, GUJARAT

Table 1 & 2 comprises of critical points along with recommendations arising from HAZOP done for MPP (Acephate (ACP), Monocrotophos (MCP)), Mancozeb (MNZ A, B & Propineb) & Phosphorus Trichloride (PCl3 & Tri Methyl Phospite (TMP)) Plants. Current status for each recommendation is also stated.

Summary

Sr. No.	Plant	No. of critical recommendation points	Completed points	Pending points
1	MNZ (MNZ A, B & Propineb)	18	18	NIL
2	PCl3 (PCl3 & TMP)	5	5	NIL
3	MPP (ACP, MCP)	NIL	-	-

Table 1: Recommendation List with current status - MNZ (MNZ A, B & Propineb)

Sr. No.	Node No	S	L	R	Observations	S	L	R	Status	Supporting Document
1	N1.04.1	4	5	20	Confirm the Dyke size of EDA storage tank	4	2	8	Dyke Size volume checked and found adequate.	Calculation & Photo attached. Annexure 1 & 2
2	N1.04.1	4	5	20	Provide NRV at Pump Discharge and remove circulation line	4	2	8	NRV Provided and Circulation line removed	Photo attached. Annexure 3
3	N1.04.1	4	5	20	Provide anti siphoning loop to EDA addition, anti-syphoning	4	2	8	Anti-siphoning hole checked and meets	Photo attached. Annexure 4

Sr. No.	Node No	S	L	R	Observations	S	L	R	Status	Supporting Document
					hole will not work as reactor is fully occupied				intended requirement therefore loop not required.	
4	N1.04.1	4	5	20	Interlock to close on/off valve XVR5101A-10 if pump stop	4	2	8	Interlock provided	Photo of interlock system attached. Annexure 5.
5	N1.04.1	4	5	20	Confirm the addition program of EDA to check ON/OFF valve opening after pump start only	4	2	8	Program checked and correction to open ON/OFF valve after pump start only is done	Photo of interlock system attached. Annexure 6.
6	N3.01.1	4	5	20	Include in PSM critical equipment to ensure PM (DBH Condenser)	4	2	8	DBH Condenser included in PSM critical equipment	Critical equipment list attached. Annexure 7.
7	N3.01.1	4	5	20	Hydro test schedule (DBH Condenser)	4	2	8	Hydro test schedule for DBH condenser is prepared (frequency – 2 year) & being followed	PM\hydrotest Schedule & filled testing report attached. Annexure 8.
8	N3.01.1	4	5	20	Include in PSM critical equipment to ensure PM (Internal Coil)	4	2	8	Internal coil included in PSM critical equipment list	PM Schedule attached. Annexure 9.
9	N3.01.1	4	5	20	Hydro test schedule (Internal Coil)	4	2	8	Hydro test schedule updated for Re-circulation HE/internal	Hydro test schedule attached. Annexure 10.

Sr. No.	Node No	S	L	R	Observations	S	L	R	Status	Supporting Document
									coil (Frequency – 2 year) & being followed	
10	N3.01.1	4	5	20	Provide Detachable hose with isolation during normal operation and proxy switch feedback in program to ensure no connection during operation	4	2	8	Additional line to the reactor which is not required, hence Line removed permanently.	Photograph attached. Annexure 11.
11	N7.03.02	4	5	20	Final shed height to be increased above L.I for checking the Level	4	2	8	Instead of increasing shed height LT Installed with High Level Interlock	Photograph attached. Annexure 12
12	N7.03.02	4	5	20	Check the adequacy of MNSO4 over flow line for tank (T-5103 C)	4	2	8	Checked found adequate	Photograph attached. Annexure 13
13	N19.01.1	4	5	20	Consider PM schedule of HAG shell.	4	2	8	Inspection and testing list updated and being followed (Frequency – 2 year)	PM schedule & filled testing report attached. Annexure 14
14	N19.01.1	4	5	20	Explosion window to be provided in HAG (as per standard)	4	2	8	Explosion doors (rating 0.1 barg) available on SPD -5 nos	Photograph attached. Annexure 15
15	N22.03.3	4	5	20	Rotary valve periodical PM	4	2	8	PM Schedule updated	PM schedule & filled

Sr. No.	Node No	S	L	R	Observations	S	L	R	Status	Supporting Document
					schedule to be implemented.				and being followed (Frequency – 6 months)	testing report attached. Annexure 16
16	N22.03.3	4	5	20	Consider high level audio visual alarm with operator action	4	2	8	High differential pressure across SPD chamber audio visual alarm provided with operator to take corrective action	Interlock sheet attached. Annexure 17.
17	N 28.04.1	4	5	20	Consider providing overflow line and connection to a hold tank	4	2	8	Overflow line provided to prevent high level	Photo attached. Annexure 18.
18	N 28.04.1	4	5	20	High level switch and interlock with main storage tank pump.	4	2	8	High level switch and interlock to stop storage tank pump provided	Photo attached. Annexure 19.

Table 2: Recommendation List with current status – PCI3 (PCL3 / TMP)

Sr. No.	Node No	S	L	R	Observations	S	L	R	Status	
1	N1.1	5	4	20	Consider having an Interlock with the Pressure in the P4 day tank and the ON-OFF(XV-R101B-20) valve in the transferring line of P4	5	2	10	Interlock provided on high pressure	Photo attached. Annexure 19.

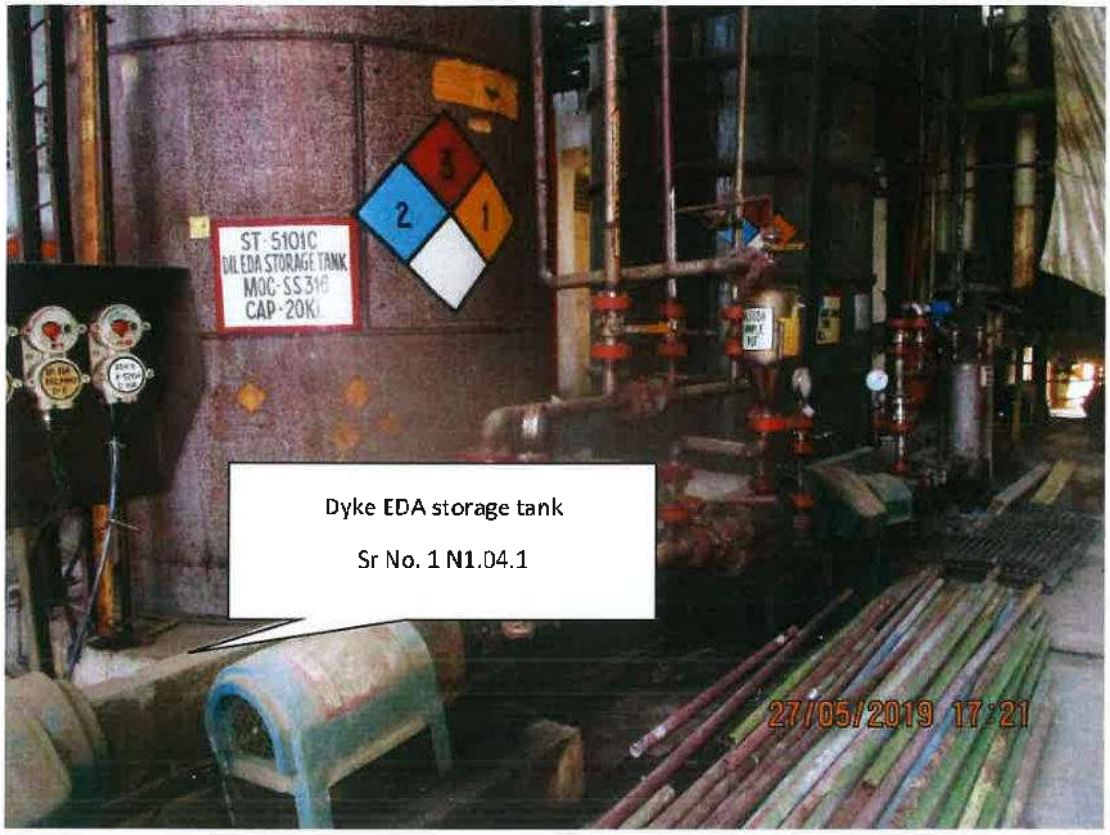
2	N1.2	5	4	20	Consider revisiting the Contract with P4 vendor	5	2	10	Contract\PO reviewed and sufficient control exist	Copy of PO attached having all safety instructions. Annexure 20.
3	N1.2	5	4	20	Consider having a Vendor Audit (P4)	5	2	10	Audit schedule made by SCM team frequency once in 2 year	Schedule attached. Annexure 21
4	N1.2	5	4	20	Explore the possibility of Sampling at the site. (P4)	5	2	10	QC process reviewed and updated for mandatory COA check	Specification sheet attached. Annexure 22
5	N1.2	5	4	20	Consider having the initiation of blow down tank for controlling fire (PCl_3 reactor)	5	2	10	Blowdown tank provided	Photo attached. Annexure 23.

Sl.No: 1. N1.04.1

Objective: Dike volume Calculation for EDA Tank			
	Tank Specification		
Sr. No.	Parameters	UoM	
1	Tank Volume	m3	18
2	Tank Operating Volume	m3	15.3
	Dike Dimensions		
Sr. No.	Parameters	UoM	
1	Length	m	8.13
2	Width	m	3.5
3	Depht	m	0.65
4	Volume of Dike	m3	18.50
Conclusion : Dike volume is sufficient to contain the operating volume of tank.			

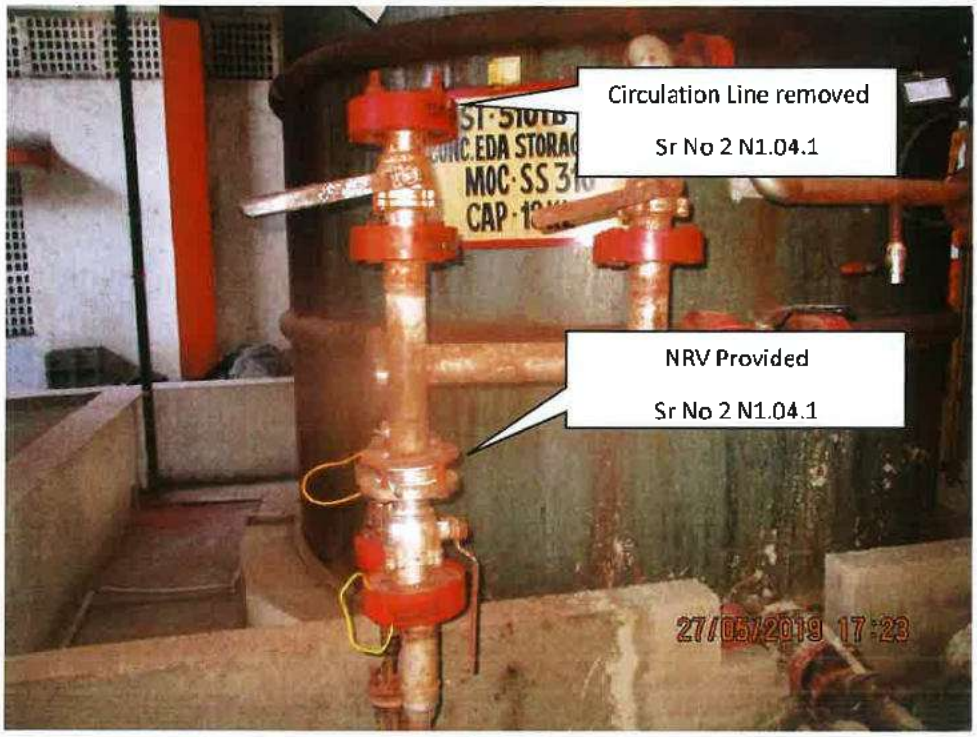
RKM
Sr. Manager
Process Engg.

Production
Incharge



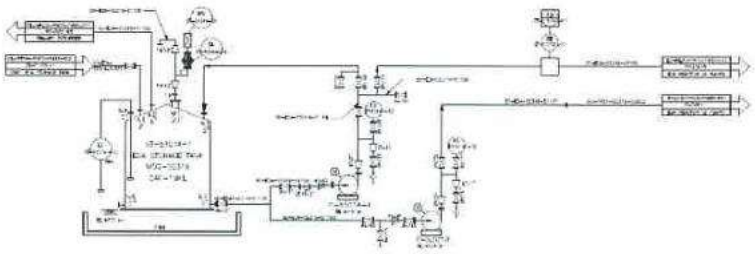
Dyke EDA storage tank

Sr No. 1 N1.04.1

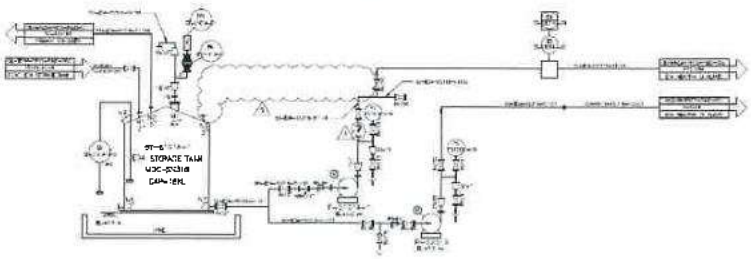


Circulation Line removed Sr No 2 N1.04.1

BEFORE: CIL-VNZA-PRCS-P&ID-001 REVISION – 2

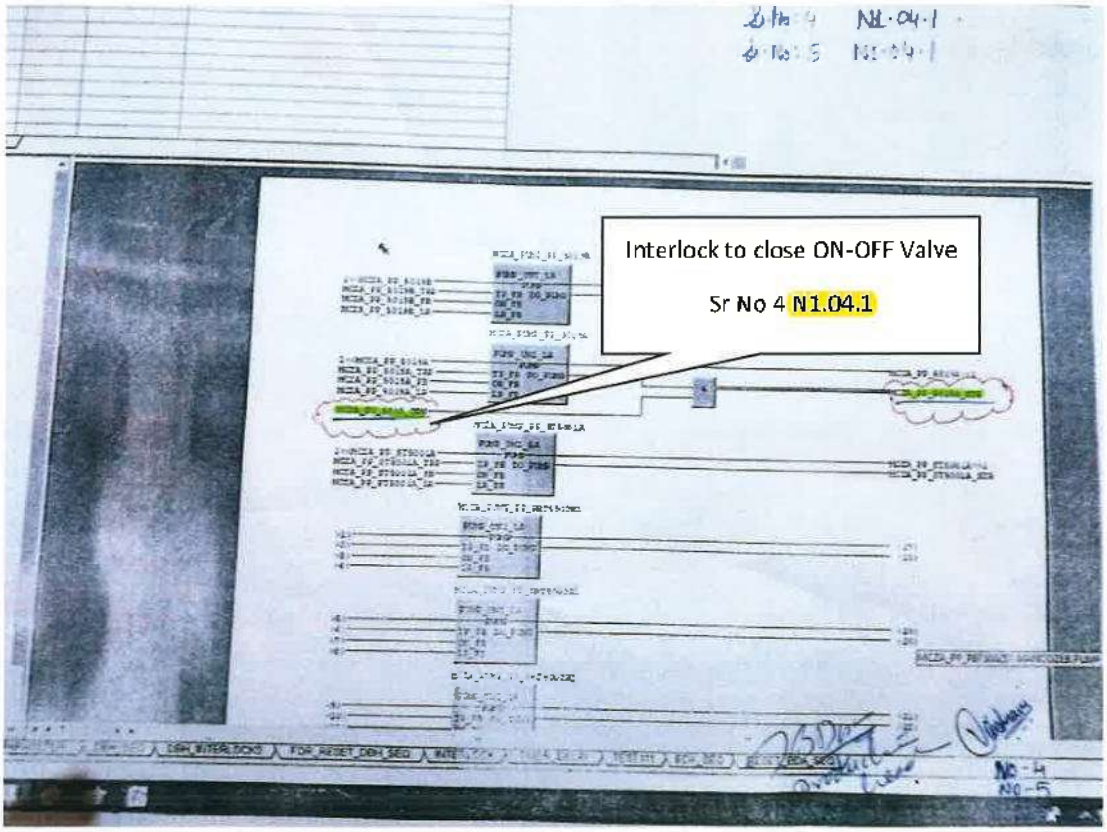


AFTER: CIL-VNZA-PRCS-P&ID-001 REVISION – 3

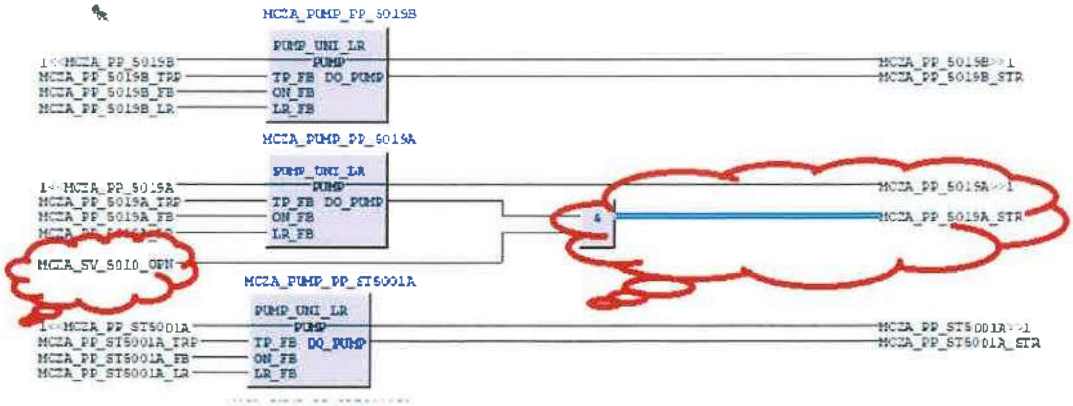


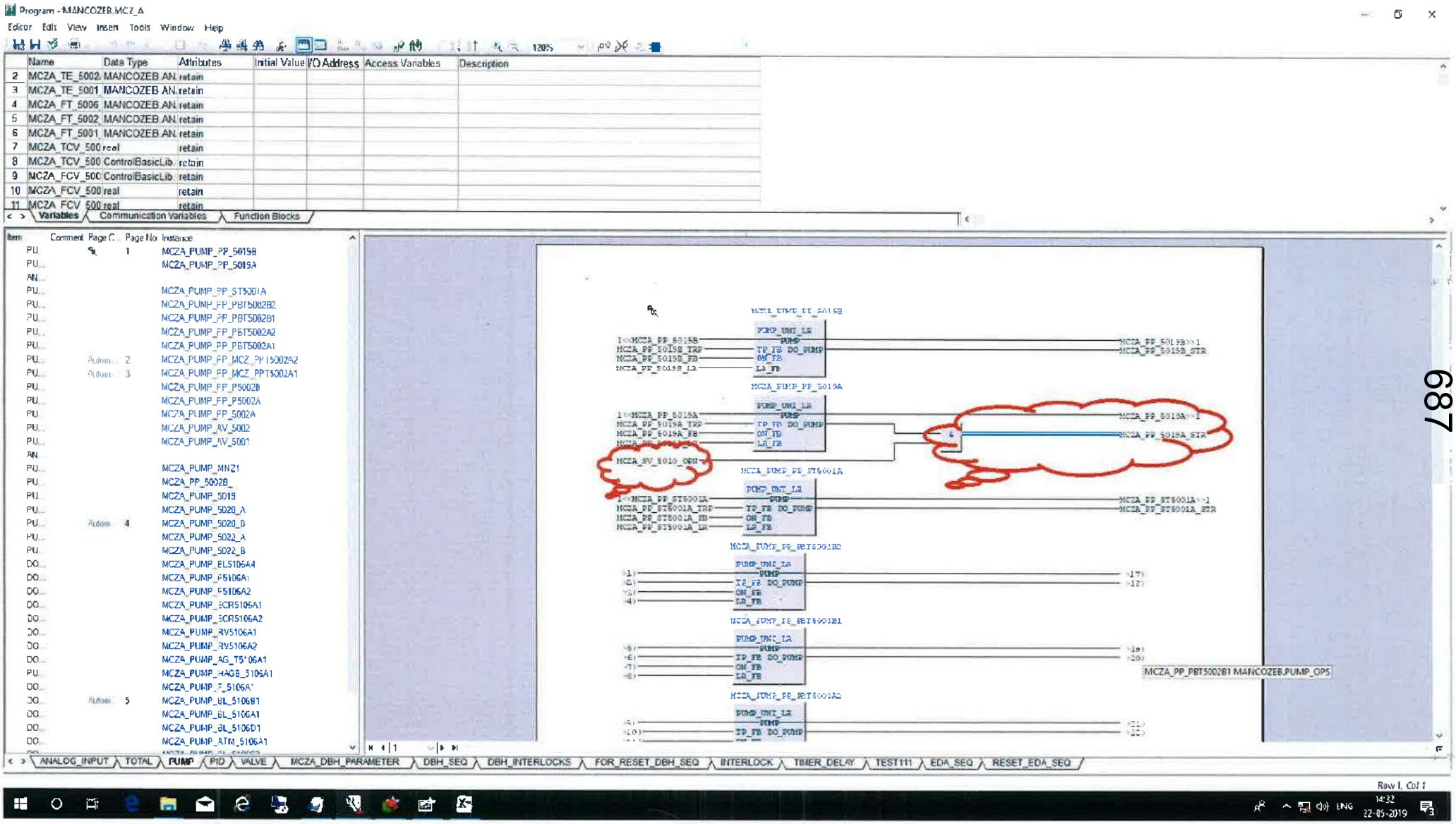
Sr. No 3

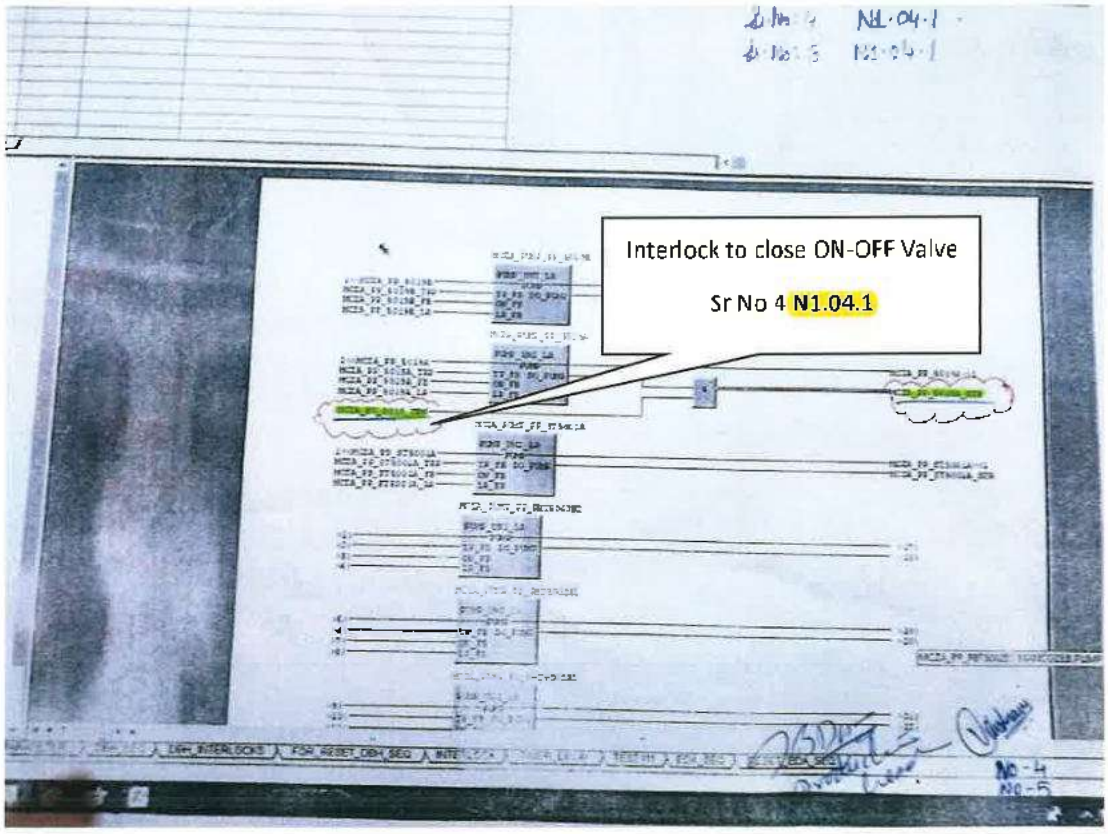




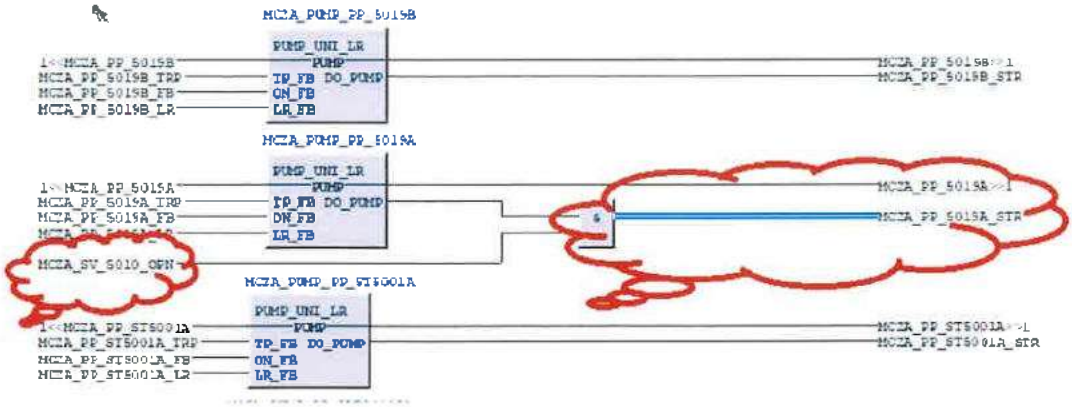
DCS Logic - for closing ON/OFF valve if Pump stop

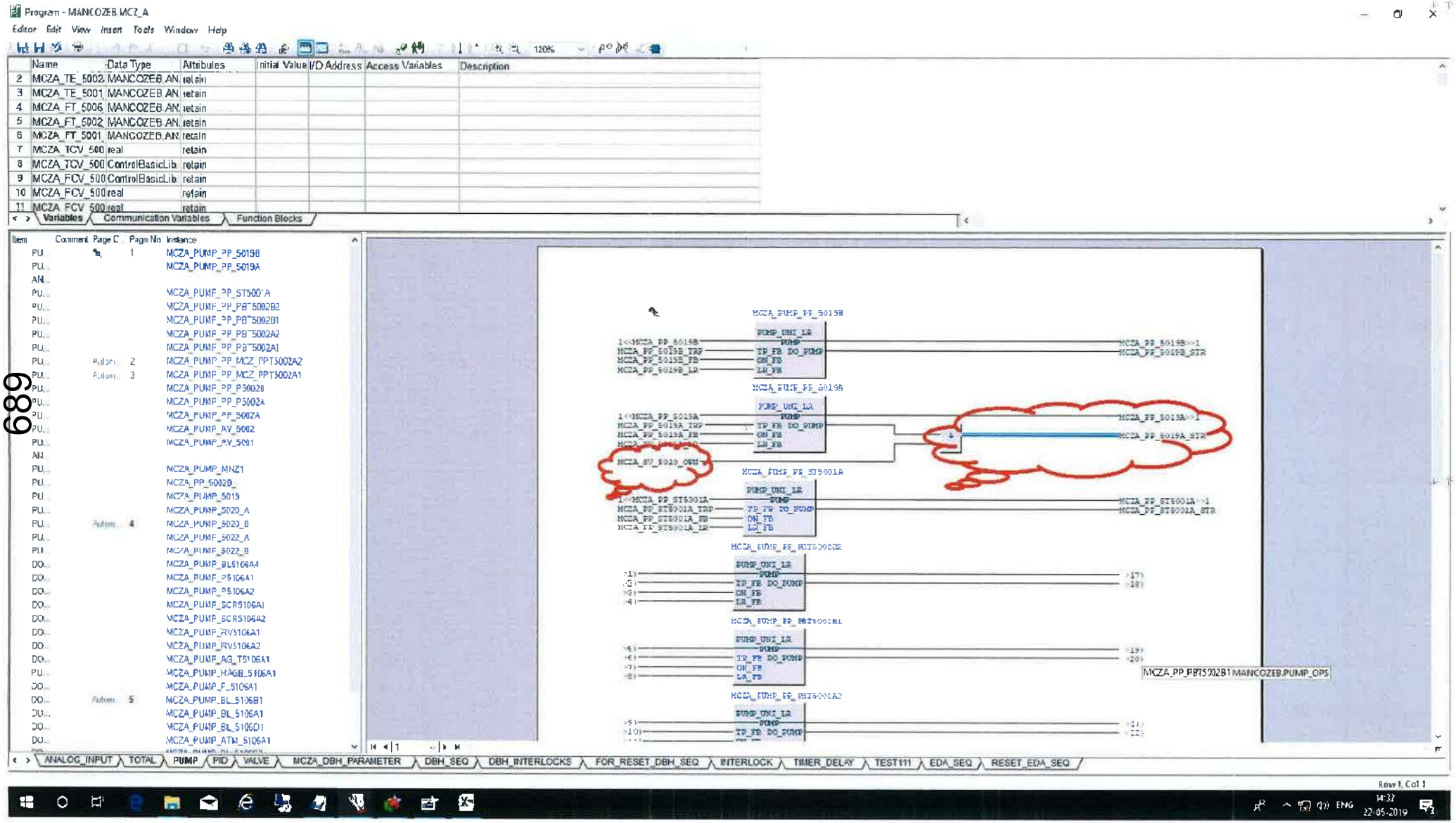



Program - MANCOZEB.MCZ_A
Editor Edit View Insert Tools Window Help
Name Data Type Attributes Initial Value I/O Address Access Variables Description
MCZA_TE_5002 MANCOZEB.AN retain
MCZA_TE_5001 MANCOZEB.AN retain
MCZA_FT_5006 MANCOZEB.AN retain
MCZA_FT_5002 MANCOZEB.AN retain
MCZA_FT_5001 MANCOZEB.AN retain
MCZA_TCV_500 real retain
MCZA_TCV_500 ControlBasicLib retain
MCZA_FCV_500 ControlBasicLib retain
MCZA_FCV_500 real retain
MCZA_FCV_500 real retain
Variables
Communication Variables
Function Blocks
Item Comment Page C... Page No Instance
PU 1 MCZA_PUMP_PP_5015B
PU MCZA_PUMP_PP_5019A
AN
PU MCZA_PUMP_PP_ST5001A
PU MCZA_PUMP_PP_PBT5002B2
PU MCZA_PUMP_PP_PBT5002B1
PU MCZA_PUMP_PP_PBT5002A2
PU MCZA_PUMP_PP_PBT5002A1
PU Autom... 2 MCZA_PUMP_PP_MCZ_PP15002A2
PU Autom... 3 MCZA_PUMP_PP_MCZ_PPT5002A1
PU MCZA_PUMP_FP_P5002B
PU MCZA_PUMP_FP_P5002A
PU MCZA_PUMP_FP_5002A
PU MCZA_PUMP_AV_5002
PU MCZA_PUMP_AV_5001
AN
PU MCZA_PUMP_MNZ1
PU MCZA_PP_5002B_
PU MCZA_PUMP_5019
PU MCZA_PUMP_5020_A
PU Autom... 4 MCZA_PUMP_5020_B
PU MCZA_PUMP_5022_A
PU MCZA_PUMP_5022_B
DO MCZA_PUMP_EL5106A4
DO MCZA_PUMP_P5106A1
DO MCZA_PUMP_P5106A2
DO MCZA_PUMP_3CR5106A1
DO MCZA_PUMP_3CR5106A2
DO MCZA_PUMP_RV5106A1
DO MCZA_PUMP_RV5106A2
DO MCZA_PUMP_AG_T5106A1
PU MCZA_PUMP_HAGB_5106A1
DO MCZA_PUMP_F_5106A1
DO Autom... 5 MCZA_PUMP_BL_5106B1
DO MCZA_PUMP_BL_5106A1
DO MCZA_PUMP_BL_5106D1
DO MCZA_PUMP_ATM_5106A1
MCZA_PP_PBT5002B1.MANCOZEB.PUMP_OPS
ANALOG_INPUT TOTAL PUMP PID VALVE MCZA_DBH_PARAMETER DBH_SEQ DBH_INTERLOCKS FOR_RESET_DBH_SEQ INTERLOCK TIMER_DELAY TEST111 EDA_SEQ RESET_EDA_SEQ
Row 1, Col 1
14:32
22-05-2019



DCS Logic - for closing ON/OFF valve if Pump stop




Program - MANCOZEB.MCZ_A
Editor Edit View Insert Tools Window Help
Variables
Communication Variables
Function Blocks
ANALOG_INPUT
TOTAL
PUMP
PID
VALVE
MCZA_DBH_PARAMETER
DBH_SEQ
DBH_INTERLOCKS
FOR_RESET_DBH_SEQ
INTERLOCK
TIMER_DELAY
TEST111
EDA_SEQ
RESET_EDA_SEQ
MCZA_PP_PBT5002B1.MANCOZEB.PUMP_OPS

PSM Critical Equipment List - MNZ A Plant

Sr. No.	Equipment/ Instrument	Tags	
1	Flame arrestor	FA-5102A-01	Prescriptive
2	DBH reactor vent line - control valve (outlet)	PCV-E5102A2-20	preventive
3	DBH reactor vent line - control valve (inlet)	PCV-E5102A2-10	preventive
4	Pressure transmitter - DBH reactor	PT-E5102A2-10	preventive
5	Sight glass on CS2 recovery line (2 nos.)		consequence
6	Sight glass on CS2 drain line (2 nos.)		consequence
7	Level gauge of fresh CS2 batch tank	LG-DT5102B1-10	consequence
8	Level gauge of recovery CS2 batch tank	LG-DT5102B2-10	consequence
9	Chilled water supply on/off valve	XV-R5102A-20	Prescriptive
10	Temperature transmitter of DBH reactor	TT-R5102A-10	Prescriptive
11	Safety valve of DBH reactor	PSV-R5102A-10	Prescriptive
12	Chilled water line control valve	TCV-R5102A-10	Prescriptive
13	Pressure gauge of DBH reactor	PG-R5102A-20	Prescriptive
14	CS lye feed line to DBH reactor - control valve	FCV-R5102A-20	Preventive
15	CS lye feed line to DBH reactor -on/off valve	XV-R5102A-50	Mitigative
16	EDA line to DBH reactor - control valve	FCV-R5102A-10	Preventive
17	EDA feed line to DBH reactor -on/off valve	XV-R5102A-60	Mitigative
18	Chilled water return line on/off valve	XV-R5102A-70	preventive
19	Level gauge of CS lye day tank	LG-DT5102D1-10	loss of containment
20	High level switch - CS lye day tank	LSH-DT-5102D1-10	preventive
21	Overflow line - CS lye day tank		preventive
22	Level gauge of dil. EDA day tank	LG-DT5102C1-10	loss of containment
23	High level switch - dil. EDA day tank	LSH-DT-5102C1-10	Preventive
24	Overflow line - dil. EDA day tank		Preventive
25	PPT blower	BL-5103C1	Mitigative
26	DBH blower	BL-5102A	Mitigative
27	HAG	HAG-5106A-1	Prescriptive
28	Temperature transmitter of SPD chamber	TE-SPD-5106A1-20	Preventive
29	Air purging valve of SPD bag house	SOV-BF5106A10- 520	Preventive
30	SPD slurry feed pump	P-5106A-1 & 2	Preventive
31	Pinmill-1/2 & 3	PN-5109A/B/ & C	Preventive
32	Temperature transmitter on chilled water line - dehumidifier	TE-E5109-01	
33	Temp control valve - dehumidifier Chilled water supply line	TCV-E5109-01	
34	Oxygen analyser - packing conveying line	AT-GD-E5109-01	
35	Steam ejectors	EJ-5107A-1 / B-1 / C-1	Prescriptive
36	Dyke - Dilute EDA storage tank, 20 KL		Mitigative
37	Dyke - Conc. EDA storage tank, 20 KL		Mitigative
38	EDA scrubber - primary	SC-5201B3	Regulatory
39	EDA primary scrubber - pump	P-5201B3	Regulatory
40	EDA scrubber - Secondary	SC-5201A3	Regulatory
41	EDA secondary scrubber - pump	P-5201A3/A4	Regulatory
42	EDA scrubber blower- primary	BL-5201B3	Regulatory
43	EDA scrubber blower- secondary	BL-5201A3	Regulatory
44	Nitrogen Compressor of Utility		consequence
45	SPD all Interlock		consequence
46	ID & FD		consequence
47	Nitrogen Temperature		consequence
48	Packing Temperature		consequence
49	Oxgyen meter		consequence
50	CS2 Sensor		consequence
51	CMS Sensor		consequence
52	Raw water booster pump		consequence
53	CS2 flame arrester in blower line		consequence
54	Primary CS2 recovery Heat Exchanger (DBH Condenser)	E -5102A-1	consequence
55	Primary CS2 recovery Heat Exchanger (DBH Condenser)	E -5102A-2	consequence
56	DBH Reactor Internal Coil		consequence

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

FORMATE FOR PREVENTIVE MAINTENANCE SCHEDULE

PLANT	MNZ - A	FORMAT NO: IMS/EN/F/01/01

SR. NO	TANK LIST	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	EDA STORAGE TANK -A												
2	EDA STORAGE TANK -B												
3	DILUTE EDA SCRUBBER TANK												
4	DILUTE EDA STORAGE TANK												
5	CS2 STORAGE TANK -A												
6	CS2 STORAGE TANK B												
7	FRESH CS2 DAY TANK												
8	DILUTE EDA BATCH TANK												
9	CAUSTIC LYE BATCH TANK												
10	CS2 RECOVERY TANK												
11	DBH HOLD TANK												
12	MNSO4 STORAGE TANK												
13	MNSO4 OVERFLOW TANK												
14	MNSO4 BATCH TANK -A												
15	MNSO4 BATCH TANK -B												
16	DBH INTERNAL COIL *												
17	DBH BATCH TANK -A												
18	DBH BATCH TANK -B												
19	WATER FEED TANK -A												
20	ZNSO4 STORAGE TANK												
21	ZNSO4 DAY TANK												
22	ML TANK -A												
23	ML TANK -B												
24	LEAF FILTER TANK												
25	SLURRY FEED TANK												
26	WATER FEED TANK -B												
27	SPD SCRUBBER TANK A												
28	SPD SCRUBBER TANK-B												
29	BAROMETRIC TANK												
30	BAROMETRIC OVERFLOW TANK												
31	WATER SINTEX TANK												
32	RVD -1 RECOVER RECEIVER A												
33	RVD -1 RECOVER RECEIVER B												
34	RVD -2 RECOVER RECEIVER A												
35	RVD -2 RECOVER RECEIVER B												
36	RVD -3 RECOVER RECEIVER A												
37	RVD -3 RECOVER RECEIVER B												
38	CAUSTIC LYE STORAGE TANK												
39	Primery CS2 Recovery HE (DBH Condenser) *												
40	Secondary CS2 Recovery HE (DBH Condenser) *												
41	HAG Shell												

Prepared By	Reviewed By	Approved By
Engg	HOD	HOD Maint

* HYDRO TEST TO BE CONDUCTED ONCE IN TWO YEARS

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

PREVENTIVE MAINTENANCE CHECKLIST FOR TANKS

PLANT	MNZ								FORMAT NO: IMS/EN/F/07/07			
Date	5/01/19		10/01/19									
EQUIPMENT DESCRIPTION	Primary CS2 Recovery HE (DBH Condenser)		Secondary CS2 Recovery HE (DBH Condenser)		HAG Shell							
Activity	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
External Inspection												
Foundation and Supports	✓		✓									
Concrete OR Steel Supports	✓		✓									
Nozzle	✓		✓									
Pipe Hanger	✓		✓									
External Metal Surfaces Of Piping & Vessels	✓		✓									
Conditions of Ladder, Platform and Railings	✓		✓									
Indications of Water Hammer	✓		✓									
Indications of damage to piping (Dent, Bowing, Bending, etc.)	✓		✓									
Unusual Vibration	✓		✓									
Conditions of manways and covers	✓		✓									

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Evidence of water logging in contact with the vessel, tank or its structural support	✓		✓									
Condition of Name Plate	✓		✓									
Protective Coating & Insulation		NA		NA								
Earthing												
Internal Inspection	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**
Vessel Shell, Bottom Dish and Top Dish	✓		✓									
Metallic Lining		NA		NA								
Non- metallic Lining		NA		NA								
Thickness Measurement for Vessel and Piping		OK		NA								
Inspection for corrosion, erosion, cracking and bulges	✓		✓									
Hydrotest – 2 year	✓		✓									
Checked by :	[signature]		[signature]									
Certified by Plant:	[signature]		[signature]									
Maint Engg :	[signature]		[signature]									

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PIPELINE TEST REPORT
(PRESSURE TEST)

Coromandel

Test Data

Type of Pipe: PRIMERY CS2 RECOVERY HE (DBH CONDENSOR)

Location of Equipment : MNZ A Plant 7.5 m, CH. Sarigam

Tested with: Water (√) Air ( ) Nitrogen ( )

Time Started: 11:00 AM Time Ended : 12:00 PM

Date: 05/01/2019

Test Pressure Start: 2.50 kg/cm2(g)

Test Pressure Stop: 2.50 kg/cm2(g)

Pressure Loss: Yes ( ) No (√)

Remarks:

1. During Pressure test with Water of 2.50 kg/cm2 for 60 minutes, no pressure drop identified. And no pressure drop occurred.

Test Observed by-
Mr. Govind Nahak -Dept. Manager
Sign:

Test Approved by-
Mr. M. N. Tandel -Plant Supervisor
Sign:

Mr. DVS Dogra
AGM Maintance
Sign:

Mr. Dwarika Singh -Deputy Manager
Plant Manager – MNZ A
Sign:

Sr. No. 1

PIPELINE TEST REPORT

(PRESSURE TEST)

Coromandel

Test Data

Type of Pipe: SEONDARY CS2 RECOVERY HE (DBH CONDENSOR)

Location of Equipment : MNZ A Plant 7.5 m, CH. Sarigam

Tested with: Water (√) Air ( ) Nitrogen ( )

Time Started: 13:00 AM Time Ended : 14:00 PM

Date: 10/01/2019

Test Pressure Start: 2.50 kg/cm2(g)

Test Pressure Stop: 2.50 kg/cm2(g)

Pressure Loss: Yes ( ) No (√)

Remarks:

1. During Pressare test with Water of 2.50 kg/cm2 for 60 minutes, no pressure drop identified. And no pressure drop occurred.

Test Observed by-

Mr. Govind Nahak -Dept. Manager

Sign:_____

Test Approved by-

Mr. M. N. Tandel -Plant Supervisor

Sign:_____

Mr. DVS Dogra

AGM Maintance

Sign:_____

Mr. Dwarika Singh -Deputy Manager

Plant Manager – MNZ A

Sign:_____

PSM Critical Equipment List - Mancozeb Plant

Sr. No.	Equipment/ Instrument	Tags	
1	Flame arrestor	FA-5102A-01	Prescriptive
2	DBH reactor vent line - control valve (outlet)	FCV-R5102A-20	preventive
3	DBH reactor vent line - control valve (inlet)	PCV-R5102A-10	preventive
4	Pressure transmitter - DBH reactor	PT-R5102A2-10	preventive
5	Sight glass on CS2 recovery line (2 nos.)		consequence
6	Sight glass on CS2 drain line (2 nos.)		consequence
7	Level gauge of fresh CS2 batch tank	LG-DT5102B1-10	consequence
8	Level gauge of recovery CS2 batch tank	LG-DT5102B2-10	consequence
9	Chilled water supply on/off valve	XV-R5102A-20	Prescriptive
10	Temperature transmitter of DBH reactor	TT-R5102A-10	Prescriptive
11	Safety valve of DBH reactor	PSV-R5102A-10	Prescriptive
12	Chilled water line control valve	TCV-R5102A-10	Prescriptive
13	Pressure gauge of DBH reactor	PG-R5102A-20	Prescriptive
14	CS lye feed line to DBH reactor - control valve	FCV-R5102A-20	Preventive
15	CS lye feed line to DBH reactor - on/off valve	XV-R5102A-50	Mitigative
16	EDA line to DBH reactor - control valve	FCV-R5102A-10	Prescriptive
17	EDA feed line to DBH reactor - on/off valve	XV-R5103A-60	Mitigative
18	Chilled water return line on/off valve	XV-R5102A-70	preventive
19	Level gauge of CS lye day tank	LG-DT5102D1-10	loss of containment
20	High level switch - CS lye day tank	LSH-DT-5102D1-10	preventive
21	Overflow line - CS lye day tank		preventive
22	Level gauge of dil. EDA day tank	LG-DT5102C1-10	loss of containment
23	High level switch - dil. EDA day tank	LSH-DT-5102C1-10	Preventive
24	Overflow line - dil. EDA day tank		Preventive
25	PFT blower	BL-5103C1	Mitigative
26	DBH blower	BL-5102A	Mitigative
27	HAG	HAG-5106A-1	Prescriptive
28	Temperature transmitter of SPD chamber	TE-SPD-5106A1-20	Preventive
29	Air purging valve of SPD bag house	SOV BFS106A30-520	Preventive
30	SPD slurry feed pump	P 5106A 1 & 2	Preventive
31	Pinmill 1/2 & 3	PM 5109A/B/ & C	Preventive
32	Temperature transmitter on chilled water line - dehumidifier	TE-E5109-01	
33	Temp control valve - dehumidifier Chilled water supply line	TCV-E5109-01	
34	Oxygen analyser - packing conveying line	AT GD-E5105-01	
35	Steam ejectors	EA-5107A 1 / B-1 / C-1	Prescriptive
36	Dyke - Dilute EDA storage tank, 20 Kl		Mitigative
37	Dyke - Conc. EDA storage tank, 20 Kl		Mitigative
38	EDA scrubber - primary	SC-5201B3	Regulatory
39	EDA primary scrubber - pump	P 5201B3	Regulatory
40	EDA scrubber - Secondary	SC-5201A3	Regulatory
41	EDA secondary scrubber - pump	P-5201A3/A4	Regulatory
42	EDA scrubber blower- primary	BL-5201B3	Regulatory
43	EDA scrubber blower - secondary	BL 5201A3	Regulatory
44	Nitrogen GSP pressur of utility		consequence
45	SPD oil temperature		consequence
46	EDA fill		consequence
47	Nitrogen temperature		consequence
48	Packing Temperature		consequence
49	Oxygen meter		consequence
50	CS2 Sensor		consequence
51	CMS System		consequence
52	Raw water booster pump		consequence
53	CS2 flame arrestor in blower line		consequence
54	Primery CS2 recovery Heat Exchanger (DBH Condenser)	E -5102A-1	consequence
55	Primery CS2 recovery Heat Exchanger (DBH Condenser)	E -5102A-2	consequence
56	DBH Reactor internal Coil		consequence

(Valve Department)

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

FORMATE FOR PREVENTIVE MAINTENANCE SCHEDULE

PLANT	MNZ - A									FORMAT NO: IMS/EN/F/02/07			
SR. NO	TANK LIST	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	FDA STORAGE TANK -A												
2	FDA STORAGE TANK -B												
3	DILUTE FDA SCRUBBER TANK												
4	DILUTE FDA STORAGE TANK												
5	CS2 STORAGE TANK-A												
6	CS2 STORAGE TANK-B												
7	FRESH CS2 DAY TANK												
8	DILUTE FDA BATCH TANK												
9	CAUSTIC LYE BATCH TANK												
10	CS2 RECOVERY TANK												
11	DBH NAOH TANK												
12	MNSO4 STORAGE TANK												
13	MNSO4 OVERFLOW TANK												
14	MNSO4 BATCH TANK -A												
15	MNSO4 BATCH TANK -B												
16	DBH INTERNAL COIL *												
17	DBH BATCH TANK -A												
18	DBH BATCH TANK -B												
19	WATER FEED TANK -A												
20	ZNSO4 STORAGE TANK												
21	ZNSO4 DAY TANK												
22	ML TANK -A												
23	ML TANK -B												
24	LEAD WATER TANK												
25	SLURRY FEED TANK												
26	WATER FEED TANK -B												
27	SPD SCRUBBER TANK-A												
28	SPD SCRUBBER TANK-B												
29	BAROMETRIC TANK												
30	BAROMETRIC OVERFLOW TANK												
31	WATER STOCK TANK												
32	RVD-1 RECOVER RECIEVER A												
33	RVD-1 RECOVER RECIEVER B												
34	RVD-2 RECOVER RECIEVER A												
35	RVD-2 RECOVER RECIEVER B												
36	RVD-3 RECOVER RECIEVER A												
37	RVD-3 RECOVER RECIEVER B												
38	CAUSTIC LYE STORAGE TANK												
39	PRIMERY CS2 RECOVERY HE (DBH CONDENSER) *												
40	SECONDAREY CS2 RECOVERY HE (DBH CONDENSER) *												
41	MNS INTERNAL COIL *												
	Prepared By			Reviewed by				Approved By					
				MR									

* HYDRO TEST TO BE CONDUCT ONCE IN TWO YEARS

Sr. No-9

murugappa

PIPELINE TEST REPORT
(PRESSURE TEST)

Coromandel

Test Data

Type of Pipe: DBH INTERNAL COIL REACTOR

Location of Equipment: MNZ A Plant 5 m, CIL Sarigam

Tested with: Water (√) Air ( ) Nitrogen ( )

Time Started: 13:00 AM Time Ended: 14:00 PM

Date: 19/01/2019

Test Pressure Start: 3 kg/cm2(g)

Test Pressure Stop: 3 kg/cm2(g)

Pressure Loss: Yes ( ) No (√)

Remarks:

1. During Pressure test with Water of 3 kg/cm2 for 60 minutes, no pressure drop identified. And no pressure drop occurred.

Test Observed by-

Mr. Govind Nahak -Dept. Manager

Sign:

Test Approved by-

Mr. M. N. Tandel -Plant Supervisor

Sign:

Mr. DVS Dogra

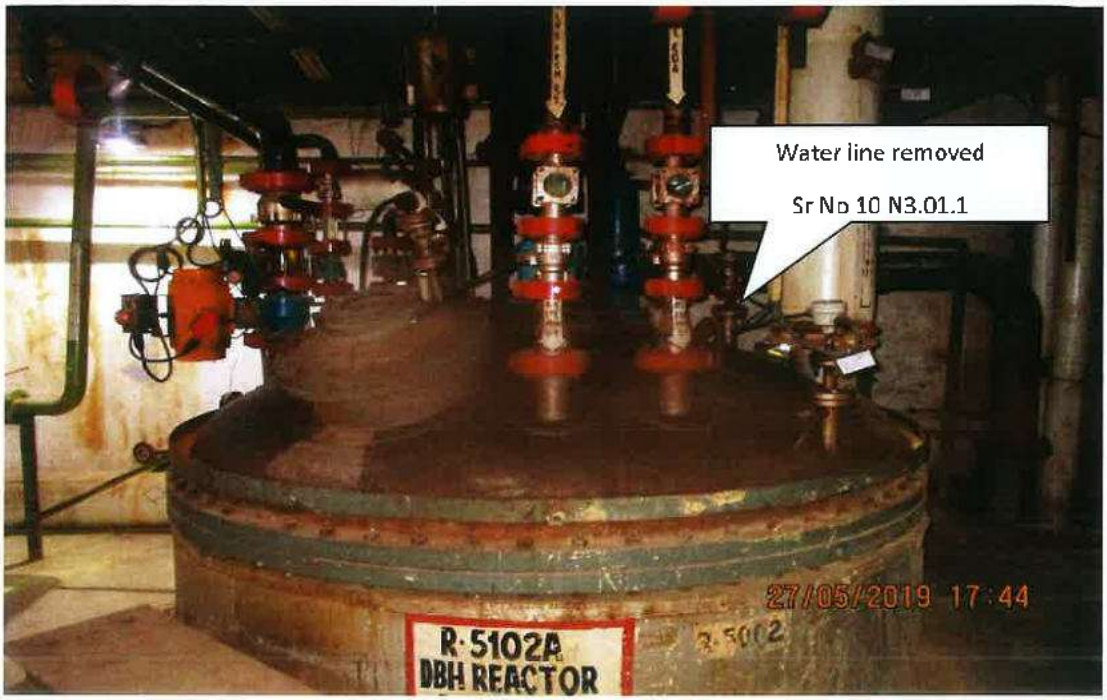
AGM Maintance

Sign:

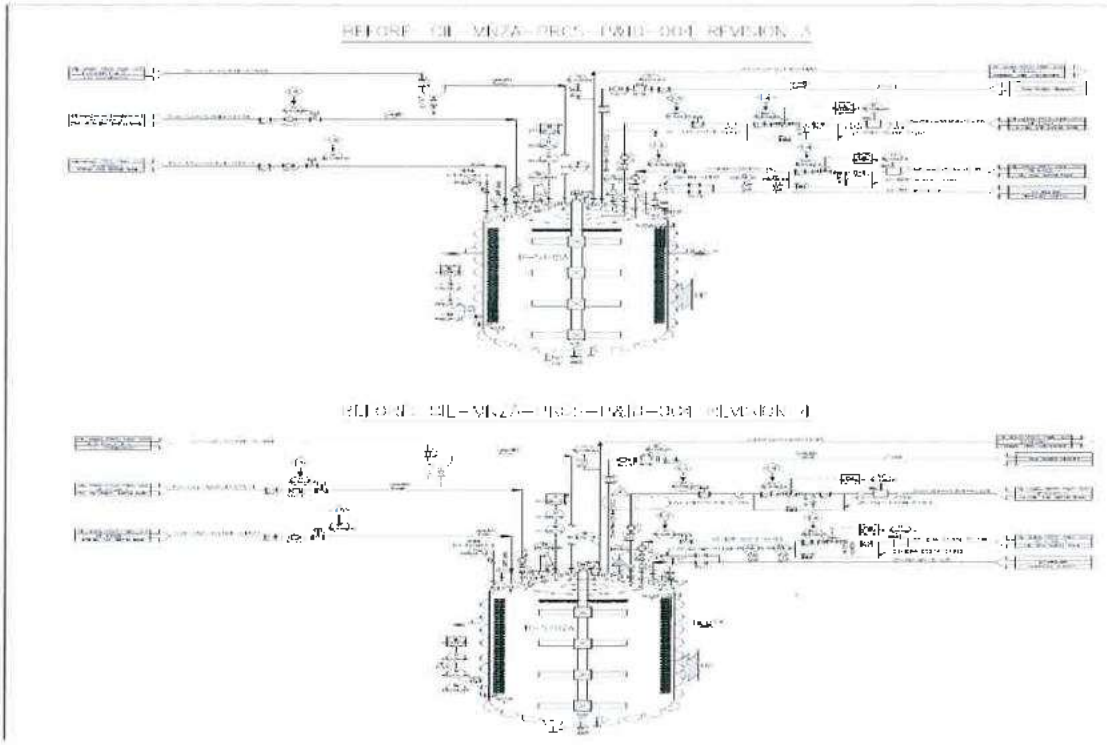
Mr. Dwarika Singh -Deputy Manager

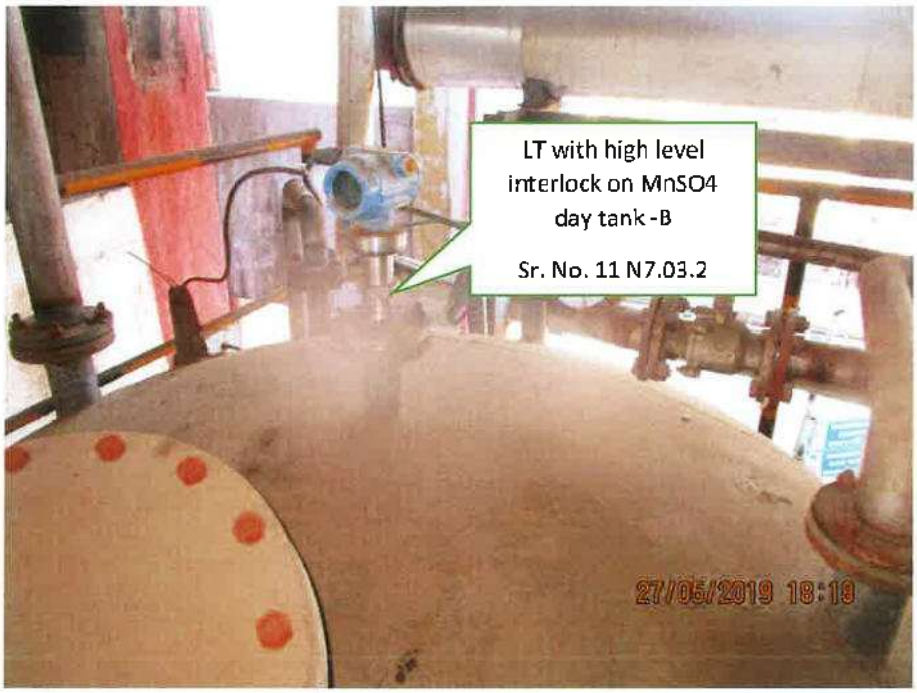
Plant Manager – MNZ A

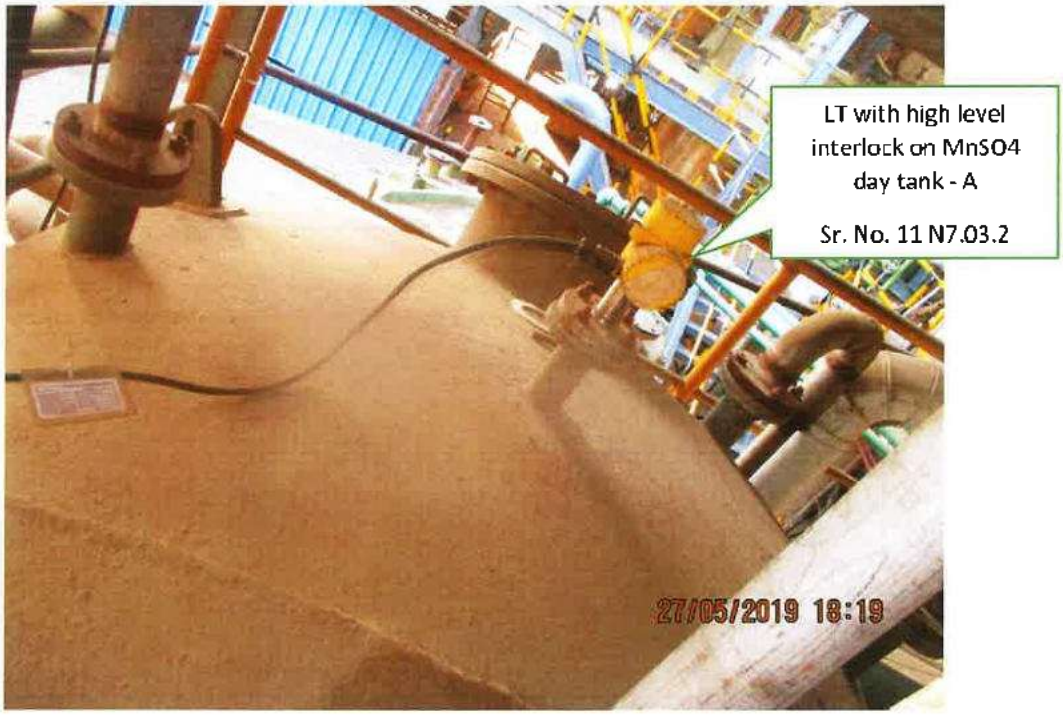
Sign:

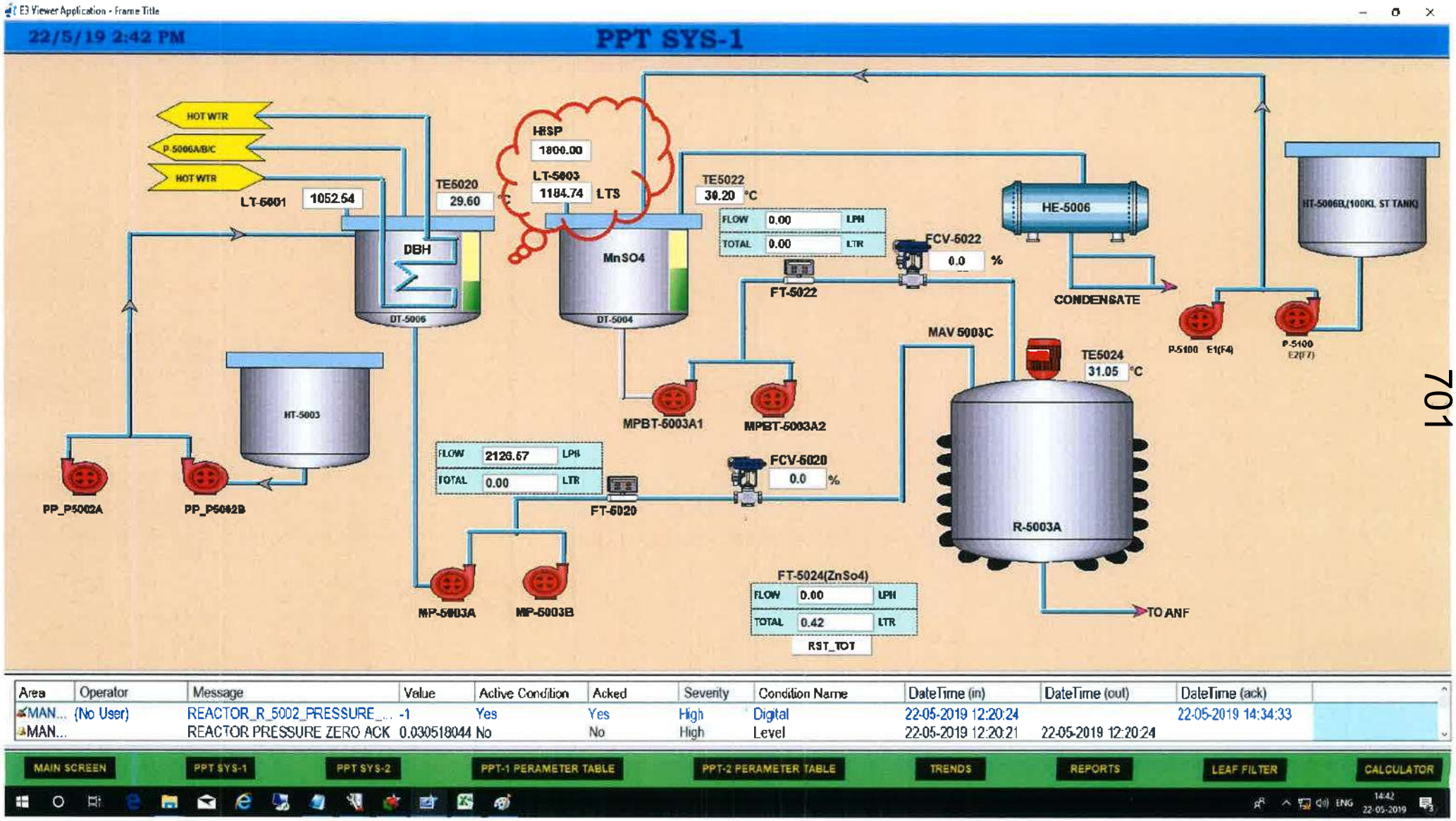


Water line removed Sr No 10 N3.01.1

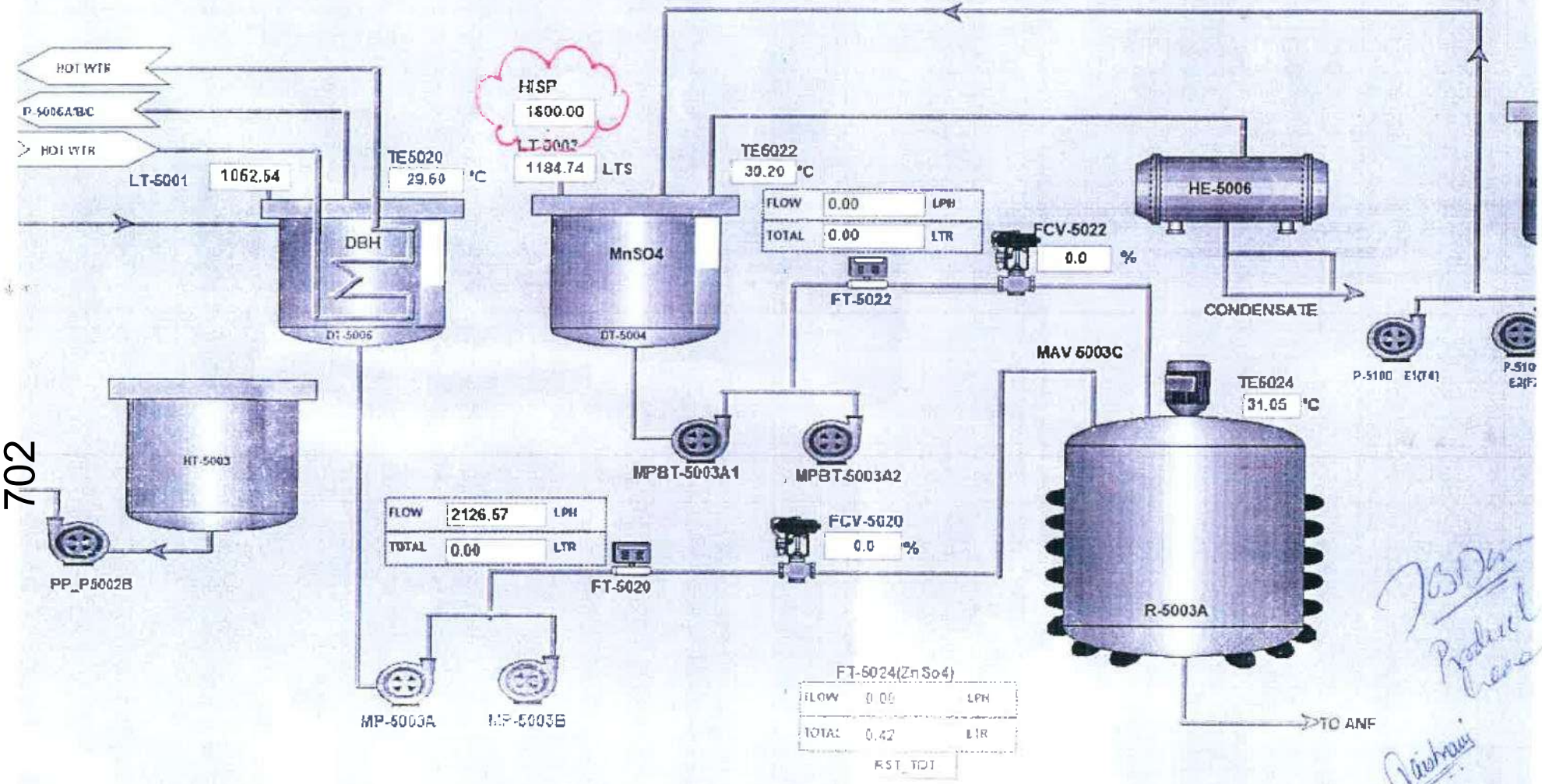



LT with high level interlock on MnSO4 day tank -B
Sr. No. 11 N7.03.2
27/05/2019 18:13


LT with high level interlock on MnSO4 day tank - A
Sr. No. 11 N7.03.2
27/05/2019 18:19


E3 Viewer Application - Frame Title
22/5/19 2:42 PM
PPT SYS-1
HOT WTR
P-5006A/B/C
HOT WTR
LT-5001
1052.54
TE5020
29.60 °C
HSP
1800.00
LT-5003
1184.74 LTS
TE5022
30.20 °C
FLOW 0.00 LPH
TOTAL 0.00 LTR
FT-5022
FCV-5022
0.0 %
HE-5006
HT-5006B,(100KL ST TANK)
CONDENSATE
DBH
DT-5005
MnSO4
DT-5004
MAV 5003C
TE5024
31.05 °C
P-5100 E1(F4)
P-5100 E2(F7)
HT-5003
MPBT-5003A1
MPBT-5003A2
FLOW 2126.67 LPH
TOTAL 0.00 LTR
FT-5020
FCV-5020
0.0 %
R-5003A
PP_P5002A
PP_P5002B
MP-5003A
MP-5003B
FT-5024(ZnSo4)
FLOW 0.00 LPH
TOTAL 0.42 LTR
RST_TOT
TO ANF
Area | Operator | Message | Value | Active Condition | Acked | Severity | Condition Name | DateTime (in) | DateTime (out) | DateTime (ack)
MAN... | (No User) | REACTOR_R_5002_PRESSURE_... | -1 | Yes | Yes | High | Digital | 22-05-2019 12:20:24 | | 22-05-2019 14:34:33
MAN... | | REACTOR PRESSURE ZERO ACK | 0.030518044 | No | No | High | Level | 22-05-2019 12:20:21 | 22-05-2019 12:20:24 |
MAIN SCREEN
PPT SYS-1
PPT SYS-2
PPT-1 PERAMETER TABLE
PPT-2 PERAMETER TABLE
TRENDS
REPORTS
LEAF FILTER
CALCULATOR
ENG
14:42
22-05-2019

PPT SYS-1



Message	Value	Active Condition	Acked	Severity	Cond...	Name	DateTime (in)	DateTime (out)	DateTime (ack)
REACTOR_R_5002_PRESSURE_	-1	Yes	Yes	High	Digital				22-05-2019 14:34:33
REACTOR PRESSURE ZERO ACK	0.030518044	No	No	High	Level		22-05-2019 12:29:21	22-05-2019 12:2...	

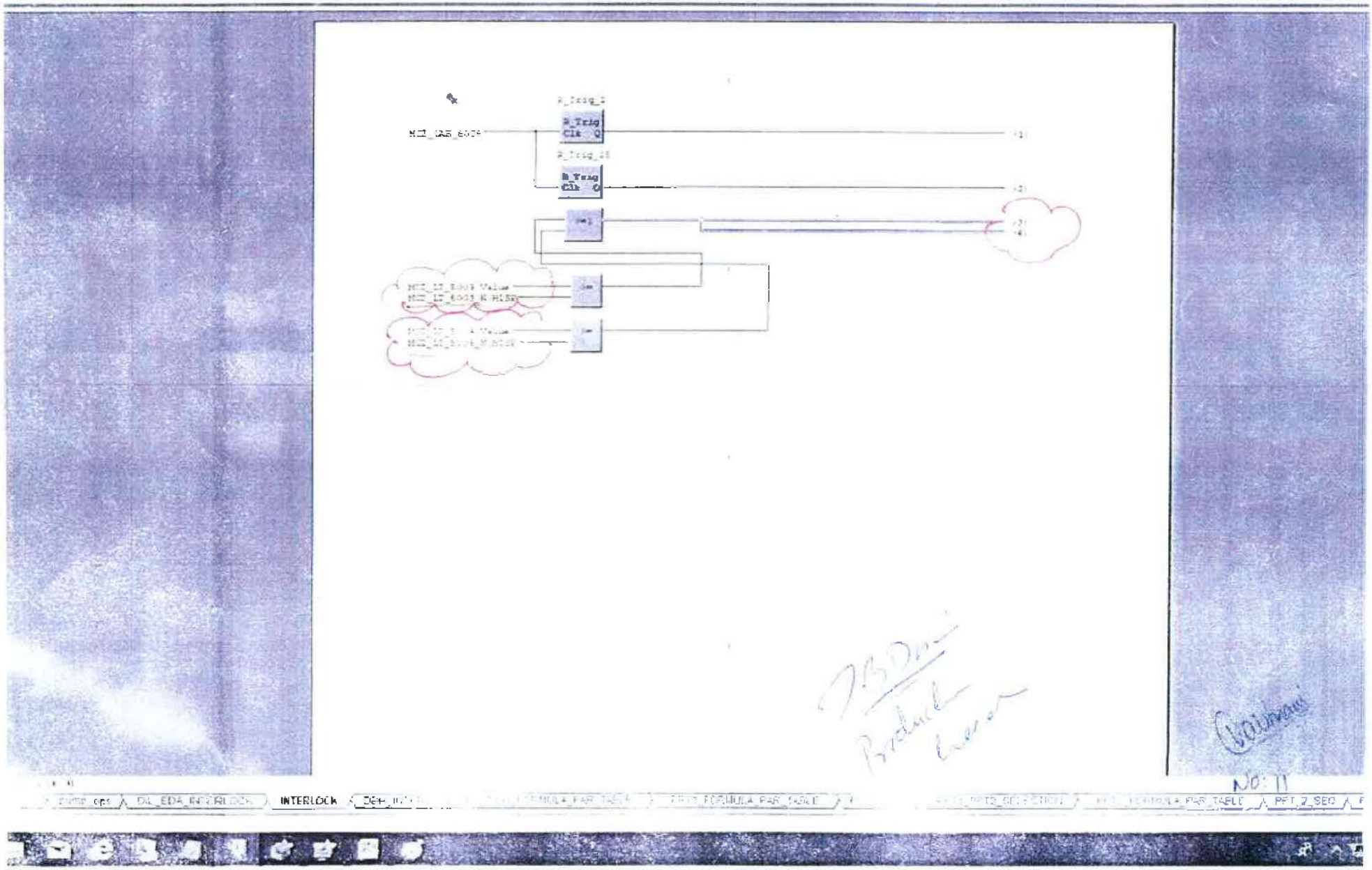
PPT SYS-1 | PPT SYS-2 | PPT-1 PERAMETER TABLE | PPT-2 PERAMETER TABLE | TRENDS | REPORTS | LEAF FILTER

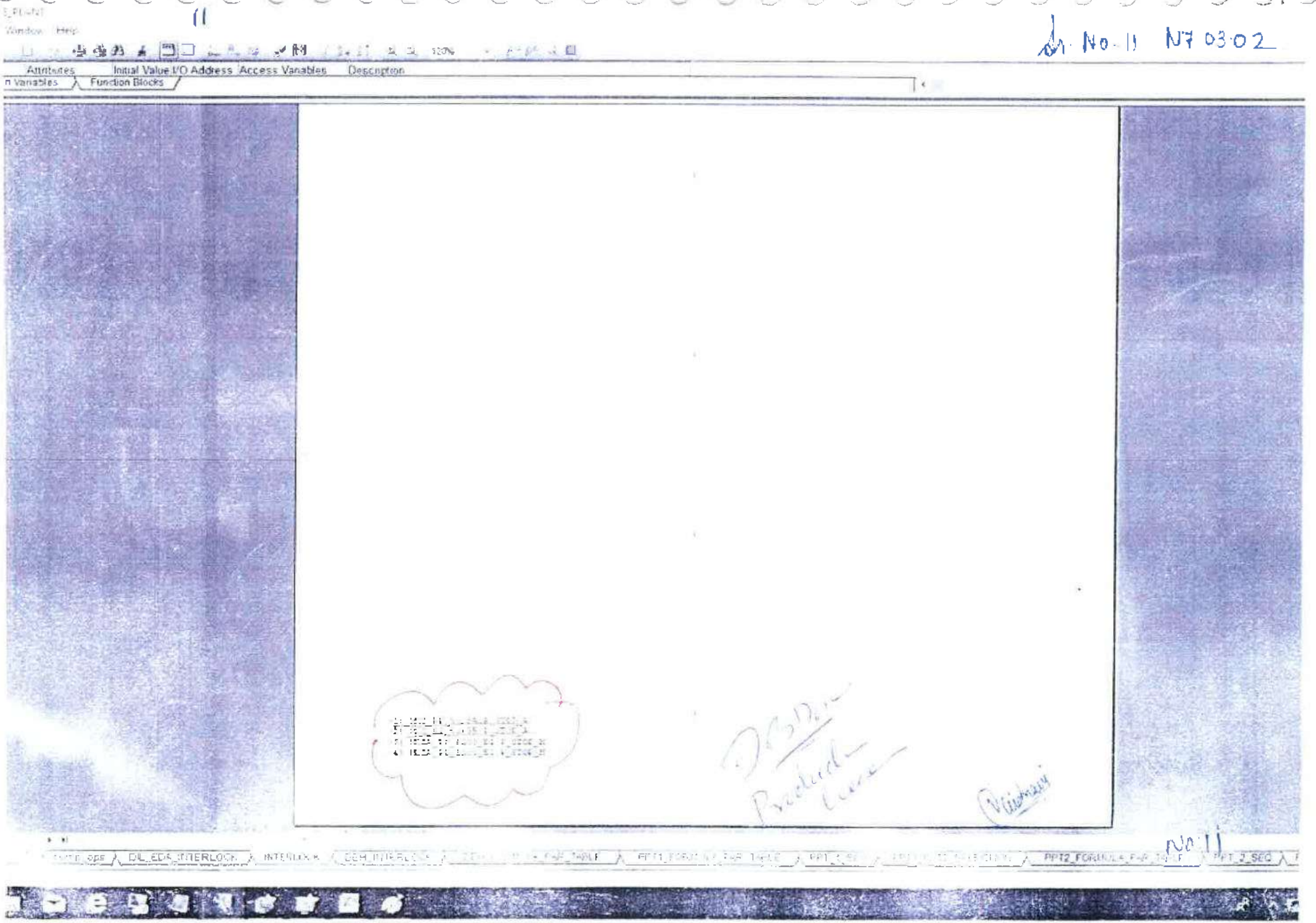
11

No 11 N7.03.02

702

No 11


Attributes
Initial Value I/O Address Access Variables
Description
Function Blocks
R_Trig
Clk Q
INTERLOCK


11
No. 11 N7 03 02
Attributes
Initial Value I/O Address Access Variables
Description
n Variables
Function Blocks
Product
No 11


Overflow line in
MnSO4 day tank
Sr. No. 12 N7.03.2
27/05/2019 17:53

Sl No - (13)

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

FORMATE FOR PREVENTIVE MAINTENANCE SCHEDULE

PLANT: MNZ A — FORMAT NO. IMS/EN/F/07/07

SR. NO	TANK LIST	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	EDA STORAGE TANK -A												
2	EDA STORAGE TANK -B												
3	DILUTE EDA SURUSHCH TANK												
4	DILUTE EDA STORAGE TANK												
5	CS2 STORAGE TANK -A												
6	CS2 STORAGE TANK -B												
7	FRESH CS2 DAY TANK												
8	DILUTE EDA BATCH TANK												
9	CAUSTIC LYE BATCH TANK												
10	CS2 RECOVERY TANK												
11	DBH HOLD TANK												
12	MNSO4 STORAGE TANK												
13	MNSO4 OVERFLOW TANK												
14	MNSO4 BATCH TANK -A												
15	MNSO4 BATCH TANK -B												
16	DBH INTERNAL COIL *												
17	DBH BATCH TANK -A												
18	DBH BATCH TANK -B												
19	WATER FEED TANK -A												
20	ZNSO4 STORAGE TANK												
21	ZNSO4 DAY TANK												
22	ASL TANK -A												
23	ASL TANK -B												
24	LEAF FILTER TANK												
25	SLURRY FEED TANK												
26	WATER FEED TANK -B												
27	SPD SCRUBBER TANK-A												
28	SPD SCRUBBER TANK-B												
29	BAROMETRIC TANK												
30	BAROMETRIC OVERFLOW TANK												
31	WATER SINTER TANK												
32	RVD -1 RECOVER RECIEVER A												
33	RVD -1 RECOVER RECIEVER B												
34	RVD -2 RECOVER RECIEVER A												
35	RVD -2 RECOVER RECIEVER B												
36	RVD -3 RECOVER RECIEVER A												
37	RVD -3 RECOVER RECIEVER B												
38	CAUSTIC LYE STORAGE TANK												
39	Primary CS2 Recovery HE (DBH Condenser) *												
40	Secondary CS2 Recovery HE (DBH Condenser) *												
41	HAG Shell												

Prepared By	Reviewed By	Approved By
Engg	MR	HOD Maint

* HYDRO TEST TO BE CONDUCTED ONCE IN TWO YEARS

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

PREVENTIVE MAINTENANCE CHECKLIST FOR TANKS

PLANT	MNZ								FORMAT NO: IMS/EN/F/07/07			
Date					19/01/19							
EQUIPMENT DESCRIPTION	Primary CS2 Recovery HE (DBH Condenser)		Secondary CS2 Recovery HE (DBH Condenser)		HAG Shell							
Activity	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
External Inspection												
Foundation and Supports						NA						
Concrete OR Steel Supports						NA						
Nozzle					✓							
Pipe Hanger					✓							
External Metal Surfaces Of Piping & Vessels					✓							
Condition of Ladder, Platform and Railings						NA						
Indications of Water Hammer					✓							
Indications of damage to piping (Dent, Bowing, Bending, etc.)					✓							
Unusual Vibration					✓							
Conditions of manways and covers					✓							

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Evidence of water logging in contact with the vessel, tank or its structural support					✓							
Condition of Name Plate					✓							
Protective Coating & Insulation					✓							
Earthing					✓							
Internal Inspection	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**	**OK**	**Not OK**
Vessel Shell, Bottom Dish and Top Dish					✓							
Metallic Lining					✓							
Non- metallic Lining						NA						
Thickness Measurement for Vessel and Piping						NA						
Inspection for corrosion, erosion, cracking and bulges					OK							
Hydrotest – 2 year					✓							
Checked by :												
Certified by Plant:												
Maint Engg :												


Explosion door on SPD chamber Sr. No. 14 N19.01.1
ATM:5
Explosion door on SPD chamber Sr. No. 14 N19.01.1
27/05/2019 18:02

Sr. No- (15)

COROMANDEL INTERNATIONAL LIMITED													
DEPARTMENT: MECHANICAL													
FORMATE FOR PREVENTIVE MAINTENANCE SCHEDULE													
PLANT	MNZ - A								FORMAT NO: IMS/EN/F/07/07				
SR. NO	ROTARY VALVE LIST	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	SPD SYSTEM ROTARY VALVE												
2	SPD BAGHOUSE ROTARY VALVE												
3	CYCLONE ROTARY VALVE												
4	CONVEYING ROTARY VALVE												
5	70 TPD ROTARY VALVE												
6	COOLER-1 ROTARY VALVE												
7	COOLER-2 ROTARY VALVE												
8	COOLER-3 ROTARY VLAVE												
9	PACKING ROTARY VALVE-1												
10	PACKING ROTARY VALVE-2												
	Prepared By	Reviewed by						Approved By					
	Engg	MR						HOD Maint					

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Sr. No 15

Coromandel	COROMANDEL INTERNATIONAL LIMITED SARIGAM	Doc no : IMS/EN/F/07/11
Issue No.01	DEPARTMENTAL MANUAL OF MAINTENANCE	Issue/ Revision Date: 01/07/2017
Revision: 01	Title: PM CHECKLIST FOR ROTARY VALVES	Page 1 of 1

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

PREVENTIVE MAINTENANCE CHECKLIST FOR ROTARY VALVE

PLANT		MN2 -A						Format: IMS/EN/07/11			
DATE		1/2/19		5/03/19		5/04/19		5/04/19		10/04/19	
EQUIPMENT		Cyclone Rotary Valve		Packing Rotary Valve 1		Conveying Rotary Valve		Packing Rotary Valve 2		70 TPD Rotary Valve	
ACTIVITIES	Method	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
Chain condition check	Visual	✓		✓		✓		✓		✓	
Abnormal Sound check	Sound	✓		✓		✓		✓		✓	
Bearing condition check	Sound	✓		✓		✓		✓		✓	
Bearing greasing	As per Indication	✓		✓		✓		✓		✓	
Checked By		[signature]		[signature]		[signature]		[signature]		[signature]	
Certified by Plant		[signature]		[signature]		[signature]		[signature]		[signature]	
Maint. Engg.		[signature]		[signature]		[signature]		[signature]		[signature]	

711

Sr No - 15

Coromandel	COROMANDEL INTERNATIONAL LIMITED SARIGAM	Doc no : IMS/EN/F/07/11
Issue No.01	DEPARTMENTAL MANUAL OF MAINTENANCE	Issue/ Revision Date: 01/07/2017
Revision: 01	Title: PM CHECKLIST FOR ROTARY VALVES	Page 2 of 1

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: MECHANICAL

PREVENTIVE MAINTENANCE CHECKLIST FOR ROTARY VALVE

PLANT		MN2-A						Format: IMS/EN/07/11			
DATE		05/01/19		13/1/19		12/2/19		18/2/19			
EQUIPMENT		SPD System Rotary Valve		Cooler 2 Rotary Valve		SPD Bag house Rotary Valve		Cooler 3 Rotary Valve			
ACTIVITIES	Method	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
Chain condition check	Visual	✓		✓		✓		✓			
Abnormal Sound check	Sound	✓		✓		✓		✓			
Bearing condition check	Sound	✓		✓		✓		✓			
Bearing greasing	As per indication	✓		✓		✓		✓			
Checked By		[signature]		[signature]		[signature]		[signature]			
Certified by Plant		[signature]		[signature]		[signature]		[signature]			
Maint. Engg.		[signature]		[signature]		[signature]		[signature]			

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22/5/19 2:40 PM

RVD SENSORS

SR. NO.	TAG NAME	DESCRIPTION	VALUE	SR. NO.	TAG NAME	DESCRIPTION	VALUE	SR. NO.	TAG NAME	DESCRIPTION	VALUE
1)	TE-5040	RVD 1 FRONT SIDE	34.10 °C	16)	TE-8010	RVD 2 COIL 3	32.00 °C	31)	TE-5103	SPD OUTLET TEMP	??? °C
2)	TE-5041	RVD 2 FRONT SIDE	37.93 °C	17)	TE-8011	RVD 2 COIL 4	32.24 °C	32)	TE-5104	FIRE FIGHTING LINE TEMP	-200.00 °C
3)	TE-5042	RVD 3 FRONT SIDE	35.63 °C	18)	TE-8012	RVD 2 SHAFT	31.95 °C	33)	TE-5105	CHILLING LINE TEMP	-200.00 °C
4)	TE-5043	RVD 1 COOLER 1	31.45 °C	19)	TE-8013	RVD 2 BAG HOUSE	31.54 °C	34)	TE-5106	NEW BAGHOUSE INLET TEMP	0.00 °C
5)	TE-5044	RVD 2 COOLER 2	32.49 °C	20)	TE-8014	RVD 2 BACK SIDE	317.70 °C	35)	TE-5107	NEW BAGHOUSE OUTLET TEMP	-50.00 °C
6)	TE-5045	RVD 3 COOLER 3	32.05 °C	21)	TE-8015	RVD 3 COIL 1	31.94 °C	36)	PT_ST_5001	MNZ_A_STEAM _PRESSURE	0.00 kg/cm2
7)	TE-8001	RVD 1 COIL 1	30.82 °C	22)	TE-8016	RVD 3 COIL 2	22.88 °C	37)	WI 5030	SPD SILO WEIGHT	0.00 kg
8)	TE-8002	RVD 1 COIL 2	32.29 °C	23)	TE-8017	RVD 3 COIL 3	-50.00 °C	38)	PT-5040	RVD1 VACUUM PT	-0.38 mmHg
9)	TE-8003	RVD 1 COIL 3	32.33 °C	24)	TE-8018	RVD 3 COIL 4	31.68 °C	39)	PT-5041	RVD2 VACUUM PT	-0.25 mmHg
10)	TE-8004	RVD 1 COIL 4	32.10 °C	25)	TE-8019	RVD 3 SHAFT			PT-5043	RVD3 VACUUM PT	0.00 Kg/Cm²
11)	TE-8005	RVD 1 SHAFT	31.31 °C	26)	TE-8020	RVD 3 BAG HO			FT_ST_5000	MAIN STEAM FLOW METER	0.00 TPH
12)	TE-8006	RVD 1 BAG HOUSE	31.94 °C	27)	TE-8021	RVD 3 BACK SI			FT_ST_5000	MAIN STEAM FLOW TOTALISER	0.04 TON
13)	TE-8007	RVD 1 BACK SIDE	31.86 °C	28)	TE-5100	AIR INGR. TEM			TE_5101_SP	HAG BURNER OUTLET TEMP	0.00
14)	TE-8008	RVD 2 COIL 1	32.74 °C	29)	TE-5101	HAG BURNER TEMP			O2_ANALYZER	OXYGEN ANALYZER	0.00
15)	TE-8009	RVD 2 COIL 2	31.56 °C	30)	TE-5102	SPD INLET TE			SPD_PT_01	SPD CHAMBER PRESSURE	0.01 KG/CM2

MANCDZEB.FACEPLATES.ANALOG_INPUT.[M...

SPD_PT_01

PV 0.01 HL

HSP 10

Acked	Operator	Active Condition	Message	Value	Source name	DateTime (in)	DateTime (out)	DateTime (ack)
No		Yes	MCZ_PT_VT_RVD2_LO IS L	-1	MCZ_PT_VT_RVD2	22-05-2019 14:40:05		
No		No	MCZ_PT_VT_RVD2_HI IS N...	0	MCZ_PT_VT_RVD2	22-05-2019 14:40:04	22-05-2019 14:40:05	
No		Yes	MCZ_PT_VT_RVD1_LO IS L	-1	MCZ_PT_VT_RVD1	22-05-2019 14:38:13		

MAIN SCREEN | RVD1 | RVD2 | RVD3 | SPD | KFG VALVE | ON/OFF VALVE | PUMPS | SENSOR | DRY SECTION | HOOTER RESET | TRENDS | REPORTS | CALCULATOR

ENG 14:40 22-05-2019

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f1-www

RVD SENSORS

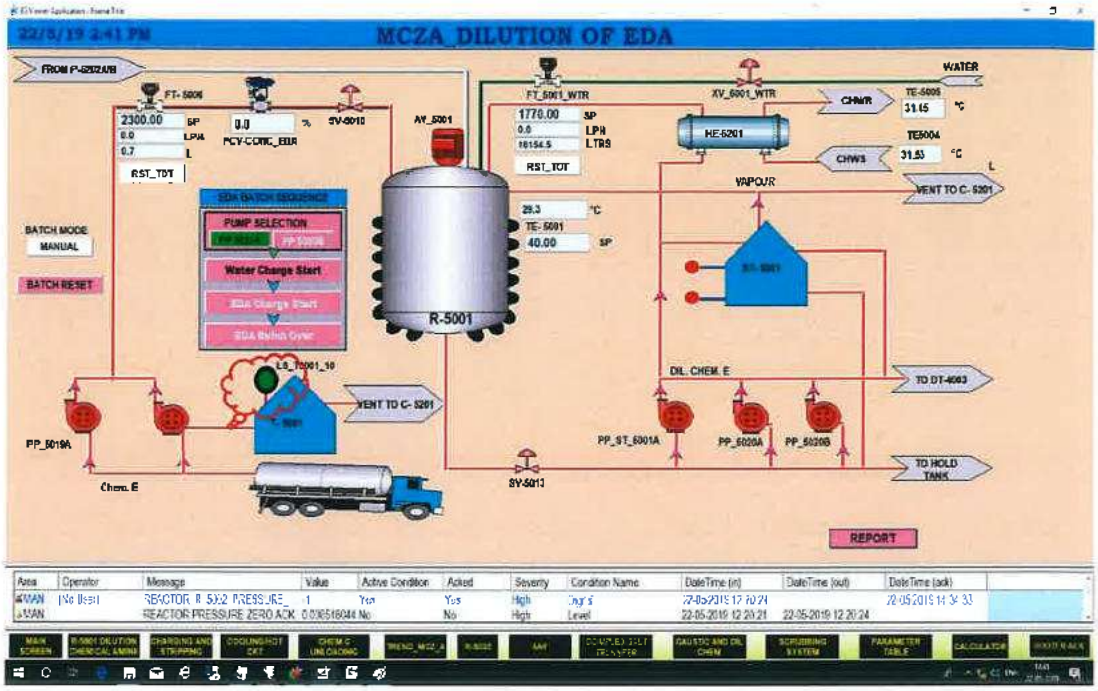
IE	DESCRIPTION	VALUE	SR. NO.	TAG NAME	DESCRIPTION	VALUE	SR. NO.	TAG NAME	DESCRIPTION
	RVD 1 FRONT SIDE	34.10 °C	16)	TE-8010	RVD 2 COIL 3	32.00 °C	31)	TE-5103	SPD OUTLET TEMP
	RVD 2 FRONT SIDE	37.93 °C	17)	TE-8011	RVD 2 COIL 4	32.24 °C	32)	TE-5104	FIRE FIGHTING LINE TEMP
	RVD 3 FRONT SIDE	35.63 °C	18)	TE-8012	RVD 2 SHAFT	31.95 °C	33)	TE-5105	CHILLING LINE TEMP
	RVD 1 COOLER 1	31.45 °C	19)	TE-8013	RVD 2 BAG HOUSE	31.54 °C	34)	TE-5106	NEW BAGHOUSE INLET TEMP
	RVD 2 COOLER 2	32.49 °C	20)	TE-8014	RVD 2 BACK SIDE	317.70 °C	35)	TE-5107	NEW BAGHOUSE OUTLET TEMP
	RVD 3 COOLER 3	32.05 °C	21)	TE-8015	RVD 3 COIL 1	31.94 °C	36)	PT_ST_5001	MN2_A_STEAM_PRESSURE
	RVD 1 COIL 1	30.82 °C	22)	TE-8016	RVD 3 COIL 2	22.88 °C	37)	WI 5030	SPD SILO WEIGHT
	RVD 1 COIL 2	32.29 °C	23)	TE-8017	RVD 3 COIL 3	-50.00 °C	38)	PT-5040	RVD1 VACUUM PT
	RVD 1 COIL 3	32.33 °C	24)	TE-8018	RVD 3 COIL 4	31.68 °C	39)	PT-5041	RVD2 VACUUM PT
	RVD 1 COIL 4	32.10 °C	25)	TE-8019	RVD 3 SHAFT			PT-5043	RVD3 VACUUM PT
	RVD 1 SHAFT	31.31 °C	26)	TE-8020	RVD 3 BAG HO			FT_ST_5000	MAIN STEAM FLOW METER
	RVD 1 BAG HOUSE	31.94 °C	27)	TE-8021	RVD 3 BACK SI			FT_ST_5000	MAIN STEAM FLOW TOTALISER
	RVD 1 BACK SIDE	31.86 °C	28)	TE-5100	AIR INGR. TEM			TE_5101_SP	HAG BURNER OUTLET TEMP
	RVD 2 COIL 1	32.74 °C	29)	TE-5101	HAG BURNER TEMP			O2_ANALYZER	OXYGEN ANALYZER
	RVD 2 COIL 2	31.56 °C	30)	TE-5102	SPD INLET TE			SPD_PT_01	SPD CHAMBER PRESSURE

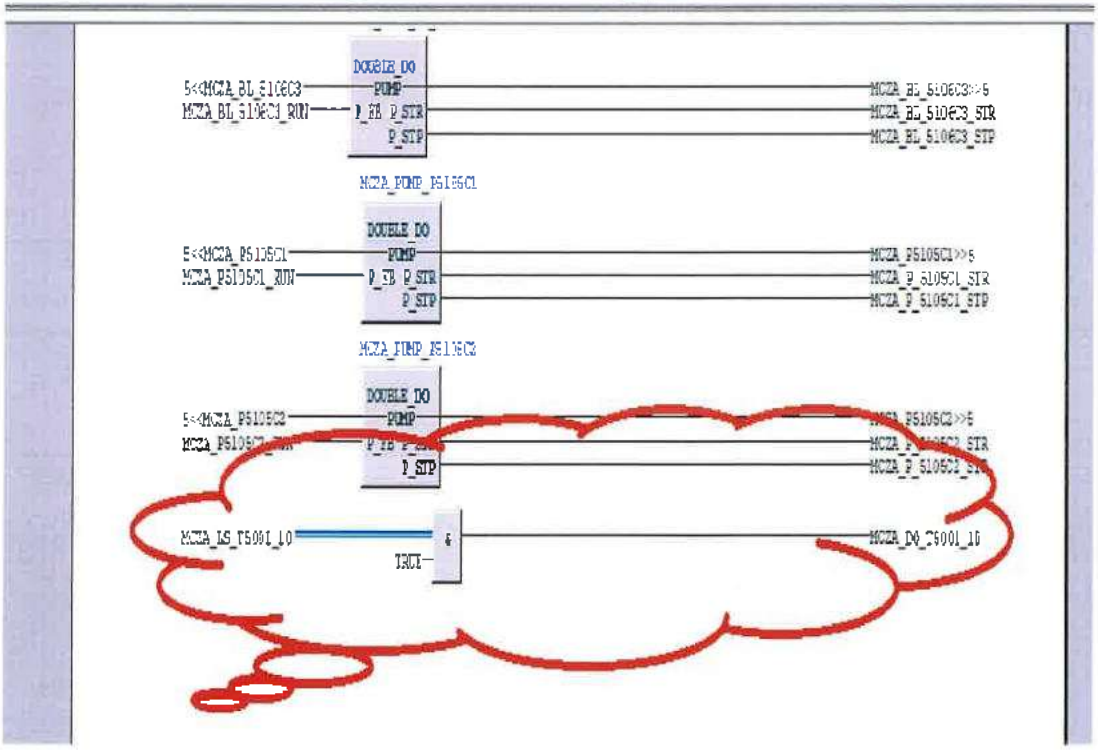
Active Condition	Message	Value	Source name	DateTime (in)	DateTime (out)	DateTime (ack)
Yes	MCZ_PT_VT_RVD2		MCZ_PT_VT_RVD2	22-05-2019 14:40:05		
No	MCZ_PT_VT_RVD2	0	MCZ_PT_VT_RVD2	22-05-2019 14:40:04	22-05-2019 14:40:05	
Yes	MCZ_PT_VT_RVD2		MCZ_PT_VT_RVD2	22-05-2019 14:39:13		

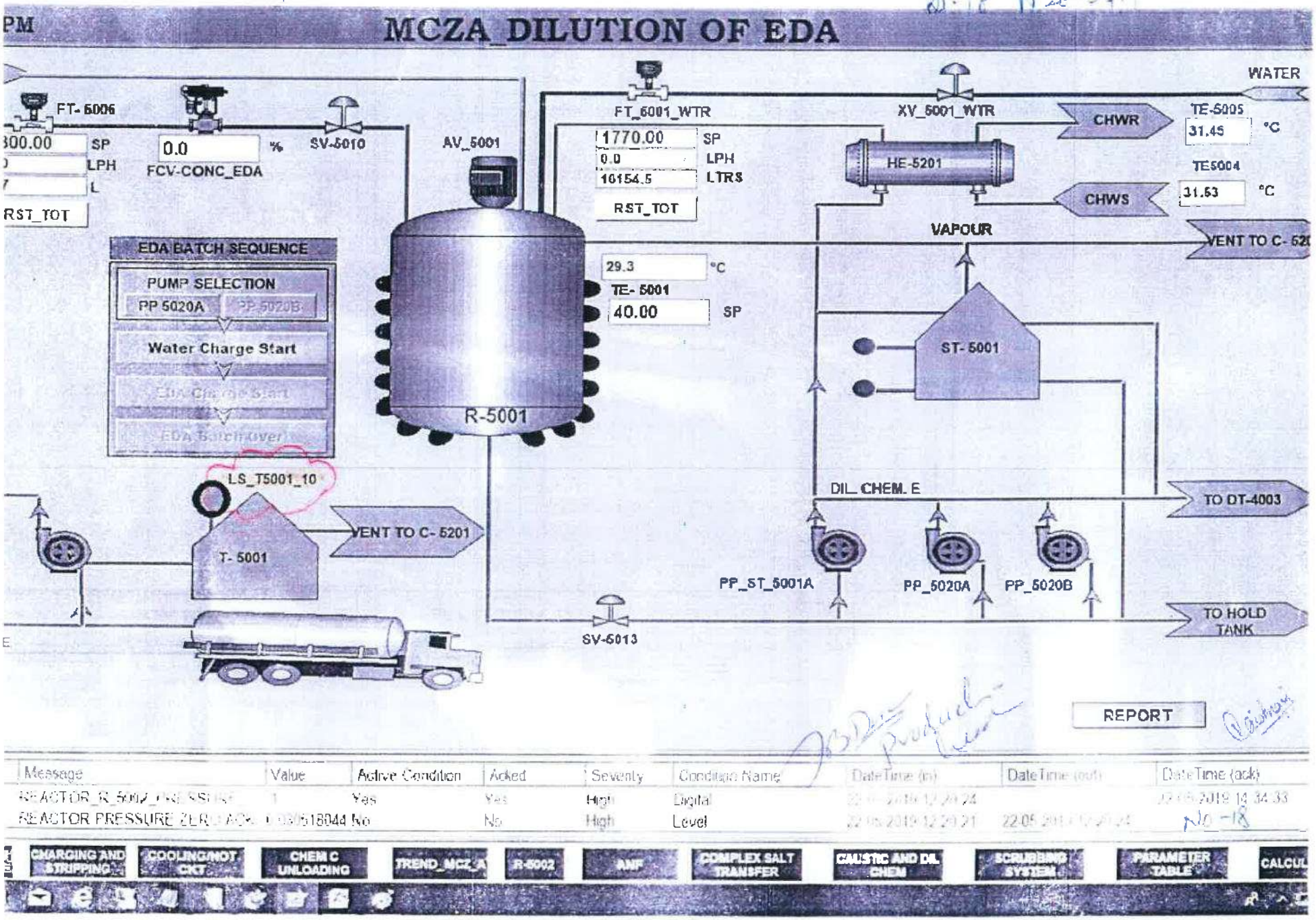
714


Overflow Line
Sr. No 17 N28.04.1
DILEDA BATCH TANK
MOC-SS316
27/05/2019 18:28

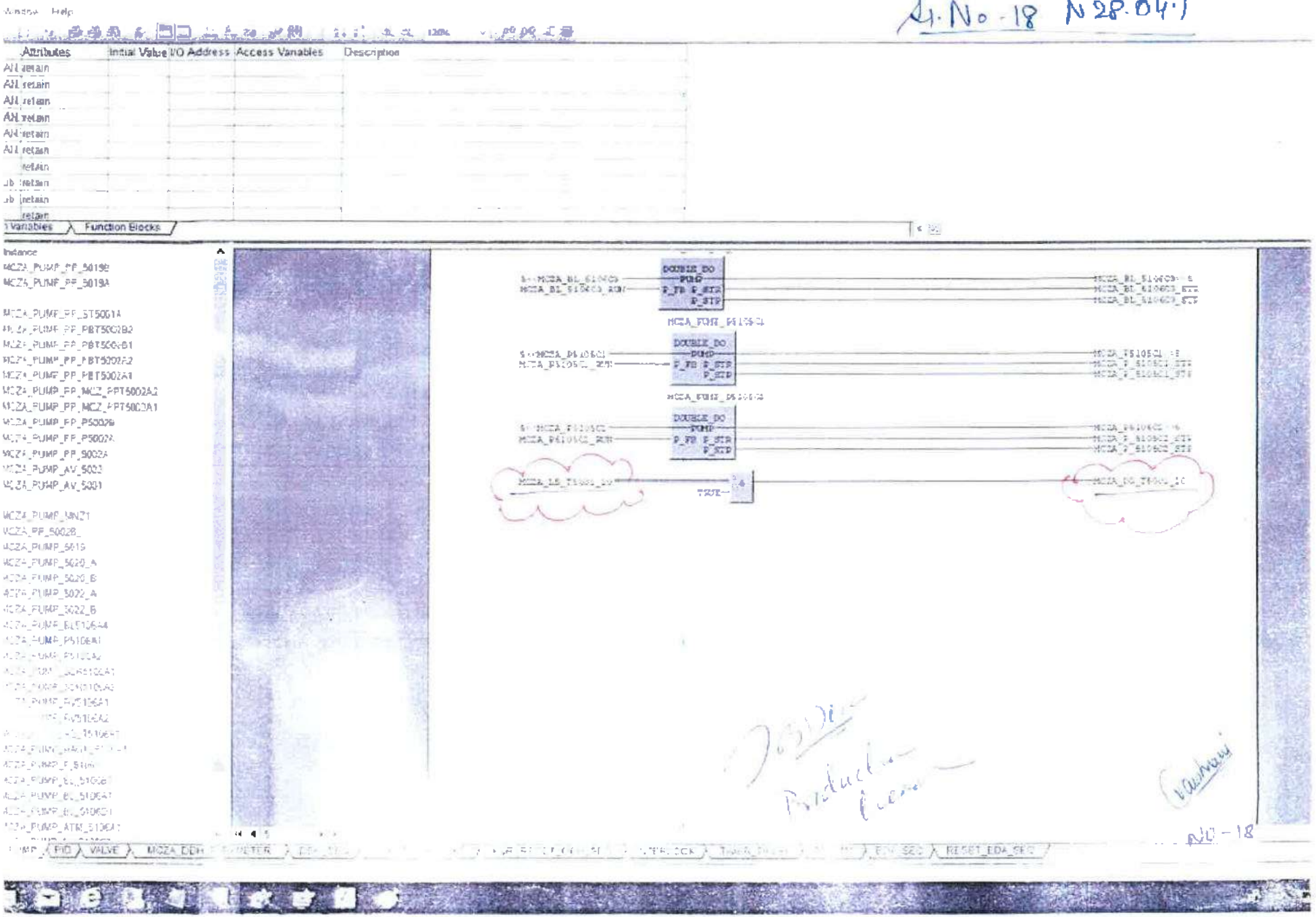
Sr. no 18 High level switch and interlock






PM
MCZA_DILUTION OF EDA
FT- 5006
300.00
SP
LPH
L
RST_TOT
0.0
%
FCV-CONC_EDA
SV-5010
AV_5001
FT_5001_WTR
1770.00
SP
0.0
LPH
16154.5
LTRS
RST_TOT
XV_5001_WTR
WATER
CHWR
TE-5005
31.45
°C
HE-5201
TE5004
31.53
°C
CHWS
VAPOUR
VENT TO C- 52
EDA BATCH SEQUENCE
PUMP SELECTION
PP 5020A
PP 5020B
Water Charge Start
EDA Charge Start
EDA Batch over
29.3
°C
TE- 5001
40.00
SP
R-5001
ST- 5001
LS_T5001_10
T- 5001
VENT TO C- 5201
DIL_CHEM. E
TO DT-4003
PP_ST_5001A
PP_5020A
PP_5020B
SV-5013
TO HOLD TANK
REPORT
Message
Value
Active Condition
Acked
Severity
Condition Name
DateTime (in)
DateTime (out)
DateTime (ack)
REACTOR_R_5002_PRESSURE
1
Yes
Yes
High
Digital
REACTOR PRESSURE ZERO ACK
18044
No
No
High
Level
CHARGING AND STRIPPING
COOLING/HOT CKT
CHEM C UNLOADING
TREND_MCZ_A
R-5002
ANF
COMPLEX SALT TRANSFER
CAUSTIC AND DIL CHEM
SCRUBBING SYSTEM
PARAMETER TABLE
CALCUL

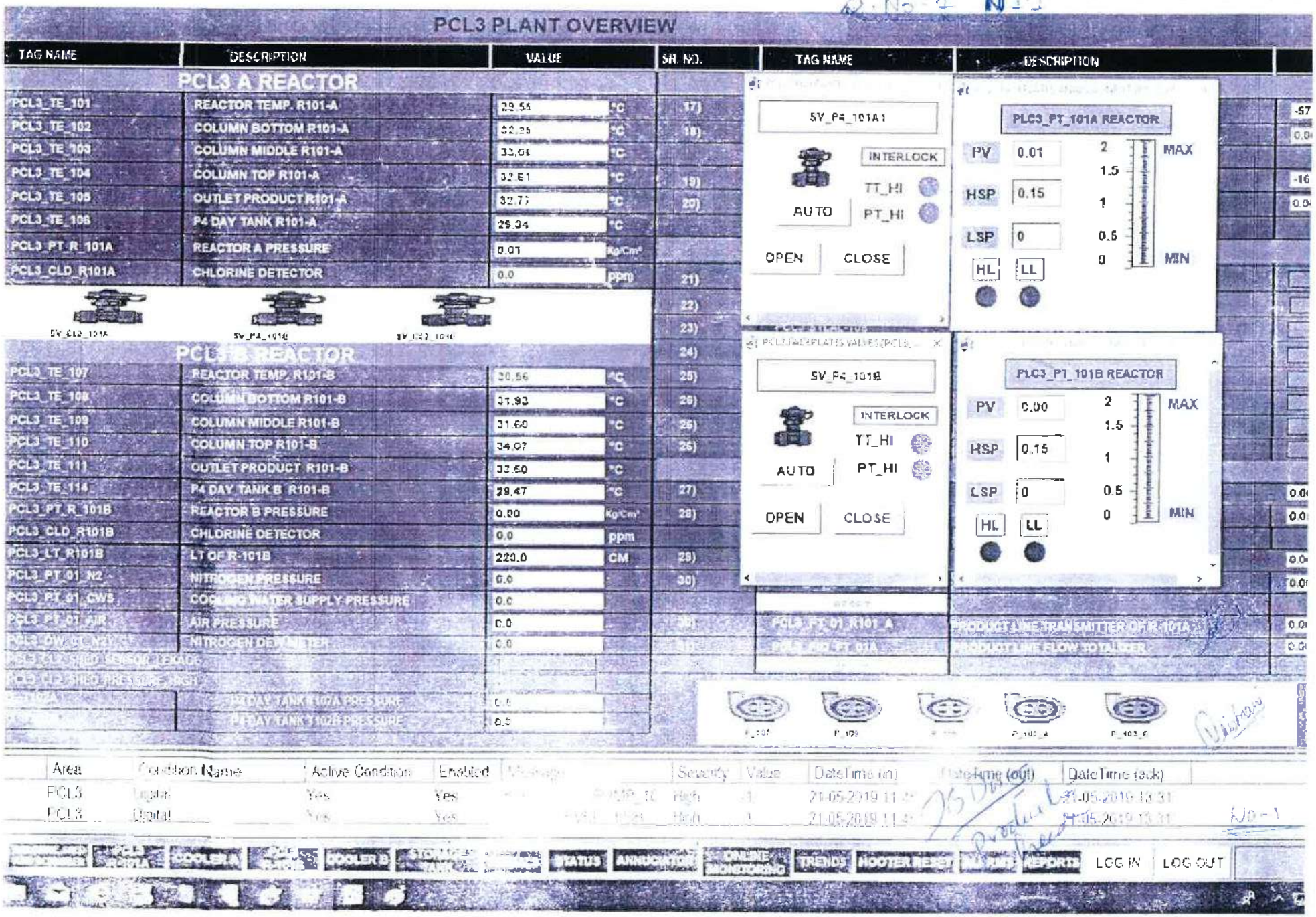
717


Attributes
Initial Value
I/O Address
Access Variables
Description
Variables
Function Blocks
Instance
DOUBLE_DO
PUMP
P_FB
P_STR
P_STP


PCL3 PLANT OVERVIEW
SR. NO.
TAG NAME
DESCRIPTION
VALUE
PCL3 A REACTOR
1) PCL3_TE_101 REACTOR TEMP. R101-A 28.55 °C
2) PCL3_TE_102 COLUMN BOTTOM R101-A 32.25 °C
3) PCL3_TE_103 COLUMN MIDDLE R101-A 33.06 °C
4) PCL3_TE_104 COLUMN TOP R101-A 32.61 °C
5) PCL3_TE_105 OUTLET PRODUCT R101-A 32.77 °C
6) PCL3_TE_106 P4 DAY TANK R101-A 29.34 °C
7) PCL3_PT_R_101A REACTOR A PRESSURE 0.01 Kg/Cm²
9) PCL3_CLD_R101A CHLORINE DETECTOR 0.0 ppm
PCL3 B REACTOR
9) PCL3_TE_107 REACTOR TEMP. R101-B 30.56 °C
10) PCL3_TE_108 COLUMN BOTTOM R101-B 31.93 °C
11) PCL3_TE_109 COLUMN MIDDLE R101-B 31.60 °C
12) PCL3_TE_110 COLUMN TOP R101-B 34.07 °C
13) PCL3_TE_111 OUTLET PRODUCT R101-B 33.50 °C
14) PCL3_TE_114 P4 DAY TANK B R101-B 29.47 °C
15) PCL3_PT_R_101B REACTOR B PRESSURE 0.00 Kg/Cm²
16) PCL3_CLD_R101B CHLORINE DETECTOR 0.0 ppm
17) PCL3_LT_R101B LT OF R-101B 220.0 CM
18) PCL3_PT_01_N2 NITROGEN PRESSURE 0.0
19) PCL3_PT_01_CWS COOLING WATER SUPPLY PRESSURE 0.0
20) PCL3_PT_01_AIR AIR PRESSURE 0.0
21) PCL3_DW_01_N2 NITROGEN DEW METER 0.0
22) PCL3_CL2_SHED_SENSOR_LEKAGE
23) PCL3_CL2_SHED_PRESSURE_HIGH
24) PT_T102A P4 DAY TANK T102A PRESSURE 0.0
25) PT_T102B P4 DAY TANK T102B PRESSURE 0.0
SR. NO.
TAG NAME
DESCRIPTION
VALUE
17) -57.43 Kg/H
18) 0.00 Kg
19) -16.00 Kg/H
20) 0.00 Kg
21)
22)
23)
24)
25)
26)
27) 0.00 TPH
28) 0.05 TON
29) 0.00 KG/HR
30) 0.00 KG
30) PCL3_FT_01_R101_A PRODUCT LINE TRANSMITTER OF R-101A 0.00 KG/HR
31) PCL3_FIQ_FT_01A PRODUCT LINE FLOW TOTALIZER 0.00 KG
SV_P4_101A
INTERLOCK
TT_HI
PT_HI
AUTO
OPEN
CLOSE
PCL3_PT_101A REACTOR
PV 0.01
HSP 0.15
LSP 0
HL
LL
MAX
MIN
SV_P4_101B
PLC3_PT_101B REACTOR
PV 0.00
HSP 0.15
LSP 0
RESET
COOLING WATER PRESSURE LOW
Acked Operator Area Condition Name Active Condition Enabled Message Severity Value DateTime (in) DateTime (out) DateTime (ack)
Yes (No User) PCL3 Digital Yes Yes SCRUBBER _PUMP_10 High -1 21-05-2019 11:45 21-05-2019 13:31
Yes (No User) PCL3 Digital Yes Yes R_101B LEVEL_HIGH High -1 21-05-2019 11:45 21-05-2019 13:31
MAIN SCREEN
SCRUBBER AND STORAGE
CHLORINE SHED AND SCRUBBER
PCL3 R-101A
COOLER A
PCL3 R-101B
COOLER B
STORAGE TANK
SIGNALS
STATUS
ANNUCIATOR
ONLINE MONITORING
TRENDS
HOOTER RESET
ALARMS
REPORTS
LOG IN
LOG OUT
Operator
ENG
14:45
22-05-2019

619

Annx-14


PCL3 PLANT OVERVIEW
TAG NAME
DESCRIPTION
VALUE
SR. NO.
TAG NAME
DESCRIPTION
PCL3 A REACTOR
PCL3_TE_101
REACTOR TEMP. R101-A
29.55
°C
17)
PCL3_TE_102
COLUMN BOTTOM R101-A
32.25
°C
18)
PCL3_TE_103
COLUMN MIDDLE R101-A
32.06
°C
PCL3_TE_104
COLUMN TOP R101-A
32.61
°C
19)
PCL3_TE_105
OUTLET PRODUCT R101-A
32.77
°C
20)
PCL3_TE_106
P4 DAY TANK R101-A
29.34
°C
PCL3_PT_R_101A
REACTOR A PRESSURE
0.01
Kg/Cm²
PCL3_CLD_R101A
CHLORINE DETECTOR
0.0
ppm
21)
22)
23)
24)
PCL3 B REACTOR
PCL3_TE_107
REACTOR TEMP. R101-B
30.56
°C
25)
PCL3_TE_108
COLUMN BOTTOM R101-B
31.93
°C
26)
PCL3_TE_109
COLUMN MIDDLE R101-B
31.60
°C
25)
PCL3_TE_110
COLUMN TOP R101-B
34.07
°C
26)
PCL3_TE_111
OUTLET PRODUCT R101-B
33.50
°C
PCL3_TE_114
P4 DAY TANK B R101-B
29.47
°C
27)
PCL3_PT_R_101B
REACTOR B PRESSURE
0.00
Kg/Cm²
28)
PCL3_CLD_R101B
CHLORINE DETECTOR
0.0
ppm
PCL3_LT_R101B
LT OF R-101B
220.0
CM
29)
PCL3_PT_01_N2
NITROGEN PRESSURE
0.0
30)
PCL3_PT_01_CWS
COOLING WATER SUPPLY PRESSURE
0.0
PCL3_PT_01_AIR
AIR PRESSURE
0.0
P4 DAY TANK 101A PRESSURE
0.0
P4 DAY TANK 101B PRESSURE
0.0
SV_P4_101A1
INTERLOCK
TT_HI
PT_HI
AUTO
OPEN
CLOSE
PLC3_PT_101A REACTOR
PV
0.01
HSP
0.15
LSP
0
HL
LL
2
1.5
1
0.5
0
MAX
MIN
SV_P4_101B
INTERLOCK
TT_HI
PT_HI
AUTO
OPEN
CLOSE
PLC3_PT_101B REACTOR
PV
0.00
HSP
0.15
LSP
0
HL
LL
2
1.5
1
0.5
0
MAX
MIN
PCL3_PT_01_R101_A
PRODUCT LINE TRANSMITTER OF R-101A
PCL3_ANL_FT_01A
PRODUCT LINE FLOW TO TALLYER
Area
Condition Name
Active Condition
Enabled
Severity
Value
DateTime (in)
DateTime (out)
DateTime (ack)
PCL3
Logic
Yes
Yes
High
-1
21-05-2019 11:3
21-05-2019 13:31
PCL3
Digital
Yes
Yes
High
1
21-05-2019 11:3
21-05-2019 13:31
STATUS
ANNUNCIATION
TRENDS
REPORTS
LOG IN
LOG OUT

720

To,
M/S. K S INTERNATIONAL FZE
P O BOX 66632, DEIRA, DUBIA, UAE.
TEL:+971559072442
Utd.Arab.Emir.
PAN No: NO PAN
GSTIN:

Vendor code assigned to you ==> 101332

Purchase Order (Page 1 of 3)

PO Number/Date : 3506289 / 25.04.2018
Contact Name/Ph: Sarigam- Raw Mat /

Our Particulars
PAN No : AAACC7852K
Corporate ID : L24120TG1961PLC000892
GSTIN : 27AAACC7852K1ZD

Please deliver to:
COROMANDEL INTERNATIONAL LIMITED
Plot NO-2102, GIDC, SARGAM-39615
Tal. UMERGAM 396155 VALSAD,
DISTRICT,Gujarat,India

Delivery Date : 30.04.2019
Po Validity: 25.04.2018 To 30.04.2019

Please arrange to supply the following Materials / Equipments / Services as per terms and conditions mentioned herein. We require an order acknowledgement immediately. The terms and conditions as contained overleaf forms part of this order

Srl	Mat./*HSN /SAC Code*	Material/Service Description	UOM	Rate/Unit	Quantity	Amount(USD)
1	15486 *28047030*	YELLOW PHOSPHORUS (Imported) DELIVERY : MATERIAL DELIVERY FROM VIETNAM/CHINA/KAZAKISTAN/ANY WHERE IN WORLD SHIPEMENT : 8 CONTAINER PER MONTH FROM JUNE 2018 TO MARCH 2019 MATERIAL QUALITY : 200PPM	1 KG		1000,000.000 kg	
		BASIC PRICE		2.68		2680000.00
		T O T A L				0.00 2680000
		Grand Total				2680000.00

Grand Total (in words) US DOLLAR TWO MILLION SIX HUNDRED EIGHTY THOUSAND ONLY

Email ID: aphelpdesk@coromandel.murugappa.com & Toll Free No : 1800-425-5696

Purchase Order (Page 2 of 3)

PO Number/Date : 3506289 / 25.04.2018

GENERAL PO TERMS FOR ALL PO ITEMS

Terms of Delivery: Costs and freight CNF NHAVA SHEVA

Terms of Payment : Within 30 days of Bill of Lading Date

Header Text

TERMS AND CONDITIONS AS BELOW :

DOCUMENT TO BE REQUIRED :

1. 3 COPIES EACH OF SIGNED INVOICE & BILL OF LANDING WITH 14 DAYS DETENTION FREE CALUSE
2. 2 COPIES EACH OF CERTIFICATE OF ANALYSIS WITH BATCH NO, MSDS, COUNTRY OF ORIGIN, PACKING LIST, INNSURANCE POLICY

KINDLY ENSURE ALL THE DOCUMENTS SHOULD HAVE OUR PO NO. & FACTORY ADDRESS.

B/L TERMS & CONDITION :

1. CONSIGNEE:
COROMANDEL INTERNATIONAL LTD
PLOT NO 2102, GIDC SARIGAM,
TAL UMERGAM, DIST VALSAD,
PIN CODE 396 155,
GUJARAT, INDIA.
A/C OF L/C OPENER BANK NAME & ADDRESS (IN CASE OF L/C PAYMENT)

2. NOTIFY PARTY:
COROMANDEL INTERNATIONAL LTD
PLOT NO 2102, GIDC SARIGAM,
TAL UMERGAM, DIST VALSAD,
PIN CODE 396 155,
GUJARAT, INDIA.

3. IEC CODE NO. 0988002639

4. 14 DAYS DETENTION FREE CLAUSE

5. SHIPPING MARKS AS BELOW:
a. CIL SARIGAM VIA JNPT
b. GROSS & NET WEIGHT
c. COUNTRY OF ORIGIN
d. SUPPLIER NAME
e. PRODUCT NAME
f. PURCHASE ORDER NO & DATE
g. BATCH NO.

6. For D/A PAYMENT, REFER BELOW BANK DETAILS.
Kind Attn to: Trade Desk
Deutsche Bank AG
Floor Second, D. B. House,

Purchase Order (Page 3 of 3)
PO Number/Date : 3506289 / 25.04.2018

Hazarimal Somani Marg,
Port, Mumbai, India
CURR A/C NO. : 5011564000
Swift Code : DEUTINBB

SPECIAL INSTRUCTIONS :
Material to be dispatched strictly as per the our specification.
Any deviation in the same shall attract penalty / reimbursement of the total value of the consignment against our claim. Also to ensure your test certificate should include all the parameters as mentioned in our specification.

TERMS & CONDITIONS FOR MATERIAL SUPPLIED IN ISO TANKS:
Please ensure that an ISO TANK is cleaned properly before filling and Tank Cleanliness Certificate should be accompanies with ISO Tank.

* Purchase Order number should be indicated in the Tax Invoice and credit note.
* All invoices to be raised in the name and address of respective plant or locations which are receiving the goods or services and Invoices to be accompanied with the goods.
* All Invoices have to separately be explicit on Taxable Values, CGST & SGST, or , IGST and other charges as per purchase order terms given to you.
* All invoices and other documents to mention Purchase / service order number, GST registration number, Vendor number, HSN / SAC code and HSN / SAC description clearly.
* All dispatches of goods is to be supported with E-Way bills as required by relevant statues in force on the dispatch date.
* In case the Input tax credit of GST is denied or demand is recovered from COROMANDEL INTERNATIONAL LIMITED on account of Non-Compliance by supplier, including non-payment of GST charged and recovered by you, then you shall indemnify COROMANDEL INTERNATIONAL LIMITED in respect of all claims of tax, penalty, interest, costs, expenses and liability that may arise due to such Non-compliance.
* In order to be eligible for payment, all invoices made by this Purchase/Service order have to be followed up by filing of complete supply data in GSTR-1 return for each month before 10th of subsequent month.
* Vendors are supposed to maintain Good Compliance rating track record as required under GST Law.
* You are requested to use environment friendly and recyclable packing material wherever possible.
* Please send Invoices to following mail address for making payment.

Shared Services Center,
Coromandel International Limited,
Ground Floor, Administrative Block,
Sriharipuram, Malkapuram Post
Visakhapatnam, A.P. - 530011

For COROMANDEL INTERNATIONAL LIMITED.,

Authorised Signatory

Special Note: Vendors registered under GST are requested to submit the registration certificate immediately.

COROMANDEL INTERNATIONAL LIMITED

DEPARTMENT: SCM

FORMATFOR SUPPLIER AUDIT SCHEDULE

SR. NO	SUPPLIER LIST	Fequency	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
1	Kazphosphate limited - Yellow Phosphorous	Once in 2 years																								
2	Durgiang Laocai Chemicals - Yellow Phosphorous	Once in 2 years																								
		Prepared By											Approved By													
		Sr Officer SCM											HOD SCM													

724

Sl. No 4 N1.2

Coromandel

COROMANDEL INTERNATIONAL LIMITED
(CROP PROTECTION DIVISION)

COROMANDEL INTERNATIONAL LTD	Revision No.: 02
RAW MATERIAL SPECIFICATION	Date of Revision: 08/07/2011
QP/QC/RM/SPEC/ 001	Date of Effective: 18/07/2011

NAME OF PRODUCT	:	Phosphorus, White Phosphorus, Yellow Phosphorus
STATE	:	Solid
COMMERCIAL NAME	:	Phosphorus, White Phosphorus, Yellow Phosphorus
MOLECULAR FORMULA	:	P_4
MOLECULAR WEIGHT	:	30.97

REQUIREMENT:

Sr. No	Characteristic	Unit of Measure	Requirements	Test Method/ Reference
1	Appearance	**	White or Yellow Colour Solid Preserved Under Water	Visual
2	Melting of Phosphorus	**	The Molten Phosphorus Should be Clear and Free of Sludge	Visual
3	Purity by Mass	%	99.0 Minimum	QI/QC/RM/059
4	As Content	ppm	250 ppm Maximum	--

Note: Phosphorous is not analyzed owing to its flammable properties

Remark : material is Released Based On Supplier COA.

HOD QA/QC HOD R&D HOD PRODUCTION HOD SUPPLY CHAIN

Prepared by	Verified by	Reviewed by MR
Dy. Manager QA/QC	Manager QC	DGM (QA & R&D)
Signature:	Signature:	Signature:


Blowdown Tank for
PCl3 Reactors
R-101 A/B
BLOW DOWN TANK
MOC - MS
CAP - 10KL
4
2
28/05/2019 09:56

726

NOTIFIED AREA OFFICE

(Established Under Sec.16 of Guj.Ind.Dev.Act.1962)
1st Floor, GIDC Office Building, Near Water Tank,GIDC,
Sarigam,Pin -396 155, Dist:- Valsad. Ph-(0260) 2780326
Email - notifiedareasarigam@yahoo.com

Ref No.-NAO/SRG/FIRE/CERT/ 86 Date:- 03 MAY 2019

To Whom It May is Ever Concern

This is to certify that as per survey by our fire fighter team on dtd.03/05/2019 of M/s. Coromandel International Limited, Plot No. 2102, 2104/1, GIDC – Sarigam, Taluka - Umbergam, Dist. - Valsad. The factory has provided Fire Hydrant Systems to Extinguish fire in the factory & likely the different type of Fire-Fighting Extinguisher & has trained Staff who can Operate Fire Fighting equipment etc. The facilities provided by factory has checked by our fire fighter team on dtd. 03/05/2019 & found satisfactory. This certificate has been given on request of party letter dtd. 02/05/2019. This certificate is valid up to one (1) year from the date of issue of this letter.

CHIEF OFFICER * G.I.D.C. SARIGAM * NOTIFIED AREA OFFICE

CHIEF OFFICER
NOTIFIED AREA
GIDC, SARIGAM

To,
M/s. Coromandel International Limited,
Plot No. 2102, 2104/1,
GIDC - Sarigam,
Taluka - Umbergam.
Dist. - Valsad

POPULAR ELECTRIC STORES
AUTH. DISTRIBUTOR : MIMIC PRODUCTS, R.R. KABEL LTD. SUBODHAN CAPACITOR,
SUPPLIERS OF : CONTROL PANELS PCC, MCC, APFC PANELS, DISTRIBUTION BOARDS, BOXES ETC.
[Govt. Licenced. Electrical Contractor] GBC 2061
HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref No: -PES/19/05/28

Date: -28/05/2019

To Whom It May Concern

We hereby certify that the testing of electrical installations of M/S Coromandel International Limited, Plot No. 2102, 2104/1, GIDC – Sarigam, Taluka – Umbergam, Dist. Valsad on dtd.04/04/2019, 22/05/2019 & 28/05/2019 by our electrical team and found satisfactory.

This certificate has been given on the basis of all inspection and testing reports and as per the work order No.80824052 Date: 15.03.2019 and letter dtd. 27/05/2019. This certificate is valid up to 6 months from the date of issue of this letter.

For popular electric stores.

SARIGAM

Proprietor.

M/S. Coromandel International Limited,
Plot No. 2102,2104/1,
GIDC – Sarigam,
Taluka – Umbergam,
Dist. Valsad

RECEIVED
Date 26/7/19

575/2019

Phone :
Mobile:
Email :
To,
M/s Commandal Internationl Ltd
Plot No. 210, Chemical Zone
GIDC Sachin Gen. (Industrial)

Subject: Intimation regarding annual inspection of the electrical installation at your unit for year 2019

Sir,

It is informed that annual inspection of the electrical installation at your above addressed unit will be carried out on Date 29/7/19 by the undersigned as required under Regulation 30(1) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010.

You are requested to instruct your authorized technical person and Electrical Safety Officer to remain present along with the following details to facilitate the inspection.

01. Duly filled in Data of installation and Electrical Safety Report. (Blank format is enclosed)
02. Details of Generating Sets / CPP installed in the unit. (As per the enclosed format)
03. Single line diagram showing general arrangement of entire electrical installation.
04. List of connected motors with capacity, make and serial number along with heating load and welding machines.
05. Details of total lighting load.
06. Details of addition or alteration made in electrical installation after the previous inspection (if, any)
07. Details of Insulation Resistance Values of the transformers, cables, etc, along with the date of testing.
08. Results of earth test for each earth point and earth grid along with the date of testing.
09. Oil Test results of Transformers and Breakers, if any.
10. List of the authorized persons as required under regulation 3 of the aforesaid Regulation.
11. Copy of the latest electricity bill received from the supply company.
12. Copy of detailed compliance report submitted with reference to the previous annual inspection.
13. Copy of the Audit Report acceptance letter in respect of latest Energy Audit Report of your installation.
14. Details of Previous Electrical Accident if took place in your unit.

Last two years Inspection Reports submitted with necessary documents

Encl : As above

Yours Faithfully,

SARIGAM-396 155 Dist Valsad (Gujarat)

Annual Data of EHV/HV Industry / Establishment to be furnished by the Owner / Occupier of the installation for the purpose of Annual Inspection

Name of the Unit and Address	SOPOMAN DEL INTERNATIONAL LTD PLOT NO. 2102 GIDC SARIGAM
Phone No with STD code	—
Mobile No.	9824751428
Fax No.	—
Email	Pathak1@Commended.internet.com
Name of the Electricity Supplying Entity & Demand in KVA/KW	DGVCL 4000 KVA.

Details of Transformer : (Attached separate sheet if required)

	TR-1	TR-2	TR-3
Is Permission of the Electrical Inspector obtained ? Yes or No	YES	YES	
Make	VOLTAMP	VOLTAMP	
Capacity	2000 KVA	4000 KVA	
Sr. No.	IN 8682	IN 9348411	
Voltage Ratio	11KV/433V	11KV/433V	

Generating Sets : (Attached separate sheet if required)

Alternator	DG-1	DG-2	DG-3	DG-4
Is Permission of the Electrical Inspector obtained ? Yes or No	YES	YES	YES	YES
Make	KEC LTD	KEC LTD	STAMFORD	STAMFORD
Capacity	1600 KVA	500 KVA	500 KVA.	200 KVA
Sr. No.	9360352 02	9730912-19	9910167.	M08H021
Voltage	415 V	415 V	415 V	415 V
Engine Fuel	DIESEL	DIESEL	DIESEL	DIESEL
Hour Meter Reading				
Details of Energy Meter	1	2	3	
Make	L&T	L&T	L&T	L&T
Sr. No.	5857696	5852694	7816092	10232155
Voltage	240V	240V	240V	240V
Ampere	-/5	-/5	-/5	-/5
Dial MF	320	160	160	60
CT Ratio / PT Ratio	1600/5	800/5	800/5	300/5
Final MF	320	160	160	6
Energy Meter Reading	1959.9	2869.7	2130.6	135.6
Usage Standby/Captive	STANDBY	STANDBY	STANDBY	STANDBY
Registration No. obtained. (If yes, mention the No.)	15-0334-001-06820	15-0334-002-06821	15-0334-003-169033	—
Liable for payment of Electricity Duty or Exempted.	EXEMPTED	EXEMPTED	EXEMPTED	EXEMPTED

Connected Load.

Particulars	In the Beginning of the Year	Additions during the year	Total
Motor in KW	10410	-89	10326 KW
Lighting in KW	111		111
Furnace in KW	-	-	-
Rectifier in KW	-	-	-
Any other equipment in KW	97		97
Total in KW	10618		10534

Date : 23/5/19

Place : Sarigam

Signature of the Authorized Person

Name : Jitendra Sinha

Designation : DGM - Engg.

Name & Signature of the inspecting Officer

Assistant Electrical Inspector
Valsad

2

COROMANDEL INTERNATIONAL LIMITED
Plot No.2102, GIDC Estate,
SARIGAM-396 155, Dist. Valsad, Gujarat

Electrical Safety Report to be Furnished by the Owner/Occupier of the installation for the purpose of Annual Inspection

Name of the Unit:	COROMANDEL INTERNATIONAL LTD PLOT NO. 2102, GIDC - SARIGAM DIST- VALSAD GUJRAT	Consumer No:	37525
Unit:		Year	2019-2020

No.	Regulation		Requirement	Report	
				Yes	No
1	5		Is the register of the designated persons properly made and kept up to date duly attested ?	Yes	
2	12	(i)	Whether the transformer oil samples are being tested periodically and results recorded in a register ?	YES	
		(ii)	Whether suitable lightning arrestors have been provided near the transformer for protection against lightning ?	YES	
		(iii)	Whether the earth resistance is being measured periodically	YES	
		(iv)	Where any unauthorized temporary installation exists ?		NO
		(v)	Whether predictive maintenance is being performed for installation of voltage exceeding 650 v ?	YES	
		(vi)	Are there deficiencies in construction with reference to Indian Standard requirements ? Please specify.		NO
3	15		Give report on condition of service lines, cables, wires apparatus and such other fittings placed by the supplier or owner of the premises. If not satisfactory give details.	-	-
4	17	(i)	Are bare conductors in building accessible ?		NO
5	18		Whether "Danger Notice" in English or Hindi and local language of the district and of a design as per relevant Indian standard is affixed permanently in conspicuous position ?	YES	
6	19	(i)	Whether insulating floor or mats conforming to IS - 15652:2006 have been provided ?	YES	
		(ii)	Whether identification of panel has been provided on the front and rear of the panel ?	YES	
7	21		Whether flexible cables used for portable or transportable equipment covered under the Regulation, are heavily insulated and adequately protected from mechanical injury ?	YES	
8	24		Whether the circuits or apparatus intended for operating at different voltage(s) are distinguishable by means of indication (s) of permanent nature ?	-	-
9	27	(i)	In case of generating stations and enclosed sub stations, whether fire buckets filled with clean dry sand and ready for immediate use for extinguishing fires, in addition to fire extinguishers suitable for dealing with electric fires are provided ?	YES	
		(ii)	Whether First aid boxes or cupboards conspicuously marked and properly equipped are provided and maintained ?	YES	
10	28	(i)	Whether instructions in English or Hindi and local language of the district, for resuscitation of persons suffering from electric shock are affixed in a "conspicuous place"	YES	
11	34		Leakage on premises : State insulation resistance between conductors and earth in Mega Ohms.	YES	

CORROMANDEL INTERNATIONAL LIMITED
Plot No.2102 GIDC
SARIGAM-396 155 Dist.

No.	Regulation		Requirement	Report	
				Yes	No
12	35		Whether the provisions of Regulation-35: Supply and use of Electricity is complied or not.	COMPLIED	
13	37		Sufficient clearance is provided surrounding the switch board or electrical panels (Provision of Regulation 37 is compiled or not ?	YES	
14	44	(i)	State in case of transformers or reactors or switches or static condensers involving the use of more than 2000 liters of oil in one chamber, is suitable oil soak pits are provided ?	YES	
		(ii)	Where 9000 liters or more of oil is used in any one oil tank, has provision been made for draining away or removal of oil which may leak or escape from such tank (s)	N/A	
		(iii)	Whether trenches inside substation containing cables are filled with non inflammable material or completely covered with non-inflammable slabs ?	YES	
		(iv)	Whether sufficient space for working clearance for electrical apparatus is provided as required under the Regulations.	YES	
		(v)	Whether any encroachment found below the installation		NO
		(vi)	Whether the baffle wall between the transformers is provided ?	YES	
		(vii)	Whether spare oil filled equipment/container is kept inside the S/s or switch room.		N/A
		(viii)	Whether duly updated register for maintenance schedule of all transformers and switch gears is kept ?	YES	
		(ix)	Whether adequate fire protection arrangement for quenching the fire in the apparatus of S/s or switch room is provided ?	YES	
15	45	Whether protections and interlocks have been provided ? If not, give details.		YES	
16	48	Efficient earthing provided or not to all electrical equipments ?		YES	
17	49	Is the outdoor (except pole type) s/s efficiently protected by fencing not less than 1.8m in height ?		YES	
18	50	Has suitable provision been made for immediate and automatic or manual discharges of every static condenser on disconnection of supply ?		YES	
19	Overhead Line	If overhead line is provided, whether site vertical / horizontal clearances are maintained or not ?		YES	

Name of the Electrical Engineer / Electrical Safety Officer	R. S PATHAK.
Signature	
Mobile No.	9824751428
Email	pathakn@coromandel.murugappa.com

POPULAR ELECTRIC STORES

AUTH. DISTRIBUTOR : MIMIC PRODUCTS, R.R. KABEL LTD. SUBODHAN CAPACITOR,
SUPPLIERS OF : CONTROL PANELS PCC, MCC, APFC PANELS, DISTRIBUTION BOARDS, BOXES ETC.

[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref.: No.: PES/19-05/22
Date: 22/05/2019

To,
M/s Coromandel International Limited.,
Plot No.2102,
G.I.D.C. Sarigam.

CERTIFICATE

Dear Sir,

With reference to your order, we have the pleasure informing you that we have tested the samples of transformer oil for its die-electric strength, the results are as under:

1) Transformers make : Voltamp Transformer
   Capacity : 4000 Kva
   Volt : 11Kv / 433v
   Sr. No. : JN-43484/1

2) Oil Die-electric strength :
   Sample withstood 65KV for one minute and break at 70Kv.

3) Comments :
   The dielectric strength of the oil is now quiet satisfactory.

Thanking you, we remain,
Yours faithfully,

For Popular Electric Stores

Proprietor

For COROMANDEL INTERNATIONAL Limited

AUTHORISED SIGNATORY

POPULAR ELECTRIC STORES

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[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref.: No.: PES/19-05/22
Date: 22/05/2019

To,
M/s Coromandel International Limited.,
Plot No.2102,
GIDC, Sarigam.

CERTIFICATE

Dear Sir,

With reference to your order, we have the pleasure informing you that we have tested the samples of transformer oil for its die-electric strength, the results are as under:

1) Transformers make : Voltamp Transformer
   Capacity : 2000 Kva
   Volt : 11Kv / 433v
   Sr. No. : JN-3082

2) Oil Die-electric strength :
   Sample withstood 65KV for one minute and break at 70Kv.

3) Comments :
   The dielectric strength of the oil is now quiet satisfactory.

Thanking you, we remain,
Yours faithfully,

For Popular Electric Stores

Proprietor

For COROMANDEL INTERNATIONAL Limited

AUTHORISED SIGNATORY

POPULAR ELECTRIC STORES

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[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref. No.: PES/19-05/23
Date: 23/05/2019

To,
M/s Coromandel International Ltd.,
Plot No. 2102,
GIDC, Sarigam.

INSULATION RESISTANCE TEST

Dear Sir,

This is to certify that the insulation Resistance test of cables & transformer has been checked out under the direct Supervision of us. The resistance test has been measured by 1000 Volt Megger and found the result as follows.

TRANSFORMER No.2 DETAILS

Capacity	:	2000Kva
Volt	:	11KV/433V
Transformer make	:	Voltamp Transformer Ltd
Sr. No.	:	JN-3082

MEGGER VALUE OF TRANSFORMER No.2

1)	Between H T to L T	:	230 Mega Ω
2)	Between H T to body	:	215 Mega Ω
3)	Between L T to body	:	230 Mega Ω

MEGGER VALUE OF CABLE

1)	Between phase to phase	:	240 Mega Ω
2)	Between phase to earth	:	250 Mega Ω

Comment: Results are satisfactory

LICENCE NO. GBC – 2061.

SUPERVISOR PERMIT
NO. MGS 179.

For Popular Electric Stores

POPULAR ELECTRIC STORES SARIGAM

Proprietor

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[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref. No.: PES/19-05/23
Date: 23/05/2019

To,
M/s Coromandel International Ltd.,
Plot No. 2102,
GIDC, Sarigam.

INSULATION RESISTANCE TEST

Dear Sir,

This is to certify that the insulation Resistance test of cables & transformer has been checked out under the direct Supervision of us. The resistance test has been measured by 1000 Volt Megger and found the result as follows.

TRANSFORMER No.1 DETAILS

Capacity	:	4000Kva
Volt	:	11KV/433V
Transformer make	:	Voltamp Transformer Ltd
Sr. No.	:	JN-43484/1

MEGGER VALUE OF TRANSFORMER No.1

1)	Between H T to L T	:	250 Mega Ω
2)	Between H T to body	:	245 Mega Ω
3)	Between L T to body	:	235 Mega Ω

MEGGER VALUE OF CABLE

1)	Between phase to phase	:	240 Mega Ω
2)	Between phase to earth	:	270 Mega Ω

Comment: Results are satisfactory

LICENCE NO. GBC – 2061.

SUPERVISOR PERMIT
NO. MGS 179.

For Popular Electric Stores

POPULAR ELECTRIC STORES SARIGAM

Proprietor

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[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Ref: No. PES/19-04/04
Date: 04/04/2019

To,
M/s. Coromandel International Ltd.,
Plot No.2102, GIDC, Sarigam.
Dist:Valsad, Gujarat.

EARTH RESISTANCE TEST

Dear Sir,

We certify that we have carried out the earth resistance test at your factory, the results are as under:

Weather condition: clear

Soil: clear

The test was carried out on 3 pin method by spacing the probes at approximately 15 and 25 meter from the test electrodes.

Sr. No	Equipment Name	Location	Use for	Date of Testing	Resist. Value in OHM	Type of earthing	Due Date
1	E.P. No – 1	SWITCH YARD	G.C.B.	04.04.2019	0.33	G.I.	03.04.2020
2	E.P. No – 2	SWITCH YARD	HT L.A. - 1	04.04.2019	0.78	G.I.	03.04.2020
3	E.P. No – 3	SWITCH YARD	HT L.A. - 2	04.04.2019	0.76	G.I.	03.04.2020
4	E.P. No – 4	SWITCH YARD	TR-1 BODY	04.04.2019	0.19	G.I.	03.04.2020
5	E.P. No – 5	SWITCH YARD	TR-1 BODY	04.04.2019	0.75	G.I.	03.04.2020
6	E.P. No – 6	SWITCH YARD	H.T STRUCTUR - 1	04.04.2019	2.64	G.I.	03.04.2020
7	E.P. No – 7	SWITCH YARD	H.T STRUCTUR - 2	04.04.2019	1.21	CU	03.04.2020
8	E.P. No – 8	SWITCH YARD	PCC - 1 BODY	04.04.2019	0.58	CU	03.04.2020
9	E.P. No – 9	SWITCH YARD	TR - 2 BODY	04.04.2019	0.19	G.I.	03.04.2020
10	E.P. No – 10	SWITCH YARD	TR-2 Neutral	04.04.2019	1.61	G.I.	03.04.2020
11	E.P. No – 11	SWITCH YARD	TR - 1 NUETRAL	04.04.2019	0.15	CU	03.04.2020
12	E.P. No – 12	SWITCH YARD	TR-2 BODY	04.04.2019	2.34	CU	03.04.2020
13	E.P. No – 13	SWITCH YARD	TR-1 Neutral	04.04.2019	1.5	CU	03.04.2020
14	E.P. No – 14	SWITCH YARD	TR-2 Neutral	04.04.2019	1.25	CU	03.04.2020
15	E.P. No – 15	SWITCH YARD	TR - 2 BODY	04.04.2019	1.97	G.I.	03.04.2020
16	E.P. No – 16	SWITCH YARD	PCC - 2 BODY	04.04.2019	1.23	G.I.	03.04.2020
17	E.P. No – 17	SWITCH YARD	PCC- 2 BODY	04.04.2019	2.82	G.I.	03.04.2020
18	E.P. No – 18	SWITCH YARD	PCC - 1 BODY	04.04.2019	1	G.I.	03.04.2020
19	E.P. No – 19	POWER HOUSE	QUIPPO GSPC	04.04.2019	1.82	CU	03.04.2020
20	E.P. No – 20	POWER HOUSE	QUIPPO NUETRAL - 1	04.04.2019	0.56	G.I.	03.04.2020
21	E.P. No – 21	POWER HOUSE	QUIPPO NUETRAL - 2	04.04.2019	1.29	G.I.	03.04.2020
22	E.P. No – 22	POWER HOUSE	QUIPPO DG BODY - 1	04.04.2019	1.88	G.I.	03.04.2020
23	E.P. No – 23	POWER HOUSE	QUIPPO DG BODY - 2	04.04.2019	1.41	G.I.	03.04.2020
24	E.P. No – 24	POWER HOUSE	QUPPO BOILOR BODY	04.04.2019	1.63	CU	03.04.2020
25	E.P. No – 25	POWER HOUSE	QUIPPO DG BODY - 3	04.04.2019	1.96	CU	03.04.2020

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HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

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Sr. No	Equipment Name	Location	Use for	Date of Testing	Resist. Value in OHM	Type of earthing	Due Date
26	E.P. No – 26	POWER HOUSE	QUPPO BOILOR BODY	04.04.2019	1.35	G.I.	03.04.2020
27	E.P. No – 27	POWER HOUSE	UTILITY EQUIP BODY	04.04.2019	1.57	G.I.	03.04.2020
28	E.P. No – 28	POWER HOUSE	DG - II BODY	04.04.2019	0.37	G.I.	03.04.2020
29	E.P. No – 29	POWER HOUSE	DG - II NUETRAL - I	04.04.2019	1.15	G.I.	03.04.2020
30	E.P. No – 30	POWER HOUSE	DG -II - NUETRAL - II	04.04.2019	1.09	G.I.	03.04.2020
31	E.P. No – 31	POWER HOUSE	DG - 1 BODY- 1	04.04.2019	0.94	G.I.	03.04.2020
32	E.P. No – 32	POWER HOUSE	PCC - 2 PANEL BODY	05.04.2019	2.49	G.I.	04.04.2020
33	E.P. No – 33	POWER HOUSE	PCC - 3 PANEL BODY	05.04.2019	0.31	G.I.	04.04.2020
34	E.P. No – 34	POWER HOUSE	LIGHT TXR BODY	05.04.2019	2.05	G.I.	04.04.2020
35	E.P. No – 35	POWER HOUSE	PCC - 3 PANEL BODY	05.04.2019	2.88	G.I.	04.04.2020
36	E.P. No – 36	POWER HOUSE	DG - 4 BODY-1	05.04.2019	1.57	G.I.	04.04.2020
37	E.P. No – 37	POWER HOUSE	DG - 4 BODY- 2	05.04.2019	1.75	G.I.	04.04.2020
38	E.P. No – 38	POWER HOUSE	DG - 4 NUETRAL -1	05.04.2019	1.83	G.I.	04.04.2020
39	E.P. No – 39	POWER HOUSE	DG - 4 NUETRAL- 2	05.04.2019	1.99	G.I.	04.04.2020
40	E.P. No – 40	POWER HOUSE	DG -3 NUETRAL - 1	05.04.2019	1.96	G.I.	04.04.2020
41	E.P. No – 41	POWER HOUSE	DG -3 NUETRAL - 2	05.04.2019	1.28	G.I.	04.04.2020
42	E.P. No – 42	POWER HOUSE	DG -3 BODY - 1	05.04.2019	1.07	G.I.	04.04.2020
43	E.P. No – 43	POWER HOUSE	DG - 3 BODY - 2	05.04.2019	1.94	G.I.	04.04.2020
44	E.P. No – 44	POWER HOUSE	PUMP HOUSE - L.A.	05.04.2019	1.07	G.I.	04.04.2020
45	E.P. No – 45	POWER HOUSE	PUMP HOUSE - L.A.	05.04.2019	1.88	G.I.	04.04.2020
46	E.P. No – 46	INCINERATOR	INC MCC PANEL BODY-1	05.04.2019	2.79	G.I.	04.04.2020
47	E.P. No – 47	INCINERATOR	INC EQUIPMENTBODY- 1	05.04.2019	0.26	G.I.	04.04.2020
48	E.P. No – 48	INCINERATOR	INC MCC PANEL BODY-2	05.04.2019	1.46	G.I.	04.04.2020
49	E.P. No – 49	INCINERATOR	INC EQUIPMENT BODY- 2	05.04.2019	0.24	G.I.	04.04.2020
50	E.P. No – 50	INCINERATOR	INC CHIMINY	05.04.2019	1.97	G.I.	04.04.2020
51	E.P. No – 51	MPP	ACP MCC PANEL BODY	05.04.2019	0.87	G.I.	04.04.2020
52	E.P. No – 52	MPP	ACP MCC PANEL BODY	05.04.2019	1.17	G.I.	04.04.2020
53	E.P. No – 53	MPP	MPP ST BODY 1	05.04.2019	0.85	G.I.	04.04.2020
54	E.P. No – 54	MPP	MPP ST BODY 2	05.04.2019	1.02	G.I.	04.04.2020
55	E.P. No – 55	MPP	ACP INSTRUMENT	05.04.2019	0.57	G.I.	04.04.2020
56	E.P. No – 56	NAHTCP	NAHTCP REACTOR	05.04.2019	0.91	G.I.	04.04.2020
57	E.P. No – 57	MPP	ACP REACTOR -1	05.04.2019	0.57	G.I.	04.04.2020
58	E.P. No – 58	MPP	ACP REACTOR -2	05.04.2019	1.57	G.I.	04.04.2020
59	E.P. No – 59	MPP	ACP STRUCTURE -1	05.04.2019	0.89	G.I.	04.04.2020
60	E.P. No – 60	MPP	ACP STRUCTURE -2	05.04.2019	0.49	G.I.	04.04.2020
61	E.P. No – 61	PNB	PNB MCC PANEL BODY-1	05.04.2019	1.17	G.I.	04.04.2020
62	E.P. No – 62	PNB	PNB EQUIPMENT -1	05.04.2019	1.15	G.I.	04.04.2020
63	E.P. No – 63	PNB	PNB EQUIPMENT -2	05.04.2019	1.07	G.I.	04.04.2020
64	E.P. No – 64	PNB	PNB MCC PANEL BODY-2	06.04.2019	1.1	G.I.	05.04.2020
65	E.P. No – 65	ADM	ADM ELDB BODY-1	06.04.2019	1.2	G.I.	05.04.2020

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Page No.3

Sr. No	Equipment Name	Location	Use for	Date of Testing	Resist. Value in OHM	Type of earthing	Due Date
66	E.P. No – 66	ADM	ADM ELDB BODY-2	06.04.2019	2.6	G.I.	05.04.2020
67	E.P. No – 67	ADM	ADM SAP -1	06.04.2019	2.92	G.I.	05.04.2020
68	E.P. No – 68	ADM	ADM SAP -2	06.04.2019	2.14	G.I.	05.04.2020
69	E.P. No – 69	ADM	ADM SERVER	06.04.2019	1.99	G.I.	05.04.2020
70	E.P. No – 70	MEE	MEE 3,4,5 & 6 MCC BODY-1	06.04.2019	1.28	G.I.	05.04.2020
71	E.P. No – 71	MEE	MEE 3&6 MCC PANEL BODY	06.04.2019	1.15	G.I.	05.04.2020
72	E.P. No – 72	MEE	MEE 6 LA	06.04.2019	1.31	G.I.	05.04.2020
73	E.P. No – 73	MEE	MEE 6 LA	06.04.2019	1.1	G.I.	05.04.2020
74	E.P. No – 74	MEE	MEE - 3&6 MCC BODY	06.04.2019	0.34	G.I.	05.04.2020
75	E.P. No – 75	MEE	MEE-3,4, 5 & MCC BODY	06.04.2019	0.53	G.I.	05.04.2020
76	E.P. No – 76	ETP	ETP WEIGHT BALANCE-1	06.04.2019	0.27	G.I.	05.04.2020
77	E.P. No – 77	ETP	ETP WEIGHT BALANCE-2	06.04.2019	1.19	G.I.	05.04.2020
78	E.P. No – 78	ETP	ETP MCC PANEL-1	06.04.2019	0.78	G.I.	05.04.2020
79	E.P. No – 79	ETP	ETP MCC PANEL-2	06.04.2019	1.06	G.I.	05.04.2020
80	E.P. No – 80	STORAGE TANK	ST TANK BODY	06.04.2019	0.48	G.I.	05.04.2020
81	E.P. No – 81	STORAGE TANK	ST CS TANK BODY	06.04.2019	1.89	G.I.	05.04.2020
82	E.P. No – 82	STORAGE TANK	ST TANK BODY	06.04.2019	0.12	G.I.	05.04.2020
83	E.P. No – 83	STORAGE TANK	ST TANK BODY	06.04.2019	0.11	G.I.	05.04.2020
84	E.P. No – 84	STORAGE TANK	ST CS TANK BODY	06.04.2019	0.13.	G.I.	05.04.2020
85	E.P. No – 85	PCL3	REACTOR EARTHING-1	06.04.2019	2.25	G.I.	05.04.2020
86	E.P. No – 86	PCL3	MCC PANEL BODY-1	06.04.2019	0.25	G.I.	05.04.2020
87	E.P. No – 87	PCL3	PCL MCC PANEL BODY-2	06.04.2019	0.64	G.I.	05.04.2020
88	E.P. No – 88	PCL3	REACTOR EARTHING-2	06.04.2019	0.61	G.I.	05.04.2020
89	E.P. No – 89	PCL3	PLC	06.04.2019	0.7	G.I.	05.04.2020
90	E.P. No – 90	CPP	CPP MCC PANEL BODY-1	06.04.2019	0.8	G.I.	05.04.2020
91	E.P. No – 91	CPP	CPP MCC PANEL BODY-2	06.04.2019	0.92	G.I.	05.04.2020
92	E.P. No – 92	CPP	CPP REACTOR -1	06.04.2019	1.02	G.I.	05.04.2020
93	E.P. No – 93	CPP	CPP REACTOR -2	06.04.2019	0.95	G.I.	05.04.2020
94	E.P. No – 94	MEE	MEE -1&2 MCC BODY	06.04.2019	2.02	G.I.	05.04.2020
95	E.P. No – 95	MEE	MEE -1&2 MCC BODY	06.04.2019	1.32	G.I.	05.04.2020
96	E.P. No – 96	CL2 SHED	CL2 SHED	06.04.2019	2.04	G.I.	05.04.2020
97	E.P. No – 97	TMP	TMP DRUM FILLING	06.04.2019	1.97	G.I.	05.04.2020
98	E.P. No – 98	PBH	PBH REACTOR -1	06.04.2019	0.69	G.I.	05.04.2020
99	E.P. No – 99	PBH	PBH REACTOR -2	06.04.2019	2.8	G.I.	05.04.2020
100	E.P. No – 100	PBH	PBH PLC	06.04.2019	0.9	G.I.	05.04.2020
101	E.P. No – 101	PBH	PBH MCC PANEL BODY	06.04.2019	0.64	G.I.	05.04.2020
102	E.P. No – 102	PBH	PBH MCC PANEL BODY	06.04.2019	1.25	G.I.	05.04.2020
103	E.P. No – 103	GLP	GLP REACTOR	06.04.2019	1.32	G.I.	05.04.2020
104	E.P. No – 104	GLP	GLP NEW REACTOR	06.04.2019	2.1	G.I.	05.04.2020
105	E.P. No – 105	GLP	GLP REACTOR	06.04.2019	1.16	G.I.	05.04.2020

POPULAR ELECTRIC STORES
AUTH. DISTRIBUTOR : MIMIC PRODUCTS, R.R. KABEL LTD. SUBODHAN CAPACITOR,
SUPPLIERS OF : CONTROL PANELS PCC, MCC, APFC PANELS, DISTRIBUTION BOARDS, BOXES ETC.
[Govt. Licenced. Electrical Contractor] GBC 2061
HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

Continue On Page No.4

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Sr. No	Equipment Name	Location	Use for	Date of Testing	Resist. Value In OHM	Type of earthing	Due Date
106	E.P. No – 106	GLP	GLP MCC PANEL BODY-1	07.04.2019	1.17	G.I.	06.04.2020
107	E.P. No – 107	GLP	GLP MCC PANEL BODY-2	07.04.2019	1.14	G.I.	06.04.2020
108	E.P. No – 108	GLP	GLP PLC	07.04.2019	1.21	G.I.	06.04.2020
109	E.P. No – 109	TMP	MCC PANEL BODY-1	07.04.2019	0.76	G.I.	06.04.2020
110	E.P. No – 110	TMP	MCC PANEL BODY-2	07.04.2019	1.96	G.I.	06.04.2020
111	E.P. No – 111	TMP	TMP REACTOR-1	07.04.2019	0.39	G.I.	06.04.2020
112	E.P. No – 112	TMP	TMP REACTOR-2	07.04.2019	0.76	G.I.	06.04.2020
113	E.P. No – 113	NEW MNZ	MCC PANE EARTHING - 1	07.04.2019	0.46	G.I.	06.04.2020
114	E.P. No – 114	NEW MNZ	MCC PANE EARTHING - 2	07.04.2019	0.94	G.I.	06.04.2020
115	E.P. No – 115	NEW MNZ	EAQUPMENT EARTNIG - 1	07.04.2019	0.13	G.I.	06.04.2020
116	E.P. No – 116	NEW MNZ	EAQUPMENT EARTNIG - 2	07.04.2019	0.39	G.I.	06.04.2020
117	E.P. No – 117	UTILITY	BOILOR MCC BODY	07.04.2019	0.12	G.I.	06.04.2020
118	E.P. No – 118	UTILITY	500 TR MCC BODU	07.04.2019	0.13	G.I.	06.04.2020
119	E.P. No – 119	UTILITY	BOILOR BODY - 1	07.04.2019	0.14	G.I.	06.04.2020
120	E.P. No – 120	UTILITY	BOILOR BODY - 2	07.04.2019	0.20	G.I.	06.04.2020
121	E.P. No – 121	UTILITY	MCC BODY - 1	07.04.2019	2.3	G.I.	06.04.2020
122	E.P. No – 122	UTILITY	VOLTAS COMP	07.04.2019	1.32	G.I.	06.04.2020
123	E.P. No – 123	UTILITY	UTY 130 TR MCC BODY -1	07.04.2019	0.30	GI	06.04.2020
124	E.P. No – 124	UTILITY	UTY 130 TR MCC BODY -2	07.04.2019	2.23	G.I.	06.04.2020
125	E.P. No – 125	NEW GODOWN	LA-1	07.04.2019	1.32	G.I.	06.04.2020
126	E.P. No – 126	NEW GODOWN	LA-2	07.04.2019	1.76	G.I.	06.04.2020
127	E.P. No – 127	OXIGEN TANK	OXIGEN TANK-1	07.04.2019	0.85	G.I.	06.04.2020
128	E.P. No – 128	OXIGEN TANK	OXIGEN TANK-2	07.04.2019	1.07	G.I.	06.04.2020
129	E.P. No – 129	CS2 TANK	CS2 TANK BODY	07.04.2019	2.81	G.I.	06.04.2020
130	E.P. No – 130	CS2 TANK	CS2 TANK BODY	07.04.2019	1.76	G.I.	06.04.2020
131	E.P. No – 131	CS2 TANK	CS2 TANK BODY	07.04.2019	2.64	G.I.	06.04.2020
132	E.P. No – 132	CS2 TANK	CS2 TANK BODY	07.04.2019	1.72	G.I.	06.04.2020
133	E.P. No – 133	AMONIA YARD	AMONIA TANK BODY	07.04.2019	2.88	G.I.	06.04.2020
134	E.P. No – 134	AMONIA YARD	AMONIA TANK BODY	07.04.2019	0.61	G.I.	06.04.2020
135	E.P. No – 135	AMONIA YARD	AMONIA TANK BODY	07.04.2019	0.82	G.I.	06.04.2020
136	E.P. No – 136	AMONIA YARD	AMONIA TANK BODY	07.04.2019	1.08	G.I.	06.04.2020
137	E.P. No – 137	CANTEEN	CANTEEN LDB BODY	07.04.2019	2.44	G.I.	06.04.2020
138	E.P. No – 138	CANTEEN	CANTEEN LDB BODY	07.04.2019	2.84	G.I.	06.04.2020
139	E.P. No – 139	"C" GATE	WEIGHT BALANCE BODY	07.04.2019	2.6	G.I.	06.04.2020
140	E.P. No – 140	"C" GATE	WEIGHT BALANCE BODY	07.04.2019	1.95	G.I.	06.04.2020

Continue On Page No.5

POPULAR ELECTRIC STORES

AUTH. DISTRIBUTOR : MIMIC PRODUCTS, R.R. KABEL LTD. SUBODHAN CAPACITOR,
SUPPLIERS OF : CONTROL PANELS PCC, MCC, APFC PANELS, DISTRIBUTION BOARDS, BOXES ETC.

[Govt. Licenced. Electrical Contractor] GBC 2061

HT/LT Electrical Installation, Cable Jointing, Repaires & Reconditioning of Distribution Transformers

COMMENTS: Result are satisfactory

Thanking you, we remain,
Yours faithfully,
For Popular Electric Stores

Proprietor

LICENCE NO. GBC – 2061 .

SUPERVISOR PERMIT
NO. MGS 179 .

For CORONANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

POPULAR ELECTRIC STORES
AUTH.DEALER : MIMIC PRODUCTS, R.R. KABEL LTD., SHRAMIK WINDING WIRES, SUBODHAN CAPACITORS
SUPPLIERS of : Control Panels PCC, MCC, APFC Panels, Distribution Boards, Boxes
[Govt. Licenced. Electrical Contractor]
HT/LT electrical installation, Cable jointing, Repaires & Reconditioning of Distribution Transformers

Ref. No.: PES/19-05/29
Date: 28/05/2019

To,
M/s Coromandel International Ltd.,
Plot No.2102, 2104/1
G.I.D.C. Sarigam.

CERTIFICATE

Dear Sir,

With reference to your order No.80850984 Date 28/05/2019, we have pleasure to inform you that we have tested the insulation resistance of PCC-1 and the results are as under:

1) PCC -1 Capacity : 6300 Amps
Volt : 433 Volt

2) Insulation Resistance Value in Mega Ohms:

R phase to Y phase	:	260 Mega Ω
Y phase to B phase	:	280 Mega Ω
R phase to B phase	:	290 Mega Ω
Phase and Neutral	:	250 Mega Ω
Phase, Neutral and Earth	:	230 Mega Ω

3) Comments:
The results are satisfactory.

Thanking you, we remain,
Yours faithfully,
For Popular Electric Stores

Proprietor

Works & Office : Plot No. 749, G.I.D.C., Sarigam, Dist. Valsad, Guj.-396 155. Ph.: 2780884,
Mob.: 98251 39032, 99250 39032 ● E-mail : pesvapi@rediffmail.com

POPULAR ELECTRIC STORES
AUTH.DEALER : MIMIC PRODUCTS, R.R. KABEL LTD., SHRAMIK WINDING WIRES, SUBODHAN CAPACITORS
SUPPLIERS of : Control Panels PCC, MCC, APFC Panels, Distribution Boards, Boxes etc.
[Govt. Licenced. Electrical Contractor]
HT/LT electrical installation, Cable jointing, Repaires & Reconditioning of Distribution Transformers

Ref. No.: PES/19-05/30
Date: 28/05/2019

To,
M/s Coromandel International Ltd.,
Plot No.2102, 2104/1
G.I.D.C. Sarigam.

CERTIFICATE

Dear Sir,

With reference to your order No.80850984 Date 28/05/2019, we have pleasure to inform you that we have tested the insulation resistance of PCC-2 and the results are as under:

1) PCC -2 Capacity : 6300 Amps
Volt : 433 Volt

2) Insulation Resistance Value in Mega Ohms:

R phase to Y phase	:	250 Mega Ω
Y phase to B phase	:	260 Mega Ω
R phase to B phase	:	270 Mega Ω
Phase and Neutral	:	240 Mega Ω
Phase, Neutral and Earth	:	220 Mega Ω

3) Comments:
The results are satisfactory.

Thanking you, we remain,
Yours faithfully,

For Popular Electric Stores

Proprietor

Works & Office : Plot No. 749, G.I.D.C., Sarigam, Dist. Valsad, Guj.-396 155. Ph.: 2780884.
Mob.: 98251 39032, 99250 39032 ● E-mail : pesvapi@rediffmail.com

POPULAR ELECTRIC STORES
AUTH.DEALER : MMC PRODUCTS R.R. KABEL LTD. SHRAMIK WINDING WIRES SIBODHAN CAPACITORS
SUPPLIERS of : Control Panels PCC, MCC, APFC Panels, Distribution Boards, Boxes etc.
[Govt. Licenced. Electrical Contractor]
HT/LT electrical installation, Cable jointing, Repaires & Reconditioning of Distribution Transformers

Ref. No.: PES/19-05/31
Date: 28/05/2019

To,
M/s Coromandel International Ltd.,
Plot No.2102, 2104/1
G.I.D.C. Sarigam.

CERTIFICATE

Dear Sir,

With reference to your order No.80850984 Date 28/05/2019, we have pleasure to inform you that we have tested the insulation resistance of HT VCB PANEL and the results are as under:

1) HT VCB Capacity : 1600 Amps
Volt : 11000 Volt

2) Insulation Resistance Value in Mega Ohms:

R phase to Y phase	:	800 Mega Ω
Y phase to B phase	:	800 MegaΩ
R phase to B phase	:	800 Mega Ω
Phase and Earth	:	650 Mega Ω

3) Comments:
The results are satisfactory.

Thanking you, we remain,
Yours faithfully,

For Popular Electric Stores

Proprietor

Works & Office : Plot No. 749, G.I.D.C., Sarigam, Dist. Valsad, Guj.-396 155. Ph.: 2780884,
Mob.: 98251 39032, 99250 39032 ● E-mail : pesvapi@rediffmail.com

Indian-Non Judicial Stamp
Haryana Government

Date :25/04/2018

No. G0Y2018D1285

GRN No. 34748978

Stamp Duty Paid : ₹ 101
(Rs One)

Penalty :₹ 0
(Rs Zero Only)

Deponent

Name: E I Dupont india pvt ltd
H.No/Floor : Na
City/Village : Gurugram
Phone : 0

Sector/Ward : Na
District : Gurugram

Landmark : Na
State : Haryana

Purpose : OTHERS to be submitted at Any where india

ORIGINAL

SAFETY SERVICE AGREEMENT

This SAFETY SERVICE Agreement is made on this 10th day of May, 2018 (hereinafter referred to as 'Effective Date of the Agreement')

By and between

E. I. DUPONT INDIA PRIVATE LIMITED, a Company registered in India under the Companies Act, 1956, and having its registered office at 7th Floor, Tower C, DLF Cyber Greens, Sector-25A, DLF City, Phase-III, Gurgaon – 122002, Haryana, India (hereinafter referred to as "**EIDI**", which expression shall unless repugnant to the meaning and context thereof, mean and include its successors and assigns) of the one part.

And

COROMANDEL INTERNATIONAL LIMITED, a Company registered in India under the Companies Act, 1956, and having registered office at Coromandel House, Sardar Patel Road, Secunderabad 500003, Telangana, India (hereinafter referred to as "COROMANDEL", which expression shall unless repugnant to the meaning and context thereof, mean and include its successors and assigns) of the other part. [EIDI and COROMANDEL are hereinafter collectively referred to as the "Parties" and individually as a "Party"]

WHEREAS

I) EIDI is interalia engaged in science related works and deliver science-based solutions and technology in areas such as food and nutrition, health care, apparel, safety and security, construction, electronics and transportation.

II) COROMANDEL is engaged in manufacturing of fertilizers, plant protection chemicals and speciality nutrients.

III) COROMANDEL is interested in upgrading safety systems at Sarigam (defined in **Annexure A**) to provide a better safety, health and environment at its workplace, people and surroundings; and for that approached EIDI to provide its services; to which EIDI has agreed upon in the manner, method, on the costs and upon the terms and conditions hereinafter appearing.

NOW THEREFORE IN CONSIDERATION OF THE MUTUAL COVENANTS SET FORTH HEREIN, THE PARTIES AGREE AS FOLLOWS:

1. Scope of this Agreement

1.1 The Parties agree that this Agreement is limited in scope and coverage as detailed in the Scope of Services as per **Annexure A** and is meant only for COROMANDEL facilities as defined in the **Annexure A** (hereinafter referred as the ***"SITE"***).

1.2 Should COROMANDEL require safety services for any of its other operating or office facility or those of its associates (as defined in Clause 6.7 below) then:

(a) COROMANDEL shall not use the "DuPont Intellectual Property" (defined below in Clause 6) for any such requirements;

(b) The parties may mutually negotiate the terms and conditions for rendering of the Safety Services for such requirements.

1.3 This Agreement represents the entire agreement of the Parties and supersedes any and all prior agreements, understandings, promises, representations, and discussions between the Parties and / or their representatives or affiliates regarding the subject hereof.

2. Period of Agreement

This Agreement, including prices, shall remain in force with effect from the Date of Agreement up to 30th September 2020. The Parties may mutually agree in writing to extend the Agreement for a further period of Three (3) Calendar Months on mutually decided terms and conditions for such extension of time.

3. Service Fees and Payment Terms

3.1 The services to be provided by EIDI under this Agreement are as set out in Annexure A "Scope of Services" (the "Services"), and same shall be read as part of this agreement .

COROMANDEL agrees to accept the scope of Services and deliverables as described in **Annexure A**. Any variations to the **Annexure A** will be subject to a quotation by EIDI. No work will be commenced unless confirmed in writing by COROMANDEL assigned representative. Any scope or scale variation requested by COROMANDEL and beyond the

existing contract terms in excess of 25% of the contract price will require a new agreement to be entered between EIDI and COROMANDEL.

3.2 The fees for the Services and the applicable payment terms shall be as specified in **Annexure B** "Service Fees, Terms and Conditions", which Annexure is incorporated by reference herein.

3.3 If goods and services tax, value added tax, consumption tax or similar tax is applicable to any transactions at any time during the term of this Agreement, EIDI is entitled to charge such tax to COROMANDEL. COROMANDEL hereby agrees to pay EIDI such tax charge in the same manner and at the same time as the payment of invoice(s) for the fees for services under this Agreement.

4. Warranty and Limitation of Liability

4.1 EIDI warrants that all Services performed hereunder will be performed in a professional, workmanlike and competent manner, in conformity with applicable professional standards and requirements of the Agreement.

It is agreed that EIDI shall, wherever feasible, use its improved / updated professional standards in providing its Services under this Agreement. EIDI shall not delegate its obligations under this agreement to any third party, other than its Affiliates / Contractors / Sub-Contractors.

EIDI shall remain liable for all acts or omissions of its Affiliates / Contractors / Sub-Contractors in the course of the provision of the Services.

4.2 The foregoing warranty is the only warranty offered by EIDI and is expressly offered in lieu of any other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and all warranties arising from course of dealing or usage of trade.

4.3 Subject to the provisions of 4.5 of this Agreement, EIDI's aggregate liability to COROMANDEL and COROMANDEL exclusive remedy arising out of or in connection with the Services provided under this Agreement (including, without limitation, claims for breach of contract, warranty, negligence, strict liability, and other torts) shall be limited to re-performing at EIDI's expenses and the Services to correct any deficiencies which result from EIDI's failure to perform in accordance with applicable professional standards.

4.4 All claims of COROMANDEL for non-conforming Services must be specified in writing and received by EIDI no later than one (1) year after completion of the delivery of the said Services (the "Warranty Period").

4.5 The aggregate monetary liability of EIDI to COROMANDEL arising out of or in connection with the Services provided hereunder shall be limited to 100 % of the total amount actually received by EIDI from COROMANDEL for such Services, and COROMANDEL hereby releases EIDI from any monetary liability in excess thereof.

4.6 The remedies set forth in this section constitute the sole and exclusive recourse and remedy of COROMANDEL for monetary damages with respect to any breach of any of the warranties or covenants contained in this agreement.

4.7 Such remedies set forth in this section, waivers and limitations shall extend to the partners, members, licensees, direct and indirect subcontractors and vendors, successors, assigns and related entities of COROMANDEL, and all of its shareholders, directors, officers, employees and agents.

4.8 Under no circumstances EIDI shall be liable to COROMANDEL for any special, indirect, or consequential loss or damage.

5. Indemnity

5.1 EIDI shall provide the Services in accordance with the scope of services mentioned in the Annexure A of this Safety Service agreement. COROMANDEL shall make all final decisions on the use of such Services and implementation into its operations at the SITE. COROMANDEL acknowledges and agrees that it bears all responsibility for the use of the Services and their implementation into its operations at the SITE.

6. Intellectual Property

6.1 EIDI hereby represents that patent, trade mark, trade name, know how, technical or engineering information or other material relating to DuPont or the Services, including without limitation written reports prepared by EIDI pursuant to this Agreement, Safety Training Materials, Engineering Standards and Process Safety Risk Management Standards are individually and collectively considered, as the "intellectual property", which are owned by E. I. du Pont de Nemours and Company, USA (hereinafter referred as "DuPont Intellectual Property"); and it is a subsidiary of E. I. du Pont de Nemours and Company, USA; and have necessary license to use and apply the same with a right to sub- license the same.

6.2 COROMANDEL recognizes and agrees that any such "DuPont Intellectual Property" shall remain vested in E. I. du Pont de Nemours and Company, USA both during the term of this Agreement and thereafter and agrees never to challenge the validity or ownership of the same.

6.3 EIDI hereby authorizes COROMANDEL to use the "DuPont Intellectual Property" as envisaged in Clause 6.5 and COROMANDEL agrees that all use by COROMANDEL of the "DuPont Intellectual Property" shall be made only for bonafide reasons and shall not be in a manner which may confuse the public and/or the trade as to the respective identities of the Parties to this Agreement.

6.4 Upon the expiration of this agreement all such "DuPont Intellectual Property", which has been passed on to COROMANDEL during this period of agreement, can be retained by COROMANDEL provided that any use by COROMANDEL of such "DuPont Intellectual Property" shall be subject

to the provisions of Clause 1.2, entire Clause 4, 6.1, 6.2, 6.3 and 6.5 of this Agreement.

6.5 In the event of termination of this Agreement in terms of Clause 11, COROMANDEL shall discontinue use of the EIDI Intellectual Property and shall promptly return all such EIDI Intellectual Property to EIDI.

6.6 EIDI grants COROMANDEL a non-exclusive, non-transferable revocable license to use the "DuPont Intellectual Property" for internal purposes only to the extent necessary for COROMANDEL to obtain the benefit of the Services provided that:

(i) COROMANDEL shall only be entitled to distribute tangible versions of "DuPont Intellectual Property" to those employees of COROMANDEL to whom the Services were specifically directed as agreed by EIDI.

(ii) Neither COROMANDEL nor any employee of COROMANDEL may copy, reproduce or otherwise duplicate the "DuPont Intellectual Property" except as expressly authorized by EIDI;

(iii) Any use of the "DuPont Intellectual Property" expressly authorized by EIDI shall not be done in such a manner as to infringe upon, or prejudice the rights or ability of EIDI to exploit its Intellectual Property.

6.7 It is anticipated that during the course of providing the Services, EIDI may recommend modifications and enhancements to COROMANDEL existing documentation, materials, plans and processes at the SITE ("COROMANDEL Materials"). In this event, COROMANDEL may use and disclose the COROMANDEL Materials to affiliates and joint venture partners of COROMANDEL provided that the use and disclosure does not occur.

(i) In a manner whereby substantial elements, sections or information considered to be "DuPont Intellectual Property" is used and disclosed;

(ii) In a manner that will infringe upon, or prejudice the ability of EIDI to exploit the "DuPont Intellectual Property".

6.8 For the purposes of this Agreement, affiliates shall mean any wholly owned subsidiary or holding company of COROMANDEL, joint venture partners shall mean a partnership where COROMANDEL is the Operating Company or where the COROMANDEL is not a minority shareholder in that partnership.

6.9 COROMANDEL confirms its no-objection to EIDI listing their name in its Customer lists.

6.10 COROMANDEL hereby grants EIDI a worldwide, exclusive, royalty-free license to reproduce, distribute and use any improvements to the EIDI Intellectual Property or other services or methods provided by EIDI that may be developed or discovered by the PARTIES jointly, by EIDI or by COROMANDEL in the course of EIDI's performance of its obligations under this Agreement. EIDI also grants COROMANDEL use of these improvements for its own internal use without any restrictions.

6.11 For a period of two years following the termination or expiration of this Agreement, both the PARTIES agree not to employ any employee or consultant of each other who has had contact with the PARTY during, or as a result of such engagement in a position where such employee or consultant will be expected to install or manage any safety improvement or management process.

7. Relationship

7.1 This agreement does not create a relationship of employment or agency between EIDI and COROMANDEL and does not authorize COROMANDEL or any employee of COROMANDEL to enter into any contracts or commitments, which bind EIDI in any manner.

7.2 EIDI hereby agrees that it shall at all times be an independent contractor responsible for the compensation and supervision of all its employees, agents, and consultants. It is expressly understood that this Agreement between COROMANDEL and EIDI is a contract for service and not a contract of service. EIDI and its employees, servants or Agents shall not be deemed to be employees of COROMANDEL at any point of time. It is clearly understood that the relationship between COROMANDEL and EIDI employees shall under no circumstances be construed as the relationship between the employer and the employees. It is expressly agreed that EIDI will be solely responsible for compliance of and for discharging all obligations to or in connection with the employees for payment of wages, salaries, all amenities and benefits that may be required under the law for the time being in force or which may be applicable and any statutory liability arising out of employment, non-employment and non-payment of their dues statutory or otherwise of such employees. It is expressly agreed and understood by the parties that persons employed by EIDI shall be employees of EIDI, who shall be wholly and solely responsible for the conduct of such staff and COROMANDEL shall not be liable directly or indirectly or vicariously for any claims / demand / dues by the employees. EIDI shall not hold COROMANDEL responsible in this behalf and COROMANDEL shall not be liable for non-payment of any of the costs as mentioned in this clause.

7.3 During the term of this Agreement, neither Party shall knowingly solicit or employ any of the employees or officers of the other Party for a period of two years following the agreement, who have provided services under this Agreement unless it receives the prior consent of other Party.

8. Force Majeure

8.1 No liability shall result from delay in performance or nonperformance of this Agreement arising from contingencies, happenings, or causes beyond the control of the Party affected or any delay in performance or non-performance directly or indirectly caused by fire; explosion; accidents; flood; labour unrest / strike; war; act of terrorism; riots; act of Government; or act of God; provided on the occurrence and cessation of any such events, this Agreement shall be wholly or partially suspended during the continuance of such happening/s or event/s and the notice of which is to be given to the other party within 15 days of such happening/s or event/s. The Agreement shall then be renewed after the Parties mutually agree upon the same terms and conditions as on the date on which the Agreement was suspended or if the force Majeure conditions continued beyond six months, the parties shall then mutually decide about the future course of action.

8.2 Without in any way limiting the effect or operation of Clause 8.1, COROMANDEL acknowledges and agrees that if any difficulties in relation to security of EIDI personnel (not attributable to act of EIDI personnel resource(s)) arise in EIDI opinion, which are beyond control of both the Parties and may impact upon the ability of EIDI to provide the Services, EIDI shall not be liable or responsible for delays in performance of the Services or nonperformance of the Services.

8.3 In the event that a security situation as described in Clause 8.2 arises, COROMANDEL agrees that it shall use its reasonable endeavors to enable the Services to be delivered in a country, venue or facility, which in EIDI opinion is not exposed, to such security risks.

9. Confidentiality

9.1 During the term of this agreement and for a period of five (5) years thereafter, EIDI or its parent Company shall not use or disclose to others any confidential information of COROMANDEL for any purpose other than specified below; this confidential information is limited to the confidential information that is disclosed to EIDI by COROMANDEL, or observed by EIDI in connection with EIDI's performance of the Services and described by COROMANDEL in writing as confidential.

9.2 EIDI agrees that COROMANDEL confidential information will be restricted to personnel within EIDI assigned to this project and to independent contractors who are engaged by EIDI to participate in the provision of the Services and who have a need for such information, provided the said independent contractor enters into a confidential agreement with EIDI in this context.

9.3 Without limiting the provisions contained in Clause 5 of the Agreement COROMANDEL agrees that it shall not disclose to a third party any information furnished to COROMANDEL by EIDI in writing for the purpose of rendering the Services, except that disclosure may be made to:

i. Engineering, contracting, and consulting firms to carry out recommendations made by EIDI provided such firm agrees in writing with COROMANDEL that for a period of five (5) years following disclosure it will not disclose the information to others and will use the information only to enable COROMANDEL to carry out EIDI's recommendations; or

ii. Those persons required under federal, state, or local law or regulation.

9.4 The following information shall not be subject to the obligations set forth in this Agreement:

(i) Information already available to the public;

(ii) Information that becomes available to the public through no fault of the recipient party;

(iii) Information already known to the recipient party as shown by competent proof in its possession at the time such information is received from the other party;

(iv) Information that the recipient party subsequently received from a third party who is not under obligation to the other party to this Agreement with respect thereto; or

(iv) Information subsequently and independently developed by an employee or consultant of the recipient party, who had no previous knowledge of disclosures made under this Agreement.

10. Assignment

Neither Party may assign or otherwise transfer this Agreement without the consent of the other except that EIDI may without such consent, by written notice to COROMANDEL assign this Agreement to another company due to a merger, acquisition, demerger or other reorganization that the assigning Party, its parent company or its ultimate parent company, its affiliate or such affiliate's ultimate parent company may be involved in. Upon any such assignment referred to in this Clause:- (a) the rights and obligations under this Agreement shall be binding upon and inure to the benefit of said assignee or successor in interest and (b) after any such merger, acquisition, demerger or other reorganization neither EIDI nor any of its affiliates shall have, and EIDI and such affiliates shall be released from, all duties, obligations and liabilities to COROMANDEL under or in connection with this Agreement.

11. Termination

11.1 This Agreement may be terminated immediately and without liability upon the occurrence of the following events:

(a) In the event that either Party is adjudged bankrupt or makes a general assignment for the benefit of its creditor, or if a receiver is appointed.

(b) In the event that either Party defaults in the performance of any obligation specified in this Agreement, the non-defaulting Party may notify the other Party hereof in writing and, if such default is not remedied within thirty (30) days from the date of such notice the non defaulting party shall have the right to terminate this Agreement immediately without further liability.

11.2 EIDI and COROMANDEL may terminate this Agreement immediately in the event that there has been a material breach of any term of this Agreement. Without limitation and for the avoidance of doubt a material breach shall be considered to have occurred including but not limited to an instance where COROMANDEL in EIDI opinion fails to adhere to the terms of use for "DuPont Intellectual Property" set forth in Clause 6.

11.3 By EIDI In the event that any sums owed by COROMANDEL in respect of the Services are unpaid for more than thirty (30) days subject to due notice as required under 11.1(b) hereinabove.

11.4 This agreement may be terminated by COROMANDEL only after expiry of initial 1 (one) month from the date of this Agreement, at its own discretion, without assigning any reason therefor, provided that COROMANDEL gives prior written termination notice to EIDI. COROMANDEL will also make all payments to EIDI due for the services actually rendered till the date of termination on prorated basis.

11.5 Termination shall not relieve either party from any rights, liabilities or obligations they may have accrued under the law or as per the terms of this Agreement prior to termination; including without limitation the rights of liabilities of the parties with respect to any services that are underway or are within six (6) weeks of scheduled delivery.

12. Waiver

The failure of either party to insist upon strict performance of any of the provisions of this Agreement shall not be deemed a waiver of any subsequent breach of or default in such terms or conditions.

13. Clause Headings

Clause headings are for convenience only and in no way define or limit or in any way affect the terms and conditions of this Agreement.

14 Applicable Law, Jurisdiction & Arbitration

14.1 This Agreement shall be interpreted and construed in accordance with the laws of India and Gurgaon Courts shall have exclusive Jurisdiction.

14.2 Dispute Resolution: All disputes or differences whatsoever arising between the Parties out of or relating to the construction, meaning and operation or effect of this Agreement or the breach thereof shall be settled amicably. If,

however, the Parties are not able to resolve them amicably within a period of thirty days or any longer period as agreed upon by the Parties from the date of commencement of such negotiation the same would be resolved by arbitration. The dispute may be referred to the arbitration by either party after issuance of thirty day's notice in writing to other, clearly mentioning the nature of the dispute/differences. Such arbitration shall be conducted by a Sole Arbitrator to be appointed by Parties hereto by mutual consent. The Arbitration and Conciliation Act, 1996 or any statutory modification thereof shall apply to the arbitration proceedings and the venue for the arbitration proceedings shall be Gurgaon, Haryana. All the arbitration proceeding shall be carried out in English language. Nothing in this clause shall prevent either Party from seeking from any court of competent jurisdiction an interim order restraining the other Party from doing any act or compelling the other Party to do any act.

15. Additional Services

In the event that COROMANDEL wishes to purchase services from EIDI in addition to those services described in Annexure A to this Agreement (the "Additional Services") the Parties agree that the following conditions shall apply:

15.1 COROMANDEL shall inform EIDI in writing of the Additional Services.

15.2 Within thirty (30) days of receipt of a notice regarding Additional Services from COROMANDEL, EIDI shall provide COROMANDEL with a quotation for the Additional Services in the format provided in Annexure D to this Agreement (the "Quote"), which Annexure is incorporated by reference herein (Annexure D).

15.3 In the event that COROMANDEL wishes to proceed with the Additional Services following receipt the Quote it may sign in the space provided in Annexure D and return the quote to EIDI for acceptance.

15.4 All Additional Services obtained by COROMANDEL will be subject to the terms and conditions set forth in this Agreement and the Annexures incorporated herein.

16. A Final **Completion Certificate** will be issued by COROMANDEL to EIDI within 90 days on the successful completion of Services as set out in Annexure A.

17. Ethical Practices

17.1 COROMANDEL understands that EIDI employees are required to comply with the DuPont Code of Conduct including the Gifts & Entertainment and Bribes and Kickbacks sections more particularly stated as **Annexure H**. COROMANDEL agrees that its officers and employees have been made aware of these Code sections, as they apply to EIDI employees and the business of EIDI, and shall not pay any salaries, commissions or fees (or make any other payments or rebates) to any employee, officer or director of EIDI (or any designee of such employee, officer or director) or favour any such individual with gifts, entertainment, services or goods, that are prohibited by the DuPont Code of Conduct.

17.2 With respect to actions taken under this Agreement, COROMANDEL agrees that COROMANDEL and its officers and employees will not improperly or illegally influence or attempt to influence any other person's business decisions, whether an individual, business entity, governmental agency, or otherwise.

17.3 COROMANDEL agrees that if COROMANDEL or its officers or employees has a concern about possible ethical misconduct or a possible violation of the DuPont Code of Conduct, Gifts & Entertainment or Bribes and Kickbacks sections, COROMANDEL will promptly report the concern to an EIDI manager or, where permitted by local law, to the DuPont Hotline (US 1-800-476-3016).

17.4 COROMANDEL hereby agrees that, in its dealings, it will take no action inconsistent with the foregoing, directly or indirectly. COROMANDEL further acknowledges and agrees that any such action will serve as grounds for immediate termination of this Agreement by EIDI.

18. Privacy & Data Protection

18.1 EIDI subscribes to the Information Privacy Policy of its parent company, E.I. du Pont de Nemours and Company, USA. This policy can be viewed through the internet through the following URL: http://www.DUPONT.com/corp/global_privacy.html.

18.2 In relation to the performance of this Agreement, EIDI may have access to and may use information that identifies employees, contractors, customers or suppliers of COROMANDEL (hereinafter "Personal Data"). The Parties agree that any and all Personal Data provided to EIDI by COROMANDEL, or collected by EIDI on behalf of COROMANDEL shall be used for the purposes connected to the performance of this Agreement, including but not limited to carrying out the commercial transactions between the Parties. EIDI may carry out the processing of Personal Data on behalf of COROMANDEL or on its own behalf and shall (i) take commercially reasonable technical and organizational security measures to protect Personal Data against unlawful use or disclosure and (ii) maintain Personal Data in confidence without disclosing to third parties outside the EIDI group of companies and selected contractors that EIDI may use for the same purposes. COROMANDEL shall give adequate notice to individuals as well as obtain explicit consent as it may be required by law for the processing of Personal Data by EIDI, its affiliates and contractors in the U.S.A. and other countries.

19. Child Labour and Forced Labour Prohibition

19.1 COROMANDEL hereby certifies that it is fully aware of the prohibition regarding the employment of children under eighteen (18) years of age as required under applicable laws in India with regard to prohibition of child employment.

19.2 COROMANDEL certifies that it does not currently employ, and will not in the future employ, directly or indirectly, or through any subcontractor, any child to perform work for EIDI who is under eighteen (18) years of age, in any of its operations or activities in a manner contravening the applicable laws on prohibition of child employment.

19.3 COROMANDEL certifies that the workers it uses, and will use, to produce and supply the goods and services offered are in all cases present voluntarily. COROMANDEL certifies that it will not knowingly utilize prison or forced labor as it is defined in the DuPont Principles.

19.4 COROMANDEL understands that these certifications and undertakings are essential to this contract. COROMANDEL agrees to indemnify EIDI and hold EIDI harmless with respect to any violation of relevant laws and regulations, or for any civil liability arising from the contravention of the DuPont Principles by COROMANDEL or any of its suppliers of goods or services. COROMANDEL also agrees that, in the event that EIDI determines that a violation or contravention of relevant laws or regulations or the DuPont Principles has occurred, EIDI shall notify COROMANDEL and COROMANDEL shall immediately remedy the violation or contravention. In the event that EIDI determines that COROMANDEL has not remedied the violation or contravention and complied with the law and/or the DuPont Principles, then EIDI may terminate this contract immediately, and such termination shall be with cause.

20. Entirety

This Agreement and Annexures A, B, C and D made a part hereof, constitute the entire agreement for the sale and purchase of the services named herein. No modification of this agreement shall be of any force or effect unless it is in writing and signed by the Party claimed to be bound thereby, and no modification shall be effected by the acknowledgment or acceptance of purchase order forms containing different conditions.

E. I. DuPont India Pvt. Ltd. Haryana

COROMANDEL INTERNATIONAL LIMITED SARIGAM

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED BY THEIR DULY AUTHORISED REPRESENTATIVES.

For and on behalf of:	For and on behalf of:
E. I. DUPONT INDIA PRIVATE LIMITED (EIDI)	**COROMANDEL INTERNATIONAL LIMITED (COROMANDEL)**
Signature _____	Signature _____
Name Samar Bhatia	Name C. SITARAM
Title Sr. Legal Counsel	Title V.P & Head M+S (CPC)
Date: 10/5/18	Date: 15/ May/ 2018
itness	Witness
1. _____ EIDI, Guru	1. _____ 15/5/18
2. _____	2. Arvind S. Madalgi _____ 15/5/18

Annexure A

Scope of Services

The following SITE of COROMANDEL will be the recipient of the Services:

- Sarigam, Gujarat

EIDI shall provide, interalia, Services under the following work streams as further described below:

1. Planning and Setting Up a Baseline
2. Risk Containment
3. Behavioural Safety Enhancement
4. Process Safety Management
5. Contractor Safety Management
6. Progress Review

1. Planning and Setting Up a Baseline

Key Activities:

1.1 Safety Perception Survey

1.2 Safety Management Evaluation (SME) at the start of the engagement

1.3 Action Planning Workshop

Expected Outcomes:

- Safety Perception Survey Report and Analysis
- A combined assessment and benchmarking of Coromandel International Limited safety management system vis-à-vis world-class
- Action Planning Workshop resulting in identification / development of:
  - Significant strengths and improvement areas (gaps)
  - Prioritized recommendations to strengthen safe work practices and improve overall safety management
  - Action plan for change that is agreed by the leadership team as a roadmap to safety excellence through continued efforts
- Buy-in from larger employee base for path forward

2. Risk Containment

Key Activities:

2.1 Health check of controls for top risks

- Conduct health check of existing controls for top 5 hazards / scenarios

2.2 Implementation assistance

- Verify controls installed post PHA for top 5 hazards / scenarios via risk-based audit

Expected Outcomes:

- Top risks identification and mitigation

3. Behavioural Safety Enhancement

Key Activities:

3.1 Development of Integrated Safety Organization

- Facilitate the formation of Site Apex Safety Committee and sub committees

3.2 Leadership Capability Building

- Conduct 1 session of Executive Leadership Workshop for leaders (maximum 12 persons)
- Conduct sessions of Leading Safety Efforts workshop (3 day duration each) for Leaders and Managers (maximum 24 persons / session)
- Conduct coaching sessions for Leaders focusing on Personal Safety Action Plan (PSAP)
- Conduct sessions of Safety Management Fundamentals training for supervisors (maximum 24 persons / session)

3.3 Safety Observation Process Enhancement

- Facilitate establishment of a sub-committee for observations that meets, plans, implements and analyses safety observation data
- Provide support to safety observation champions at site for achieving high quality of observations
- Support capability enhancement of line managers in developing concrete actions based on safety observation data analysis
- Provide support to / participate in safety observation sub-committee

3.4 Incident Investigation Process Enhancement

- Facilitate establishment of a sub-committee for incident management that meets, plans, implements and analyses safety incidents data (including process safety incidents)
- Conduct session of incident investigation training (maximum 24 persons)
- Define / upgrade common procedure for incident investigation
- Provide support to / participate in incident investigation subcommittee
- Lead facilitation / investigation of 2 incidents
- Review 2 incident invesitgation reports

- Provide support on tracking implementation and closure of recommendations to prevent recurrence of safety incidents and injuries

3.5 Enhancement of safety standards, rules and procedures

- Facilitate establishment of a sub-committee comprising of line management for standards and procedures that meets, plans and implements standards / procedures for priority Work Place safety risks and analyses safety incidents to track these risks
- For the top 2 risks identified at site
    - Review existing best practice and upgrade standards / procedures for priority risks
    - Develop customized training module
    - Provide support on implementation of standards / procedures
    - Develop job-cycle-check process for measuring effectiveness of implementation of standards / procedures

Expected Outcomes:

- Effective integrated governance structure to manage safety at corporate as well as at site level
- Knowledge transfer in critical competencies via training, coaching and in-field hand-holding
- Systems and processes in place for top risks
- Trained personnel on implementation of SOPs
- Effective sharing / learning across sites as a result of sub-committee interaction
- Clear visible improvements at shop floor
- Workmen more open to adopt changes
- Better competencies of safety professionals.

4. Process Safety Management (PSM)

Key Activities:

4.1 PSM and MIQA sub-committee formation

- Facilitate establishment of a sub-committee for PSM and an ad-hoc PHA committee under PSM sub-committee that meet, plan, implement and evaluate standards / procedures for process safely management
- Risk Assessment Matrix Development
- Risk Priporitization Workshop (post PHA)
- Form MIQA committee
- Train members on MIQA requirements

4.2 PSM and PHA training and application

- Conduct sessions of training on PSM (maximum 24 persons / session) involving selected personnel from Leader, Manager and Supervisor categories
- Conduct session of training on PHA (maximum 12 persons / session) involving selected participants from PSM training session.
- Provide support to conduct PHA
    - Provide support on gathering PSI to facilitate a PHR
    - Provide support on how to use PHR to identify equipment that is PSM critical
    - Provide support on application of relevant hazard identification methodology to the selected process area
    - Review / Critique application of PHA for another part of the process and provide coaching / critique for developing PHA champions (PHA of 6 P&IDs to be reviewed)

4.3 Standard development for PSM, Process Hazard Analysis (PHA), Process Technology (PT) and Management of Change (MOC)

- Develop / review / upgrade the existing standard / procedure for PSM
- Develop / review / upgrade the existing standard / procedure for PHA
- Develop / review / upgrade the existing standard / procedure for PSI
- Develop / review / upgrade the existing standard / procedure for MOC
- Provide support in the implementation of various PSM standards / procedures developed

4.4 Support on gathering PT for model area

4.5 Mechanical Integrity and Quality Assurance (MIQA) key procedures development

- Develop MIQA manual and provide support in its implementation

4.6 Development of procedure and detailed checklist for PSSR

Expected Outcomes:

- Capability building to enhance hazard awareness and environmental compliance
- Systematic documentation for addressing priority hazards and risks
- Better PT packages for training and records purposes
- Systems in place to keep PT packages live
- Effective emergency response to minimize consequences

5. Contractor Safety Management (CSM)

Key Activities:

5.1 Development CSM sub-committee formation

- Facilitate establishment of a sub-committee for contractor safety management that meets, plans, and implements standards / procedures for improving contractor safety performance
- Provide support to / participate in contractor safety subcommittee

5.2 CSM training and application

5.3 Guidance on implementation of 6-step process

- Review existing best practices and upgrade procedures for managing contractor safety performance

Expected Outcomes:

- Enhanced hazard awareness and improved performance by contractor personnel as a result of better skill sets amongst contractors
- Higher acceptance to PPE compliance and other systems put in place
- Implementation of effective contractor management process

6. Progress Review

Key Activities:

5.1 Progress Assessment

- Annual progress assessment of Safety Cultural Transformation
- Report on annual progress assessment findings for all sub-committees

5.2 Safety Perception Survey

5.3 Safety Management Evaluation (SME) at the end of the engagement

5.4 Closure and Path Forward Workshop

Expected Outcomes:

- Annual progress assessment findings for all sub-committees
- Safety Perception Survey Report and Analysis (end of the engagement)
- A combined assessment and benchmarking of Coromandel International Limited safety management system vis-à-vis world-class (end of the engagement)

Typical Methodology for the Engagement

EIDI will form an EIDI Resource Team and COROMANDEL Sarigam team will form a Core Team (as detailed out in Annexure C) to work with EIDI Resource Team throughout the Term of this Agreement.

EIDI shall develop an execution plan for the delivery of the Services in consultation with COROMANDEL.

EIDI Resource Team would typically be visiting Sites periodically and are not likely to be present at SITE on continuous basis. COROMANDEL Resource Team is expected to practice the upgraded systems and procedures to enhance their skills and knowledge.

COROMANDEL Resource Team shall implement the improvements in day to day operations. EIDI Resource team will provide consultation on methods to overcome the barriers in effective implementation.

* * * * *

Annexure B

Service Fees, Terms and Conditions

1. Service Fees

The Service Fees for the scope of Services outlined in this Agreement will be Indian Rs. 6,26,40,000/- (Rs. Six Crores Twenty Six Lacs and Forty Thousand Only). The services will consist of 261 mandays of work to be completed at Sarigam site in 24 month period of the engagement.

This investment split by each of the proposed work areas is summarized in Table 1 below.

Table 1: Fees for Implementation Support for Various Work Areas

No.	Work Area Name	Total Value (Rs. Lacs)
1	Planning and Setting Up a Baseline	28.8
2	Risk Containment	72.0
3	Behavioural Safety Enhancement	216.0
4	Process Safety Management	235.2
5	Contractor Safety Management	36.0
6	Progress Review	38.4
	Sub Total Investment	**626.4**

The Service Fees is split into three heads, viz.

Resource Mobilization Fees (5%)	- Rs. 31,32,000/-
Implementation Support Fees in Year 1 (55%)	- Rs. 3,44,52,000/-
Implementation Support Fees in Year 2 (40%)	- Rs. 2,50,56,000/-
TOTAL	- Rs. 6,26,40,000/-

1.1 Resource Mobilization Fees

These Fees shall cover service charges towards mobilization of consultants and project planning activities and will be Indian Rs. 31,32,000/- (Rs. Thirty One Lacs and Thirty Two Thousand Only).

Invoice for the Resource Mobilization Fees will be raised within five (5) working days after signing of the Service Agreement and payable within thirty (30) days from the date of the invoice.

1.2 Implementation Support Fees in Year 1

Fees payable for the Implementation Support services planned in Year 1 will be Indian Rs. 3,44,52,000/- (Rs. Three Crores Forty Four Lacs and Fifty Two Thousand Only).

These Fees will be paid as equal monthly installments spread over the 12 month period of the first year of the engagement and each monthly installment will be Indian Rs. 28,71,000/- (Rs. Twenty Eight Lacs and Seventy One Thousand Only).

1.3 Implementation Support Fees in Year 2

Fees payable for the Implementation Support services planned in Year 2 will be Indian Rs. 2,50,56,000/- (Rs. Two Crores Fifty Lacs and Fifty Six Thousand Only).

These Fees will be paid as equal monthly installments spread over the 12 month period of the second year of the engagement and each monthly installment will be Indian Rs. 20,88,000/- (Rs. Twenty Lacs and Eighty Eight Thousand Only).

2. Planning and Scheduling

Overall detailed project schedule will be developed jointly with COROMANDEL Sarigam team at the start of the engagement typically in form of a three month rolling plan. A pool of consultants will be assigned to the project with different skill sets to address the overall objectives.

DuPont personnel deputed to COROMANDEL shall observe daily or weekly time off and public holidays as observed by COROMANDEL.

3. Invoicing Terms

During the Term of this Agreement, EIDI will raise monthly invoices to Sarigam site for the following:

- Equated monthly fees for implementation support (as described in Clauses 1.2 and 1.3 of this Annexure)

Invoices for travel and living expenses incurred by EIDI Resource Team will be raised separately on periodic basis.

4. Travel and Living Expenses and Taxes

The Service Fees do not include any Travel and Living Expenses. The same shall be charged extra at actuals in Indian Rupees and shall be capped at a maximum of 10% of the contract value. In case of Travel and Living Expenses incurred in currencies other than Indian Rupees, the RBI declared conversion rate on the date of invoice would be used for arriving at the equivalent value in Indian Rupees. Any international travel for more than 5 hours will qualify for business class.

Any taxes and Government levies applicable on the Service Fees and the Travel and Living Expenses will be billed extra.

The following guidelines are applicable for travel and living expenses:

- The travel and living does not have any out of pocket expenses
- Any international travel for more than 5 hours will entitle business class travel. Details of international travel will be provided in advance and travel undertaken after COROMANDEL clearance. These details will be provided as part of 3 monthly rolling plan for the project
- COROMANDEL will provide suitable lodging, if Guest House is not available at / near SITE
- This would include single occupancy A/C room accommodation with communication facilities including internet connections
- COROMANDEL will provide, as a minimum, sedan cars with seat belts on all seats and drivers for all work related travel in India and in and around the place of work for EIDI Resource Team during the period of the visits
- COROMANDEL will make arrangement (cars with seat belts and drivers) for travel from and to the nearby airport
- In case of inability of COROMANDEL to provide suitable and timely accommodation and transportation meeting the above standards, EIDI will have the right to arrange the same and the cost inclusive of tax will be billable and payable by COROMANDEL.
- COROMANDEL will provide office room with furniture, communication facilities like telephone, fax, internet and other office support for the EIDI Resource Team free of cost for the duration of their stay at the SITE, and meeting room facilities and equipment for joint meetings at the SITE
- EIDI personnel will be responsible for their own income tax (if any) levied in India or elsewhere
- EIDI will be responsible for its cost for effecting Employers Liability Insurance and any medical, health insurance or motor vehicle insurance required by EIDI or by applicable law in respect of EIDI personnel

5. Payment Terms

Payment terms for the Services including the additional applicable service tax will be payable within thirty (30) days from the date of invoice. Any delay in payment beyond due date will attract an interest @ 12 % per annum for the days overdue.

6. Conflict

Wherever there is a disparity between any of the above Terms and Conditions and as mentioned elsewhere in the Agreement, the Instructions / Terms / Conditions as mentioned in the Agreement shall take precedence over the above.

* * * * *

Annexure C

EIDI Resource Team

Project Director

- Responsible for overall effective implementation of this Agreement
- Seek inputs from COROMANDEL on consultant and project performance to ensure progress in the right direction and respond to any concerns immediately
- Interact with COROMANDEL Sarigam Unit Head periodically and provide inputs on what is going well and what is not going well

Project Manager

- Identify appropriate resources / consultants and trainers within EIDI
- Direct all resources involved in the project to accomplish milestone deliverables
- Lead Steering Teams, interacting with line organization at COROMANDEL
- Develop a detailed scope of work, resource needs, timing and budget
- Manage all aspect of program such as project plan vs. schedule and logistics
- Provide periodic Project Progress reports

Consultants

- Senior Leadership coaching and workshop facilitation
- Coaching / mentoring for leaders and managers
- Identify needs and deliver inputs on work processes
- Support the efforts of the committees and sub-committees
- Help the COROMANDEL team develop appropriate safety standards, systems, and procedures
- Support the accomplishment of milestones / deliverables

Trainers

- Deliver training programs
- Support customization of the training (where required)
- Resource / support for adult learning principles applied through workshops
- Resource for audit training and on-the-job learning

Note:

The Project Director would have overall responsibility of coordination of the Project and would be supported by the team mentioned above in ensuring that activities at the SITE level proceed smoothly.

The Core Team would be further supported by the entire COROMANDEL team members as reasonably needed to facilitate completion of the Services.

Coromandel International Limited Resource Team

Given below is a summary of typical resource needs for such an engagement from COROMANDEL.

Project Core Team			
Requirement	**Summary Profile**	**# of persons**	**Time Allocation**
Project Director / Project Manager	1 (one) person from COROMANDEL to lead the overall efforts over the project duration. The designated person should have a suitable level of seniority to drive the implementation across the organization and influence the Unit Heads and Top Management positively.	1	20% for entire duration of the Service Critical to have this activity as first priority
Site Project Leader	1 (one) person to lead the efforts at the site. The designated person should be from the line organization and should not be a SHE professional. The person should have a suitable level of seniority in the organization to drive the project implementation at the site. Preferably the person should be a direct report of the Unit Head.	1	10-20% for entire duration of the Service
Site Safety Coordinator	1 (one) person to coordinate efforts at the site jointly with Site Project Leader.	1	30-50% for entire duration of the Service

In addition, following support from COROMANDEL will act as the key success factor for this project:

- COROMANDEL to staff the safety committees with leaders who have line management accountability, appropriate authority, and sufficient availability to drive performance and implement the new processes.
- COROMANDEL to make executives, managers, supervisors, and employees available for competency building and coaching as required based on a mutually developed schedule.
- EIDI project management and consultants will work directly with COROMANDEL leadership to achieve project objectives.
- EIDI competency building activities will include leaders and managers to ensure consistency and successful knowledge transfer.
- Commitment from COROMANDEL to execute mutually agreed project plans to achieve key milestones on schedule.
- COROMANDEL to provide facilities for project-related activities and a suitable workspace for the EIDI Resource Team.
- COROMANDEL to provide EIDI access to necessary information regarding safety programs and performance.

Annexure D

Additional Services

This is an amendment to the Safety Service Agreement dated .....between:

E.I.DuPont India Private Limited, 7th Floor, Tower C, DLF Cyber Greens, Sector-25A, DLF City, Phase-III, Gurgaon-122002, Haryana, India (Hereinafter "EIDI")

And

COROMANDEL INTERNATIONAL LIMITED, Coromandel House, Sardar Patel Road, Secunderabad 500003, Telangana, India (hereinafter "COROMANDEL")

Dated: _____

(the "Safety Service Agreement")

The Parties hereby agree to an amendment to the Safety Service Agreement as set out herein:

A. COROMANDEL agrees to purchase the additional Services described in this Clause A:

Scope of Additional Services:

[INSERT ADDITIONAL SERVICES]

(the "Additional Services")

B. The contract price for the Additional Services is _____. The contract price for the Additional Services does not include travel and living expenses incurred by EIDI and its representatives and consultants in providing the Services. Such expenses will be invoiced to the COROMANDEL separately.

C. An invoice for Additional Services shall be issued by EIDI. All invoices will be subject to the payment terms as set out in Annexure B of the Safety Service Agreement.

D. For the avoidance of doubt, all Additional Services selected by COROMANDEL pursuant to Clause 15 and this Annexure C are subject to the terms and conditions set forth in the Safety Service Agreement.

IN WITNESS WHEREOF, the parties duly execute this annexure to the Agreement as indicated below:

E. I. DUPONT INDIA PRIVATE LIMITED (EIDI) **COROMANDEL INTERNATIONAL LIMITED (COROMANDEL)**

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GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

BY RPAD

REVOCATION OF CLOSURE DIRECTION ISSUED UNDER SECTION-31(A) OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT -1981 (HEREINAFTER REFERRED TO AS THE 'AIR ACT') AS AMENDED FROM TIME TO TIME

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155.

AND WHEREAS Board has issued Consolidated Consent & Authorization (CC&A), AWH – 84402, dated 22/02/2017 valid upto 30/09/2021 with certain conditions.

AND WHEREAS closure direction was issued under Section-31(A) Of the Air (Prevention and Control of Pollution) Act-1981, as amended from time to time vide letter No. GPCB/CCA-SRG-229(26)/ID : 24285/492844 dated 29/01/2019.

AND WHEREAS you have applied for the revocation of the Closure direction dated 29/01/2019 on 15/04/2019 and from the inspection of your industrial plant on 04/12/2018 by the authorized officers of the Board, and observed that:

1. Fire accident site area (1546 Sq Meter) is found cleaned which was earlier covered with burned residual product with Sand.
2. You have disposed off total solid waste (Burned Mix Solid waste) @ 1435.93 MT to RSPL, Panoli. and Liquid waste (Generated Waste water)@ 755.925 MT is disposed off into Ankeshwar Cleaner Process Technology Center Pvt. Ltd., Ankeshwar and RSPL, Panoli.
3. As per your submission, a new warehouse for the storage of raw material is taken on lease at Tumb (around 20 km from site) , which will be operational from June-19 and you will store minimum finished goods and raw material stock at the present site from now onwards.

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

4. You have submitted Hazop study report carried out by M/s Dupont Sustainable Solutions and the action taken for the compliance of the critical recommendation given in the study report.
5. You have submitted Fire Protection System adequacy report carried out by M/s Chola MS Risk Services Ltd. and action taken report for the compliance of the recommendation given in the report.
6. You have submitted the action taken report for the remarks of the Directorate of Industrial safety and Health (DISH) representative dated 02/02/2019.
7. You have submitted the Fire NOC from Notified Area, Sarigam.
8. You have submitted certificate about the electrical installation from the Popular Electric Stores.
9. You have submitted undertaking dated 03/06/2019, stating that no Hazardous waste was stored during accident in the warehouse (godown) were accident occur.

AND WHEREAS you have submitted undertaking dated 13/04/2019.

ORDER

Under the circumstances, I, **Sushil Vegda, Senior Environment Engineer,** Gujarat Pollution Control board is directed to revoke the closure direction for three months from the date of issue of order with following conditions:

1) You shall submit the detailed action taken report after completion of work, with reference to your letter regarding the cleaning of plant equipments, maintenance activities including installation of the safety equipments/systems and the internal inspection of various critical equipments.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

2) You shall submit the complete certified verification report for the recommendation of the Hazop Study by the M/s Dupont Sustainable Solutions.
3) You shall submit the complete certified verification report for the recommendation given in Fire protection system adequacy report by the M/s Chola MS Risk Services Ltd.
4) You shall submit the safety audit report for your premises by the competent authority.
5) You shall get checked all your electrical installation and submit the certificate in this regard from the Chief Electrical Inspector after reconnection of three phase.
6) You shall submit the new warehouse plan, capacity(material wise) and safety system for the storage of the minimum finished goods and raw material proposed by you at existing facility.
7) You shall carry out ambient air monitoring twice in a week for CS2 and H2S along with all the parameters specified in National Ambient Air Quality Standards-2009 at four locations @ 90 degree and submit report of the same to this office fortnightly.
8) You shall submit the production plan before starting production to this office.
9) You shall submit the Bank Guarantee of Rs. 15,00,000/- (Fifteen Lakhs) having validity upto 30/06/2020 within 7 days.
10) You shall comply conditions of CCA.

This order is issued after approval from competent authority.

For and on behalf of
Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-SRG-229(30)/ID:24285/ dated :

Issued to:

M/S. Coromandel International Limited

Plot No. 2102,2104/1,735& 2112/2113,

GIDC Estate, Sarigam,

Tal : Umbergaon, Dist ; Valsad – 396 155.

M/s Coromandel International Ltd. (ID – 24285)

COPY TO: -

1. **The Deputy Engineer, (O & M),**
   Dakshin Gujarat Vij Company Ltd
   GIDC Sarigam, Dist : Valsad.

With a request to Re-connect the supply of electricity with immediate effect from the date of issue of this order for three months of **M/S. Coromandel International Limited,** Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

2. **The Deputy Engineer**
   Gujarat Industrial Development Corporation
   Sarigam, Dist : Valsad.

With a request to Re-connect the water supply with immediate effect from the date of issue of this order for three months of **M/S. Coromandel International Limited,** Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

3. **The Regional Officer**
   GPCB-Sarigam
   Bhandarwad, Taluka : Umbergaon
   District : Valsad - 396155

You are directed to verify all directions and follow with local authority for compliances of all directions in complete manner and then after please send report for further action.

For and on behalf of

Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

M/s Coromandel International Ltd. (ID – 24285)

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

September 3, 2019,

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

RECEIVED
Sign.
Date : 07-09-2019
G.P.C. BOARD SARIGAM.

Subject : Submission of Revocation Order Status.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,

This has reference to the above. We are hereby submitting the status of revocation order along with compliance of remedial measures taken regarding to revocation order issued by Gujarat Pollution Control Board.

Sr. No.	Condition	Status
1	You shall submit the detailed action taken report after completion of work along with reference to your letter regarding the cleaning of plant equipments, maintenance activities including installation of the safety equipments/systems and the internal inspection of various critical equipments.	We have submitted detailed action taken report after completion of work along with cleaning of plant equipments, maintenance activities including installation of the safety equipments, systems and the internal inspection of various critical equipments on dated 28th June, 2019. Same is attached herewith for your reference as **Annexure – 1.**
2	you shall submit the complete certified verification report for the recommendation of the the Hazop Study by the Dupont Sustainable Solutions.	Hazop compliance verification report by the Dupont Sustainable Solution attached herewith as **Annexure – 2.**
3	You shall submit the complete certified verification report for the recommendation given in Fire protection system adequacy report by the M/s Chola MS Risk Services Ltd.	Compliance report of the fire protection system adequacy report by M/s Chola MS Risk Services Ltd attached herewith as **Annexure – 3.**
4	You shall submit the safety audit report for your premises by the competent authority.	Safety audit of our premises was carried out by Naik & Associated a competent authority approved by DISH and DGFASLI. Safety audit report with compliance status report is attached herewith as **Annexure – 4.**

05/09/19

Gujarat Pollution Control Board
Sector No. 10 A,
Gandhinagar - 382 010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC00089

5	You shall get checked all your electrical installation and submit the certificate in this regard from the Chief Electrical Inspector after reconnection of three phase.	We have submitted Chief Electrical Inspector certificate on dated 27th June, 2019. Copy of the same is attached herewith as **Annexure – 5**.
6	You shall submit the new warehouse plan, capacity (material wise) and safety system for the storage of the minimum finished goods and raw material proposed by you at existing facility.	We have submitted new warehouse plan, capacity (material wise) and safety system for the storage of finished goods, raw material in our existing facility wide our letter dated 05th July, 2019. Copy of the same is attached herewith as **Annexure – 6**.
7	You shall carry out ambient air monitoring twice in a week for CS2 and H2S along with all the parameters specified in National Ambient Air Quality Standards-2009 at four locations @ 90 degree and submit report of the same to this office fortnightly.	We are doing ambient air monitoring twice in a week for CS2 and H2S along with all the parameters specified in National Ambient Air Quality Standard – 2009 and also submitted reports of the on fortnightly basis. Copies of the same are attached herewith as **Annexure – 7**.
8	You shall submit the production plan before starting production to this office.	We have submitted production plan to your good office on dated 19th June, 2019. Copy of the same is attached herewith as **Annexure – 8**.
9	You shall submit the Bank Guarantee of Rs. 15,00,000/- (Fifteen Lakhs) having validity upto 30/06/2020 within 7 days.	We have submitted Bank Guarantee of Rs. 15,00,000/- (Fifteen Lakhs) on dated 19th June, 2019. Copy of the same is attached herewith as **Annexure – 9**.
10	You shall comply conditions of CCA	We are complying all CCA conditions. We have submitted our letter dated 05th July, 2019. Copy of the same is attached herewith as **Annexure – 10**.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
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T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

CC:
Mr. H. M. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

GPCB ID: 24285

June 28, 2019,

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents of revocation conditions.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,
This has reference to the above, we are hereby submitting following additional documents against the point no. 1) which consists detailed report of Completion of maintenance activities, Plant Equipment cleaning, installation of safety equipment's / system and inspection of various critical equipment's.

We are now proceeding with manufacturing of fresh production.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

RECEIVED
Sign.
Date . 09-07-2019
G.P.C. BOARD SARIGAM.

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

29/06/19
Gujarat Pollution Control Board
Head Office
Sector No. 10-A,
Gandhinagar-382010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

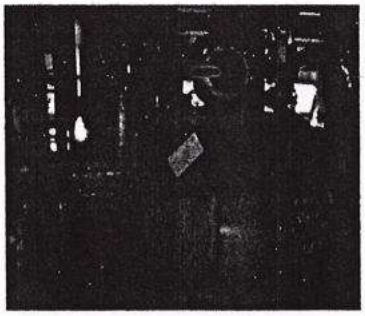
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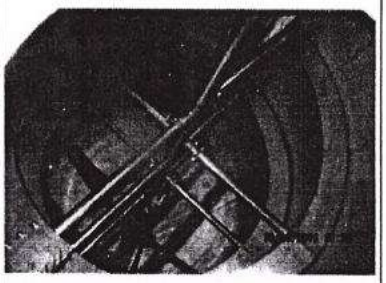
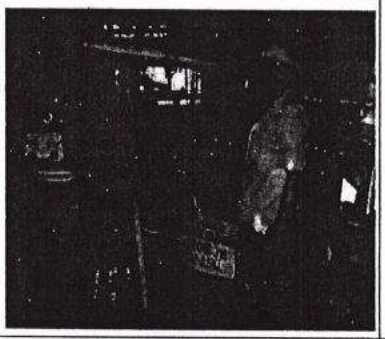
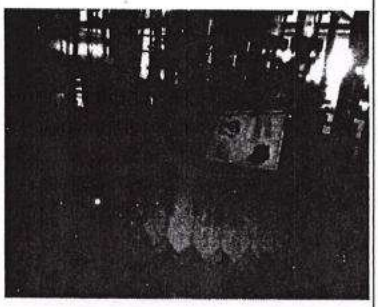
Detailed Actions Report

The following actions were taken regarding the cleaning of plant equipments, maintenance activities including installation of the safety equipments/systems and the internal inspection of various critical equipments.

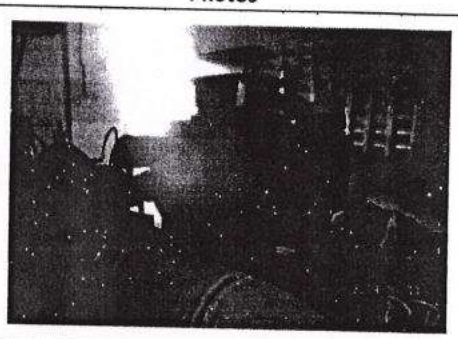
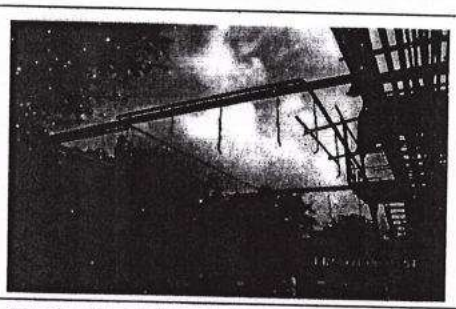
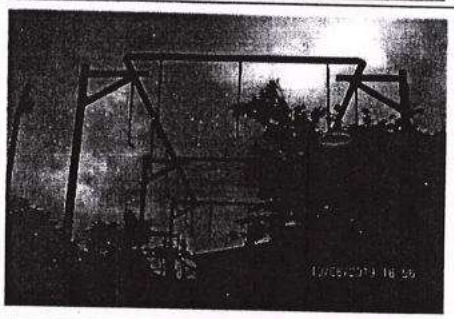
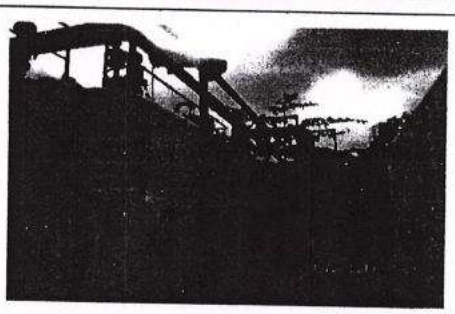
A. Cleaning and Internal Inspection for Plant Equipment's.

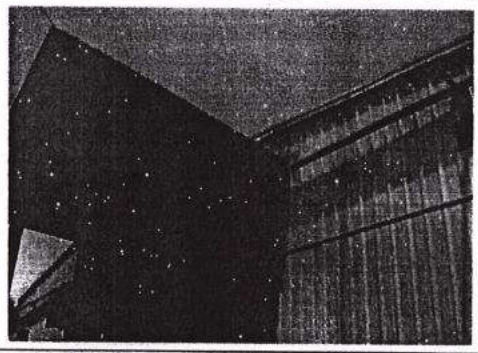
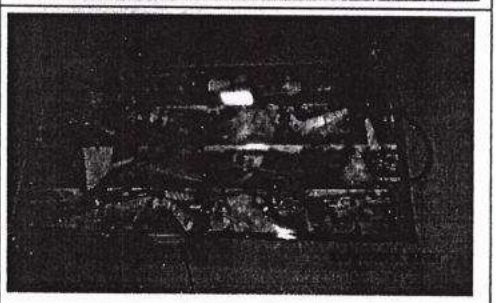
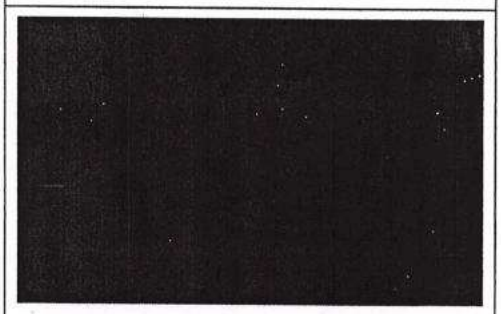
Equipment	Tag No	Photos	Remarks
Dehydration and Isomerization Reactor	R-7201A		Internal Inspection and decontamination done, Internals found okay.
Acetylation Reactor	R-7202A		Health of equipment found okay. Internals found okay. No pitting and corrosion observed.

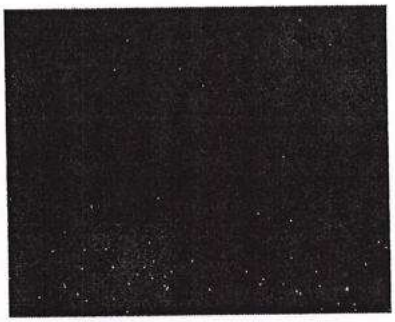
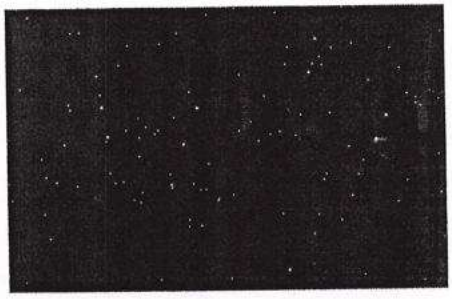
Equipment	Tag No	Photos	Remarks
CRYSTALLIZATION-A	R-7207A		Decontamination done, No pitting and corrosion observed. Thickness test done and found okay.
CRYSTALLIZATION-B	R-7207B		Health of equipment found okay. Decontamination done. No pitting and corrosion observed.
CRYSTALLIZATION-C	R-7207C		Internal Inspection done and found okay Thickness test done and found okay.

Equipment	Tag No	Photos	Remarks
CRYSTALLIZATION-D	R-7207D		Decontamination done, Health of equipment found okay. Internals found okay. No pitting and corrosion observed. Thickness test done and found okay.
CRYSTALLIZATION-E	R-7207E		Decontamination done, Health of equipment found okay. Internals found okay. No pitting and corrosion observed.
Vacuum recovery Reactor	R-7206A		Decontamination &Internal Inspection done. Health of equipment found okay. No pitting and corrosion observed.
Acephate 3rd crop recovery Reactor	R-72016A		Decontamination &Internal Inspection done. Thickness test done and found okay.

B. Installation of Safety Equipments and systems at Site.

Installation of Safety equipments/systems at site		
Sr. No	**Activities**	**Photos**
1	Installation of New Fire hydrant pump - 275 m3/hr	
2	Sprinkler system for Carbon disulphide tanker unloading	
3	Sprinkler system for Ammonia tanker unloading	
4	Sprinkler system for Ammonia Bullet	

Installation of Safety equipments/systems at site		
Sr. No	**Activities**	**Photos**
5	Installation of deluge valve in sprinkler system	
6	Installation of sprinkler system in Warehouse (Additional Photo from Inside)	
7	CCTV installation	 

Installation of Safety equipments/systems at site		
Sr. No	**Activities**	**Photos**
8	Smoke Detector	 

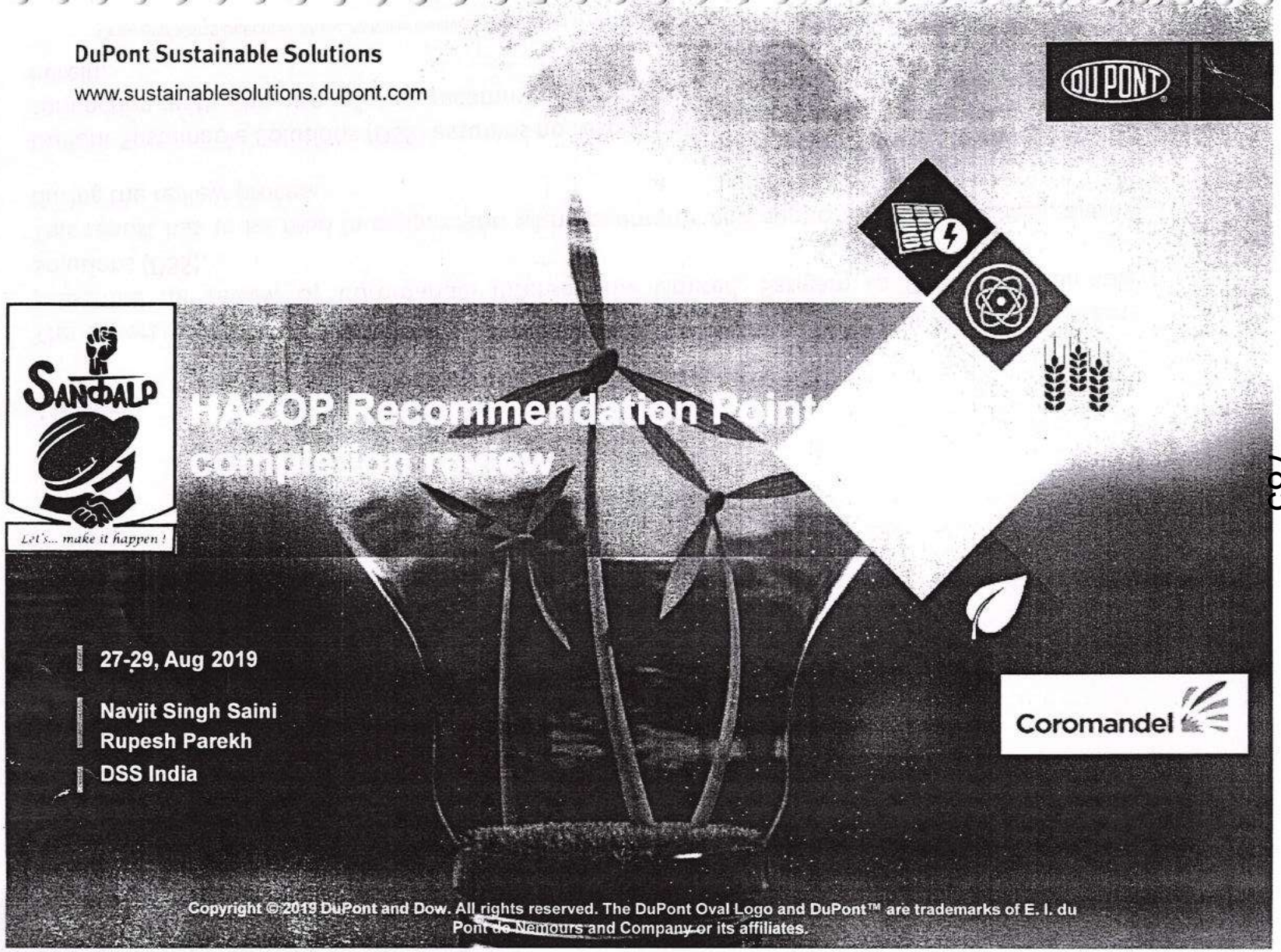
C. Maintenance of Critical Equipment's

Regular maintenance is carried out in following equipment's

1. York-1 and York-2 Chiller Servicing
2. Kirloskar Chiller Servicing
3. Air compressor Servicing
4. Preventive Maintenance of Critical Equipment
5. Cooling Tower Cleaning
6. MEE Calandria Cleaning
7. Preheaters Cleaning
8. Critical Instrument and interlock Testing

DuPont Sustainable Solutions

www.sustainablesolutions.dupont.com



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Disclaimer

i. The report mentions the implementation status from 27-29 Aug 2019 for the action items presented for review by Coromandel International Limited, Sarigam to DuPont Sustainable Solutions (DSS).

ii. This report has to be read in conjunction with documents and supporting's (annexures) shared during the review process.

iv. DuPont Sustainable Solutions (DSS) assumes no responsibility or liability for damages or claims in connection with the use of the recommendations, representations, or practices contained herein.

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High Level Summary

- Coromandel International Limited, Sarigam team has completed HAZOP for Mancozeb, Acephate & PCL3 plant and identified 187 critical and medium unique actionable points.
- Coromandel International Limited, Sarigam has suggested to review and validate the completion status of these identified action items by DSS consultants as a third party review.
- DSS conducted a through review of the identified action items during 27th to 29th August and issued this visit report to Coromandel International Limited, Sarigam site as status of implementation of the HAZOP action items
- The review process involved discussion with the concerned Coromandel team members.
- Actions have been initiated by Coromandel International Limited in all identified areas with good references available for verification. Significant investment in instrumentation and other hardware for meeting HAZOP recommendation points is visible at site.

787

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High Level Summary

- All critical and medium recommendation points have been reviewed thoroughly through supporting documentation/proofs and found adequate. All critical points verified in field & for medium points the field verification was done on random sample basis. Actions implemented for the items reviewed, need to be sustained to ensure that the risks are controlled at all times over the entire life cycle of the unit. Operational discipline in key safety elements like
  - Management of Change
  - Mechanical Integrity & Quality Assurance
  - Pre-startup Safety Review
  - Review of SOPs at regular intervals
  - Emergency Response & Planning
  - Contractor Safety Management & Auditing
  - Training

  is essential to ensure effective barriers to the these identified potential risk scenarios remains at acceptable level.
- A proper governance structure for the risk owner & barrier owner is essential along with PACA (Procedure, Accountability, Competency & Audit) to ensure that the above barriers are always maintained in healthy and working condition.

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Scope of the visit

- The intent of the visit is to review implementation of the HAZOP action items for Critical & Medium recommendation points for Mancozeb, MPP (Acephate) & PCL3 plant as per below table.

Plant	Critical Recommendation points	Medium Recommendation points	Total
Mancozeb Plant	18	112	130
PCL3 Plant	5	33	38
MPP (Acephate) Plant	0	55	55
Total	**23**	**200**	**223**

Note: Original critical and medium recommendation points of 223 were converted into 187 unique actionable points.

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Overall Review Status

Plant	Critical Recommendation points	Medium Recommendation points	Total
	Completed	Completed	Completed
Mancozeb	18	112	130
PCL3	5	33	38
MPP (Acephate)	0	55	55
Total	**23**	**200**	**223**

790

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General Observations

1. Good cross referencing of action items and their supporting's in the annexures. Good attempt has been made on Management of Change on various actions items, however few Management of change for them are yet to be concluded.

2. Actions related to provision of interlocks have been reviewed based on the evidence provided. However the following actions are suggested to be done going forward
   a. Formal signoff by operations and instrumentation to certify that the interlock has been tested and verified on the control panel vis-a-vis field condition
   b. Addition of these new interlocks into the interlock calibration and testing schedule list through SAP

3. Hydrotest has been carried out in a number of instances using a standard format for reporting. This format can be improved for the following
   a. Name and sign-off of the person actually executing the job needs to be added
   b. Acceptance criteria for the hydro test basis the Operating/Design pressure

4. QC passed stickers are being pasted on the approved lot of chemical named 'SLS'. However it is noticed that the sticker is very generic and does not have the company logo nor any identification & traceability of the QC approval as per industry best practices.

5. Cleaning/Inspection scheduled proposed as actions should have a tracker based system to trigger/intimation to ensure it is done.

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Hazop Recommendations Detailed Status Report

Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique action	S	L	R	Status of implementation	Unique action Sr. No.
Critical Recommendation points													
1	1	MNZ	N1.04.1	Confirm the Dyke size of EDA storage tank	4	5	20	Confirm the Dyke size of EDA storage tank	5	2	10	Dyke Size volume checked and found adequate.	1
2	2	MNZ	N1.04.1	Provide NRV at Pump Discharge and remove circulation line	4	5	20	Provide NRV at Pump Discharge and remove circulation line	5	2	10	NRV Provided and Circulation line removed	2
3	3	MNZ	N1.04.1	Provide anti siphoning loop to EDA addition, anti-syphoning hole will not work as reactor is fully occupied	4	5	20	Provide anti siphoning loop to EDA addition, anti-syphoning hole will not work as reactor is fully occupied	5	2	10	Anti-siphoning hole checked and meets intended requirement therefore loop not required.	3
4	4	MNZ	N1.04.1	Interlock to close on/off valve XVR5101A-10 if pump stop	4	5	20	Interlock to close on/off valve XVR5101A-10 if pump stop	5	2	10	Interlock provided	4
5	5	MNZ	N1.04.1	Confirm the addition program of EDA to check ON/OFF valve opening after pump start only	4	5	20	Confirm the addition program of EDA to check ON/OFF valve opening after pump start only	5	2	10	Program checked and correction to open ON/OFF valve after pump start only is done	5
6	6	MNZ	N3.01.1	Include in PSM critical equipment to ensure PM (DBH Condenser)	4	5	20	Include in PSM critical equipment to ensure PM (DBH Condenser)	4	2	8	DBH Condenser included in PSM critical equipment	6
7	7	MNZ	N3.01.1	Hydro test schedule (DBH Condenser)	4	5	20	Hydro test schedule (DBH Condenser)	4	2	8	Hydro test schedule for DBH condenser is prepared (frequency – 2 year) & being followed	7
8	8	MNZ	N3.01.1	Include in PSM critical equipment to ensure PM (Internal Coil)	4	5	20	Include in PSM critical equipment to ensure PM (Internal Coil)	4	2	8	Internal coil included in PSM critical equipment list	8
9	9	MNZ	N3.01.1	Hydro test schedule (Internal Coil)	4	5	20	Hydro test schedule (Internal Coil)	4	2	8	Hydro test schedule updated for Re- circulation HE/internal coil (Frequency – 2 year) & being followed	9
10	10	MNZ	N3.01.1	Provide Detachable hose with isolation during normal operation and proxy switch feedback in program to ensure no connection during operation	4	5	20	Additional line to the reactor which is not required, hence Line removed permanently.	4	2	8	Line removed permanently.	10

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Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique action	S	L	R	Status of implementation	Unique action Sr. No.
Critical Recommendation points													
11	11	MNZ	N7.03.02	Final shed height to be increased above L.I for checking the Level	4	5	20	Instead of increasing shed height LT Installed with High Level Interlock	4	2	8	LT Installed with High Level Interlock	11
12	12	MNZ	N7.03.02	Check the adequacy of MNSO4 over flow line for tank (T-5103 C)	4	5	20	Check the adequacy of MNSO4 over flow line for tank (T-5103 C)	4	2	8	Checked found adequate	12
13	13	MNZ	N19.01.1	Consider PM schedule of HAG shell.	4	5	20	Consider PM schedule of HAG shell.	4	2	8	Inspection and testing list updated and being followed (Frequency – 2 year)	13
14	14	MNZ	N19.01.1	Explosion window to be provided in HAG	4	5	20	Explosion window to be provided in SPD	4	2	8	Explosion doors (rating 0.1 barg) available on SPD -5 nos	14
15	15	MNZ	N22.03.3	Rotary valve periodical PM schedule to be implemented.	4	5	20	Rotary valve periodical PM schedule to be implemented.	4	2	8	PM Schedule updated and being followed (Frequency – 6 months)	15
16	16	MNZ	N22.03.3	Consider high level audio visual alarm with operator action	4	5	20	Consider high level audio visual alarm with operator action	4	2	8	High differential pressure across SPD chamber audio visual alarm provided with operator to take corrective action	16
17	17	MNZ	N 28.04.1	Consider providing overflow line and connection to a hold tank	4	5	20	High level switch and interlock with main storage tank pump.	4	2	8	High level switch and interlock to stop storage tank pump provided	17
18	18	MNZ	N 28.04.1	High level switch and interlock with main storage tank pump.	4	5	20	High level switch and interlock with main storage tank pump.	4	2	8	High level switch and interlock to stop storage tank pump provided	18

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Critical Recommendation points													
19	1	PCl3	N1.1	Consider having an Interlock with the Pressure in the P4 day tank and the ON-OFF(XV-R101B-20) valve in the transferring line of P4	5	4	20	Consider having an Interlock with the Pressure in the P4 day tank and the ON-OFF(XV-R101B-20) valve in the transferring line of P4	5	2	10	Pressure transmitter and interlock provided	19
20	2	PCl3	N1.2	Consider revisiting the Contract with P4 vendor	5	4	20	Consider revisiting the Contract with P4 vendor	5	2	10	Contract\PO reviewed and sufficient control exist	20
21	3	PCl3	N1.2	Consider having a Vendor Audit (P4)	5	4	20	Consider having a Vendor Audit (P4)	5	2	10	Audit schedule made by SCM team frequency once in 2 year	21
22	4	PCl3	N1.2	Explore the possibility of Sampling at the site. (P4)	5	4	20	Explore the possibility of Sampling at the site. (P4)	5	2	10	QC process reviewed and updated for mandatory COA check	22
23	5	PCl3	N1.2	Consider having the initiation of blow down tank for controlling fire (PCl3 reactor)	5	4	20	Consider having the initiation of blow down tank for controlling fire (PCl3 reactor)	5	2	10	Blowdown tank provided	23

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MNZ Medium Recommendation points													
1	1	MNZ	N1.01.01	Provide Level Switch with interlock to stop all incoming	3	4	12	Provide Level Switch with interlock to stop all incoming Include timer to program	3	2	6	Provide Level Switch with interlock to stop all incoming Include timer to program	1
2	2	MNZ	N1.01.01	Include timer to program	3	4	12		3	2	6		
3	3	MNZ	N1.01.01	Provide additional 3 ON/OFF valve with program to receive water with interlock to open one valve at a time	3	4	12	Interlock with receiving ON/OFF Valve with flow meter at high/no flow and to quantify quantity	3	1	3	Water inlet line flowmeter totalizer (quantity) and high/no flow interlock with its on/off valve provided	2
4	4	MNZ	N1.01.01	Thickness testing by external part (to be confirmed by Mechanical Eng.)	3	4	12	Hydro testing schedule to be prepared	3	3	9	Hydro testing schedule prepared	3
5	5	MNZ	N1.03.03	Provide no Flow interlock or high pressure interlock to stop pump	3	4	12	Provide no Flow interlock	3	2	6	No flow interlock with EDA charging pump provided	4
6	11	MNZ	N1.05.01	Review the vent line size as P&ID represent expander 2*3 with nozzle 3"	3	3	9	Review the vent line size as P&ID represent expander 2*3 with nozzle 3"	3	3	9	Reviewed and found size to be adequate	5
7	12	MNZ	N1.05.01	Provide interlock or program change to stop EDA Addition if blower is not working	3	3	9	Provide interlock or program change to stop EDA Addition if blower is not working	3	1	3	Interlock provided	6
8	13	MNZ	N2.06.1	Provide Level Switch with interlock to stop all incoming to R-5101A/R-5201C	3	4	12	Provide Level Switch with interlock to stop all incoming and auto stop based on Timer will be implemented for Water & EDA	3	2	6	Interlock and timer provided	7
9	14	MNZ	N2.06.1	Provide Catch pot with high level to stop all incoming in all EDA system connected to scrubber	3	4	12		3	2	6		
10	16	MNZ	N3.01.1	Provide automated system to receive water with flow meter and On/off valve	4	3	12	Provide automated system to receive water with flow meter and On/off valve	4	1	4	On/off valve, flowmeter provided on water inlet line and interlock to close valve at flowmter totalizer also provided.	8

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MNZ Medium Recommendation points													
11	17	MNZ	N3.01.1	Provide Separate pressure padding to CS2 day tanks with separate ON/OFF valve and separate PT	4	3	12	Timer to receive water with ON/OFF valve	4	1	4	Timer provided inlet line On/off valve	9
12	18	MNZ	N3.01.1	Provide automated interlock to either pumping in day tank or transfer in reactor from day tank	4	3	12	To provide ON/OFF valve in CS2 line with timer	4	1	4	ON/OFF valve provided with timer	10
13	19	MNZ	N3.01.1	Automate CS2 day tank pumping based on Qty	4	3	12	Automate CS2 day tank pumping based on Qty	4	1	4	High level interlock of day tank with st. tank pump provided	11
14	28	MNZ	N3.03.1	Provide automated interlock to stop addition on Pressure high (0.15 kg/cm2)	4	3	12	Provide pressure interlock on 850 mm wc	4	1	4	Interlock provided	12
15	29	MNZ	N3.03.1	Provide redundancy in pressure transmitter due to chocking property	4	3	12	Provide redundancy in pressure transmitter due to chocking property	4	1	4	Additional PT provided	13
16	30	MNZ	N3.03.1	Note: PSV credit is considered to depressurization point of View but in case of Fire Scenario it will not help as vent line is provided in drum. It is recommended to provide blow down tank with water filled	4	3	12	Provide pressure transmitter with interlock on 850 mm wc	4	1	4	Interlock provided	14
17	31	MNZ	N3.03.1	15. as per P&ID it looks vent line is insufficient to disperse the pressure (50NB) as CS 2 receiving line size is 100 NB, review and correct vent line size	4	3	12	Provide pressure transmitter with interlock on 850 mm wc Provide redundancy in pressure transmitter due to chocking property Line size calculation to be provided	4	1	4	Interlock provided Additional PT provided Line sizing done and found adequate	15
18	32	MNZ	N3.03.1	Establish FA cleaning and replacement frequency	4	3	12	Establish FA cleaning and replacement frequency	4	1	4	Replacement and cleaning frequency made	16
		MNZ						Provide pressure transmitter with interlock on 850 mm wc				Interlock provided	17
19	33	MNZ	N3.03.1	Establish Control valve cleaning and replacement frequency	4	3	12	Establish Control valve cleaning and replacement frequency of control valve	4	1	4	PM and cleaning frequency made	18
20	34	MNZ	N3.03.1	Provide control valve by pass with ON/OFF valve and interlock to open if pressure is HH	4	3	12	1. Provide automated interlock to stop addition on Pressure high (850 mmwc)	4	1	4	1. Interlock provided	19
		MNZ						2. Provide redundancy in pressure transmitter due to chocking property				2. Additional PT provided	20

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MNZ Medium Recommendation points													
21	35	MNZ	N3.03.1	provide DPI at blower discharge and reactor vent line to confirm the chocking withy interlock or alarm to clean the vent line	4	3	12	Vent line cleaning schedule to be prepared	4	2	8	Schedule prepared	21
22	36	MNZ	N3.03.2	Establish inertization auto system if pressure of system goes <50mmWC it will ask auto interization before receipt of new batch	4	3	12	Additional PT to be provided	4	1	4	Additional PT provided	22
23	37	MNZ	N3.03.2	Provide Blow down tank with N2 padding or water padding	4	4	16	Additional PT will be provided	4	2	8	Additional PT provided	23
24	38	MNZ	N4.01.1	Provide High Level switch with alarm and interlock to stop all incoming	3	4	12	Coil hydrotest to be performed	3	3	9	Coil hydrotest performed	24
25	40	MNZ	N5.01.1	Provide Automated interlock to stop distillation incase of high level	4	3	12	Provide Automated interlock to stop heating incase of high level	4	1	4	Interlock provided	25
26	41	MNZ	N5.01.1	Increase the capacity of recovery day tank	4	3	12	Provide Automated interlock to stop heating incase of high level	4	1	4	Interlock provided	26
27	42	MNZ	N5.01.2	Consider an interlock to stop pumps P-5100B-1/2 upon high-level in the day tanks	4	3	12	Consider an interlock to stop pumps P-5100B-1/2 upon high-level in the day tanks	4	1	4	Interlock provided	27
28	43	MNZ	N5.01.2	Consider providing redundancy in the level instruments on the day tank	4	4	16	Consider providing redundancy in the level instruments on the day tank	4	2	8	Additional LT provided	28
29	44	MNZ	N6.01.1	Consider providing an interface level instrument in the CS2 tanks, a shut-off valve in the nitrogen supply line to the tanker and an interlock to stop nitrogen supply to the tanker, upon the interface level reaching 75 cm.	4	4	16	Consider providing an interface level instrument in the CS2 tanks, a shut-off valve in the nitrogen supply line to the tanker and an interlock to stop nitrogen supply to the tanker, upon the interface level reaching 75 cm.	4	1	4	LT Installed with High Level Interlock	29
30	45	MNZ	N6.01.1	Consider providing a strobe light and a hooter to provide a local alarm when the CS2 sensors' alarm goes off				Consider providing a strobe light and a hooter to provide a local alarm when the CS2 sensors' alarm goes off				strobe light and a hooter provided	30
31	46	MNZ	N6.01.1	Consider providing a level instrument in the dyke to automatically open the raw water valve when the level in the dyke falls below a suitable set-point				Consider providing a level instrument in the dyke to automatically open the raw water valve when the level in the dyke falls below a suitable set-point				Level switch Installed with High Level Interlock	31

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MNZ Medium Recommendation points													
32	47	MNZ	N6.01.1	Consider a mechanical or instrument-based interlock that will prevent both valves from being opened at the same time	4	4	16	Consider interlock to stop pump incase of high level of CS2 storage tank Provide interlock to stop N2 valve incase of high level of CS2 storage tank	4	2	8	Interlock provided	32
33	48	MNZ	N6.01.1	Provide automated valves on unloading and vent line and program to ensure correct selection								Interlock provided	33
34	49	MNZ	N6.01.1	Consider providing a PSV on the nitrogen supply line to the tanker (with a set-point below the tanker PSV set-point)	5	3	15	Consider providing a PSV on the nitrogen supply line to the tanker (with a set-point below the tanker PSV set-point)	5	1	5	PSV provided	34
35	51	MNZ	N7.01.2	Periodic Check for Hydro test of pipelines to be defined	3	4	12	Periodic Check for Hydro test of pipelines to be defined	3	3	9	Hydrotest schedule prepared	35
36	54	MNZ	N7.4.5	Refer high pressure scenario in the pipeline N7.01.02	3	4	12	Periodic Check for Hydro test of pipelines to be defined	3	3	9	Hydrotest schedule prepared	
37	56		N8.01.03	Periodic Check for Hydro test of pipelines as well as jacketed line to be defined	4	3	12	Periodic Check for Hydro test of pipelines as well as jacketed line to be defined	4	2	8	Hydrotest schedule prepared	36
		MNZ						Periodic Check for Hydro test of pipelines as well as jacketed line to be defined				Hydrotest schedule prepared	37

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MNZ Medium Recommendation points													
38	60	MNZ	N8.03.02	Consider providing high level alarm & interlock with transferring pump.	4	4	16	To confirm Vent line is above the Over flow line	4	1	4	Vent line is above the Over flow line is confirmed	38
39	61	MNZ	N8.03.02	Final shed height to be increased above L.I for checking the Level									
40	62	MNZ	N8.03.02	Check the adequacy of DBH Hold tank (HT-5102A)									
41	63	MNZ	N8.03.02	At present the over flow line is at top of tank, needs to relocate to side nozzle.									
42	64	MNZ	N8.03.02	check the adequacy of blower of DBH day tank(DT-5103B-1)									
43	65	MNZ	N8.03.02	Consider PM of Jacketed line periodically									
44	66	MNZ	N8.03.02	Consider having a DBH day tank equal to capacity of Batch size.									
45	67	MNZ	N8.03.02	Consider providing a audio visual alarm for DBH day tank low level									
46	69	MNZ	N9.01.2	Consider the revision of SOP for taking sampling during precipitation reactor	4	3	12	1. Revision of SOP for taking sampling during precipitation reactor 2. PT and high pressure alarm need to be given	4	2	8	1. SOP revised 2. PT and high pressure alarm provided	39
47	70	MNZ	N9.01.2	Reactor design data not available in PSI document									
48	71	MNZ	N9.01.2	PT and high pressure alarm need to be given									
49	79	MNZ	N11.01.3	Periodic Check for Hydro test of pipelines to be defined	4	3	12	Periodic Check for Hydro test of pipelines to be defined	4	2	8	Hydrotest schedule prepared	40
50	80	MNZ	N11.03.2	Final shed height to be increased above L.I for checking the Level	4	4	16	LT with interlock to be provided	4	2	8	LT provided	41
51	81	MNZ	N11.03.2	Check the adequacy of MNSo4 over flow tank (T-5103 C)	4	4	16	Check the adequacy of MNSo4 over flow tank (T-5103 C)	4	2	8	Checked found adequate	42
52	83	MNZ	N12.01.3	Periodic Check for Hydro test of pipelines as well as jacketed line to be defined	4	3	12	Periodic Check for Hydro test of pipelines as well as jacketed line to be defined	4	2	8	Hydrotest schedule prepared	43

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MNZ Medium Recommendation points													
53	86	MNZ	N12.02.2	Consider providing high level alarm & interlock with transferring pump.	4	4	16	Overflow line is provided	4	1	4	Overflow line is provided	44
54	87	MNZ	N12.02.2	Final shed height to be increased above L.I for checking the Level									
55	88	MNZ	N12.02.2	Check the adequacy of DBH Hold tank (HT-5102A)				Check the adequacy of DBH Hold tank (HT-5102A)				Tank Capacity to be reviewed	45
56	89	MNZ	N12.02.2	At present the over flow line is at top of tank, needs to relocate to side nozzle.				provide overflow below vent height				Overflow line is below vent height	46
57	90	MNZ	N12.02.2	check the adequacy of blower (BL-5102A) of DBH day tank(DT-5103B-2)				check the adequacy of blower (BL-5102A) of DBH day tank(DT-5103B-2)				Checked found adequate	47
58	91	MNZ	N12.02.2	Consider PM of Jacketed line periodically				Consider PM of Jacketed line periodically				PM schedule prepared	48
59	92	MNZ	N12.02.2	Consider having a DBH day tank equal to capacity of Batch size.				Review day tank capacity and include in SOP				Capacity reviewed and found adequate	49
60	93	MNZ	N12.02.2	Consider providing a audio visual alarm for DBH day tank low level				Consider providing a audio visual alarm for DBH day tank low level				Low level alarm provided	50
61	94	MNZ	N13.01.2	Consider the revision of SOP for taking sampling during precipitation reactor	4	3	12	Revision of SOP to be confirmed PT and high pressure alarm need to be given	4	2	8	SOP Revised PT & High pressure alarm is provided	51
62	95	MNZ	N13.01.2	Reactor design data not available in PSI document									
63	96	MNZ	N13.01.2	PT and high pressure alarm need to be given									
64	102	MNZ	N14.03.2	Consider automated ANF operation	3	5	15	Additional valve will be provided to reduce possibility of valve passing leading to high level	3	3	9	Additional valve provided	52
65	104	MNZ	N15.03.2	Consider automated ZnSo4 charging to reactor	3	5	15	Interlock with receiving ON/OFF Valve with flow meter	3	3	9	provided	53
66	105	MNZ	N15.03.2	Consider method of water flushing in DOD cleaning, so that excess water charging can be eliminated	3	5	15	Water flushing method will be defined in SOP.	3	3	9	Water flushing method is well defined in SOP.	54

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MNZ Medium Recommendation points													
67	111	MNZ	N16.03.2	OBSERAVTION: Man hole is kept open (Keep it close) and also consider providing vent	2	5	10	Man hole will be kept close	2	2	4	Man hole closed	55
68	112	MNZ	N16.03.2	Consider high level alarm	2	5	10	Make strainer cleaning schedule	2	4	8	Strainer cleaning schedule prepared	56
69	113	MNZ	N16.03.2	Make strainer cleaning schedule	2	5	10		2	4	8		
70	114	MNZ	N16.05.5	Consider High level alarm	2	5	10	Not receiving of both RM at a time	2	4	8	Not receiving of both RM at a time	57
71	120	MNZ	N19.01.2	Consider auto start up of emergency power supply.	4	4	16	Switch over to Quippo from DG power	4	2	8	Switch over to Quippo from DG power Additional TT provided with high temp interlock	58
72	121	MNZ	N19.01.2	Consider additional RTD in HAG outlet & give interlock to trip the burner/gas inlet valve.	4	4	16	Additional TT provided with high temp interlock	4	2	8		
73	122	MNZ	N19.04.4	Consider providing a heat resistance Belo.	4	4	16	Bellow changing schedule to be revised in SOP. High temp interlock available	4	2	8	Bellow changing schedule revised & High temp interlock available	59
74	123	MNZ	N19.04.4	Belo changing schedule to be revised in SOP.	4	4	16	Belo changing schedule to be revised in SOP.	4	2	8	Bellow changing schedule revised	60
75	124	MNZ	N19.04.6	Consider providing a heat resistance Belo.	4	4	16	Bellow changing schedule to be revised in SOP. High temp interlock available	4	2	8	Bellow changing schedule revised & High temp interlock available	61
76	125	MNZ	N19.04.6	Belo changing schedule to be revised in SOP.	4	4	16	Bellow changing schedule to be revised in SOP.	4	2	8	Bellow changing schedule revised	62
77	127	MNZ	N20.03.1	Consider having P.M. schedule of changing the hose pipe	4	3	12	Consider having P.M. schedule of changing the hose pipe	4	2	8	PM Schedule is prepared	63
78	128	MNZ	N20.03.1	Critical pipe lines need to be identified and according to that P.M. schedule need to be develop	4	3	12	PM Schedule will be prepared	4	2	8	PM Schedule is prepared	64

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MNZ Medium Recommendation points													
79	129	MNZ	N22.01.3	In SILO N2 purging is done through rotameter as per P&ID but in actual N2 purging is done by operating a ball valve.	4	4	16	Rotameter to be provided	4	2	8	Rotameter provided	65
80	130	MNZ	N22.01.4	In SILO N2 purging is done through rotameter as per P&ID but in actual N2 purging is done by operating a ball valve.									
81	131	MNZ	N22.03.3	In SILO N2 purging is done through rotameter as per P&ID but in actual N2 purging is done by operating a ball valve.									
82	134	MNZ	N24.04.15	consider Providing an On/OFF on steam supply line & Interlock with Nitrogen Pressure of RVD	3	5	15	Consider Providing an On/OFF on steam supply line & Interlock with Nitrogen Pressure of RVD	3	3	9	On/Off valve Provided along with interlock	66
83	135	MNZ	N24.04.15	consider Providing an On/OFF Valve in Heating Steam & Interlock with Nitrogen Pressure of RVD which will be on Header of SOV Valve	3	5	15	Consider Providing an On/OFF Valve in Heating Steam & Interlock with Nitrogen Pressure of RVD which will be on Header of SOV Valve	3	3	9	On/Off valve Provided along with interlock	67
84	136	MNZ	N24.04.16	Consider Providing On/OFF Valve in Heating Steam line in jacket of RVD & Interlock with Steam Pressure of Ejector.	3	5	15	Consider Providing On/OFF Valve in Heating Steam line in jacket of RVD & Interlock with Steam Pressure of Ejector.	3	3	9	On/Off valve Provided along with interlock	68
85	137	MNZ	N24.05.1	Administrative control maintain record in log sheet	3	4	12	Administrative control maintain record in log sheet	3	3	9	O2 % data is mentioned in logsheet	69
86	139	MNZ	N24.05.8	Consequence will depend upon the foreign material getting mixed in RVD. Currently not known.	2	5	10	Sample analysis performed after receipt	2	4	8	QC analysis performed for every lot & properly documented	70
87	140	MNZ	N24.05.8	QC approved lot should have approved for use sticker applied before delivering the lot to plant.	2	5	10	QC approved lot should have approved for use sticker applied before delivering the lot to plant.	2	4	8	Sticker applied	71
88	141	MNZ	N24.05.8	2. Vendor audit	2	5	10	Sample analysis performed after receipt	2	4	8	QC analysis performed for every lot & properly documented	72

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MNZ Medium Recommendation points													
89	143	MNZ	N25.02.1	Consider providing close auto controlled N2 blanketing in cooler	2	5	10	Manual charging of N2 blanketing	2	4	8	Manual blanketing of N2 is provided	73
90	144	MNZ	N25.02.1	Consider providing close auto controlled N2 blanketing in cooler	2	5	10	Manual charging of N2 blanketing	2	4	8	Manual blanketing of N2 is provided	74
91	145	MNZ	N25.05.4	Consequence will depend upon the foreign material getting mixed in RVD. Currently not known. Recommendations:- 1. QC approved lot should have approved for use sticker applied before delivering the lot to plant. 2. Vendor audit	2	5	10	QC approved Lebel to be pasted by SCM dept	2	4	8	Sticker applied	75
92	149	MNZ	N27.01.1	Start recording conveying line temp in register	3	3	9	Start recording conveying line temp in register	3	2	6	Temp is mentioned in register	76
93	150	MNZ	N27.01.1	Consider providing high temp interlock of packing with pin mill and packing rotary valve (RV-5109A/B)	3	5	15	Consider providing high temp interlock of packing with pin mill and packing rotary valve (RV-5109A/B)	3	3	9	Interlock provided	77
94	151	MNZ	N27.01.1	Consider providing high temp interlock of packing with pin mill and packing rotary valve (RV-5109A/B)	3	5	15	Consider providing high temp interlock of packing with pin mill and packing rotary valve (RV-5109A/B)	3	3	9	Interlock provided	78
95	152	MNZ	N27.01.1	Consider providing blower stop interlock with pin mill.	2	5	10	Consider providing blower stop interlock with pin mill.	2	3	6	Interlock provided	79
96	153	MNZ	N27.03.2	Consider providing alternate N2 makeup line with control valve and interlock with pin mill	3	5	15	Consider providing alternate N2 makeup line with control valve and interlock with pin mill	3	3	9	N2 make up line provided with control valve & Interlock	80
97	154	MNZ	N27.03.2	Consider providing alternate N2 makeup line with control valve and interlock with pin mill	3	5	15	Consider providing alternate N2 makeup line with control valve and interlock with pin mill	3	3	9	N2 make up line provided with control valve & Interlock	81
98	155	MNZ	N27.03.5	Consider providing interlock of baghouse level switch with blower and pin mill	2	5	10	Consider providing interlock of baghouse level switch with blower and pin mill	2	3	6	Interlock provided	82
99	156	MNZ	N 28.01.2	Consider providing extra breather valve	4	3	12	Establish cleaning freqeucny	4	2	8	Cleaning freqeucny established	83
100	158	MNZ	N 28.02.1	Consider providing overflow line or Level switch.	4	3	12	Provide Level switch with interlock	4	1	4	Interlock provided	84

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Hazop Recommendations Detailed Status Report

Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique action	S	L	R	Status of implementation	Unique action Sr. No.
MNZ Medium Recommendation points													
101	162	MNZ	N 28.04.01	Consider providing overflow line and connection to a hold tank	4	4	16	Already covered in critical recommendations in node N 28.04.01	4	2	8	Already covered in critical recommendations in node N 28.04.01	Critical number 17 & 18
102	163	MNZ	N 28.04.01	High level switch and interlock with main storage tank pump.	4	4	16	Already covered in critical recommendations in node N 28.04.01	4	2	8	Already covered in critical recommendations in node N 28.04.01	
103	164	MNZ	N 28.04.2	Consider providing low level interlock with transferring pump	3	5	15	Consider providing low level interlock with transferring pump MPD provided	3	3	9	Interlock provided	85
104	165	MNZ	N29.03.6	Consider providing MPD (no flow will result in low current)	3	3	9	Consider providing MPD (no flow will result in low current)	3	1	3	MPD provided	86
105	168	MNZ	N29.04.2	Consider providing low level interlock with transferring pump	3	5	15	MPD provided to pump	3	3	9	MPD provided	87
106	169	MNZ	N29.04.3	Consider providing low level interlock with transferring pump	3	5	15	Consider providing low level interlock with transferring pump	3	3	9	Interlock provided	88
107	170	MNZ	N30.03.6	Consider providing MPD (no flow will result in low current to pump).	3	3	9	Consider providing MPD (no flow will result in low current to pump).	3	1	3	MPD provided	89
108	171	MNZ	N30.04.1	MOC of separate level transmitter with high level interlock with inlet on/off line is under implementation	3	3	9	High level switch with interlock inlet on/off line is provided	3	1	3	High level switch and interlock provided	90
109	172	MNZ	N30.04.2	MOC of separate level transmitter with high level interlock with inlet on/off line is under implementation - consider providing low level pump trip as well	3	5	15	Provided pump trip on MPD	3	3	9	MPD provided	91
110	173	MNZ	N30.04.2	MOC of separate level transmitter with high level interlock with inlet on/off line is under implementation - consider providing low level pump trip as well									

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Hazop Recommendations Detailed Status Report

Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique action	S	L	R	Status of implementation	Unique action Sr. No.
MNZ What if Medium Recommendation points													
111	1	MNZ	N2.01.1	RVD bag house changing activity , sheet to be made	3	3	9	RVD bag house changing activity sheet to be made	3	2	6	Sheet prepared	92
112	2	MNZ	N2.06.2	Separate tank for preparation of Caustic Solution from 48.5 % to 5 %	3	5	15	Tank of 500 ltr to be provided	3	3	9	Tank Provided	93

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Hazop Recommendations Detailed Status Report

PCL3 - HAZOP - MEDIUM ACTION POINTS													
Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
1	10	PCl3	N1.01.10	For point no One in Safeguard column (P4 line Replacement schedule avaliable for transferring line on yearly basis) we need to have proof of documentation	5	2	10	For point no One in Safeguard column (P4 line Replacement schedule avaliable for transferring line on yearly basis) we need to have proof of documentation	5	2	10	Line replacement schedule and documented proof available	1
2	11	PCl3	N1.01.11	Consider having a load cell for the chlorine tonner with audio visual alarm.	4	3	12	Consider having a load cell for the chlorine tonner with audio visual alarm.	4	2	8	Loadcell with alarm provided	2
3	12	PCl3	N1.01.12	Manual valve of the product line is kept closed (After rotameter Line No. 50-PCL3-MS-10067)	4	3	12	The consequence is observed in reactor stage, eisting additional controls available on reactor are:- 1. High pressure interlock with incoming P4 on/off valve 2. High temp interlock with incoming P4 on/off valve 3. PSV & RD available with connection to blowdown tank	4	1	4	1. PT and interlock available 2. High temp interlock available 3. PSV and RD available	3
4	14	PCl3	N1.01.14	Consider having an interlock with the trombone inlet cooling water pressure and the reactor R.M inlet.	4	4	16	Consider having an interlock with the trombone inlet cooling water pressure and the reactor R.M inlet.	4	2	8	Interlock provided	4
5	15	PCl3	N1.01.15	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	4	4	16	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	4	2	8	Level switch with interlock provided	5
6	16	PCl3	N1.01.16	Consider having a load cell for the chlorine tonner with audio visual alarm.	4	3	12	Consider having a load cell for the chlorine tonner with audio visual alarm.	4	2	8	Loadcell with alarm provided	6
7	17	PCl3	N1.01.17	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	4	4	16	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	4	2	8	Level switch with interlock provided	7
8	19	PCl3	N1.01.19	Consider revisiting the Contract with P4 vendor	4	3	12	Consider revisiting the Contract with P4 vendor	4	2	8	Contract\PO reviewed and sufficient control exist	8
9	20	PCl3	N1.01.20	Consider having a Vendor Audit	4	3	12	Consider having a Vendor Audit	4	2	8	Audit schedule made by SCM team frequency once in 2 year	9
10	21	PCl3	N1.01.21	Explore the possibility of Sampling at the site.	4	3	12	Explored the sampling at site and it not possible due to flammable material, review of CoA before accepting each lot is introduced	4	2	8	QC process reviewed and updated for mandatory COA check	10

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Hazop Recommendations Detailed Status Report

PCL3 - HAZOP - MEDIUM ACTION POINTS														
Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
11	25	PCl3	N1.01.25	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	4	12	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	2	6	Level switch with interlock provided	11
12	27	PCl3	N1.01.27	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	4	12	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	2	6	Level switch with interlock provided	12
13	28	PCl3	N1.01.28	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	4	12	Consider PROVIDING LEVEL SWITCH to Catch pot interlock to stop reaction on high level	3	2	6	Level switch with interlock provided	13
14	29	PCl3	N1.01.29	provide high level switch in catch pot with interlock to stop pumping	4	4	16	provide high level switch in catch pot with interlock to stop pumping	4	2	8	Level switch with interlock provided	14
15	30	PCl3	N1.01.30	design data of storage tank confirm	4	4	16	design data of storage tank confirm	4	2	8	Data available and checked, tank found adequate	15
16	31	PCl3	N1.01.31	Provide PT on storage tank with interlock to stop pump in case of low pressure	4	4	16	Provide PT on storage tank with interlock to stop pump in case of low pressure	4	2	8	PT and interlock provided	16
17	32	PCl3	N1.01.32	Level gauge with high alarm to be installed on scrubber catch pot.	4	4	16	Level gauge with high alarm to be installed on scrubber catch pot.	4	1	4	Level gauge with high alarm provided	17
18		PCl3	N1.01.32	Confirm the height of inverted U loop at inlet of scrubber column, its height should be more than column's vent outlet height.	4	4	16	Low level switch with interlock to stop scrubber pump to be provided	4	1	4	Low level switch with interlock to stop scrubber pump is provided	18
19		PCl3	N1.01.32	Cautionary signs to be displayed at PCl3 storage area.	4	4	16	Cautionary signs to be displayed at PCl3 storage area.				Cautionary signs to be displayed at PCl3 storage area.	19
20	33	PCl3	N1.01.33	Level gauge with high alarm to be installed on scrubber catch pot.	4	4	16	Level gauge with high alarm to be installed on scrubber catch pot.				Level gauge with high alarm provided	20
21	34	PCl3	N1.01.34	Confirm the height of inverted U loop at inlet of scrubber column, its height should be more than column's vent outlet height.	4	4	16	Provide PT on storage tank with interlock to RM charging valves	4	2	8	PT and interlock provided	21
22	35	PCl3	N1.01.35	Cautionary signs to be displayed at PCl3 storage area.	4	4	16	Cautionary signs to be displayed at PCl3 storage area.				Signs displayed	22

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Hazop Recommendations Detailed Status Report

PCL3 - HAZOP - MEDIUM ACTION POINTS														
Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
23	36	PCl3	N1.01.36	Cause 2 (reverse flow from scrubber) is considered as worst case for risk rating. Same recommendation as high pressure water ingress case. (Confirm the height of inverted U loop or level switch in catch pot)	4	4	16	1. Level gauge with high alarm to be installed on scrubber catch pot. 2. Low level switch with interlock to stop scrubber pump to be provided	4	2	8	1. Level gauge with high alarm to be installed on scrubber catch pot. 2. Low level switch with interlock to stop scrubber pump to be provided	23
24	38	PCl3	N1.01.38	Differential pressure transmitter in column can be considered.	4	4	16	Differential pressure transmitter in column can be considered.	4	2	8	Differential pressure transmitter provided with interlock	24
25		PCl3	N1.01.38	consider providing interlock of scrubbing media pH with caustic charging (on/off valve)	4	4	16	consider providing interlock of scrubbing media pH with caustic charging (on/off valve)	4	2	8	on/off valve, pH meter with interlock provided	25
26	39	PCl3	N1.01.39	consider providing interlock of scrubbing media pH with caustic charging (on/off valve)	4	4	16	consider providing interlock of scrubbing media pH with caustic charging (on/off valve)	4	2	8	on/off valve, pH meter with interlock provided	26
27	40	PCl3	N1.01.40	Interlock of cooling water pressure with RM inlet on/off valve.	3	4	12	Interlock of cooling water pressure with RM inlet on/off valve.	3	3	9	Interlock provided	27

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Hazop Recommendations Detailed Status Report

Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
PCl3 - WHAT IF - MEDIUM ACTION POINTS													
28	2	PCl3	N2.01.2	SOP to mention condition of pallet and drum before unloading	4	3	12	SOP to mention condition of pallet and drum before unloading	4	2	8	SOP prepared	28
29			N2.01.2	SOP to mention condition of pallet and drum before unloading				SOP to mention condition of pallet and drum before unloading				SOP prepared	29
30	4	PCl3	N2.01.4	Hydraulic Pallet trolley to be used from shifting of Drum with Pallets.	3	3	9	Hydraulic Pallet trolley to be used from shifting of Drum with Pallets.	3	2	6	SOP prepared	30
31	5	PCl3	N2.01.5	Hydraulic Pallet trolley to be used from shifting of Drum with Pallets.	3	3	9	Hydraulic Pallet trolley to be used from shifting of Drum with Pallets.	3	2	6	Hydraulic pallet trolley used	31
32			N2.01.5	SOP to be prepare for checking the Hydraulic Pallet Trolley.				SOP to be prepare for checking the Hydraulic Pallet Trolley.				SOP prepared	32
33			N2.01.5	Checklist to be made for Drum Pallet trolley				Checklist to be made for Drum Pallet trolley				Checklist prepared	33

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Hazop Recommendations Detailed Status Report

MPP - HAZOP - MEDIUM ACTION POINTS														
Sr. No	Report Sr. No.		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
1	1	MPP	N1.01.1.1	Provide Level Switch with interlock to stop pump	3	4	12	1. Provide Over flow line which will go to additional vent pot with dyke 2. Provide timer with 20 miutes set time to stop sulphuric acid transferring pump	3	2	6	1. The Over flow line provided and goes to additional vent pot with dyke 2. Sulphuric scid transferring pump has been provided with timer to stop pump after 20 minutes	1
2	2	MPP	N1.01.1.2	Provide Level Switch with interlock to stop pump	3	4	12		3	2	6		
3	3	MPP	N1.01.1.3	Provide Level Switch with interlock to stop pump	3	4	12		3	2	6		
4	4	MPP	N1.01.1.4	1. Provide Level Switch with interlock to stop pump 2. Provide vent pot in vent line	3	5	15		3	2	6		
5	5	MPP	N1. 04.3.1	Line pressure test frquency to to establish	3	5	15	To prepare pressure test form with frequency	3	3	9	Pressure test form with frequency prepared	2
6	6	MPP	N1. 04.3.2	Line pressure test frquency to to establish	3	4	12		3	3	9		
7	7	MPP	N2.07.1.5	Provide automation or mechanization to measure exact qty	3	4	12	1. Include in SOP to quantify based on LG (receiving qty of H2SO4 is 51 kg/batch only) 2. Provide orifice in the sulphuric acid transferring line from day tank to reactor	3	3	9	1. Included in SOP to quantify based on LG (receiving qty of H2SO4 is 51 kg/batch only) 2. Provided orifice in the sulphuric acid transferring line from day tank to reactor	3
8	8	MPP	N2.07.1.6	Provide automation or mechanization to measure exact qty	3	4	12		3	3	9		
9	10	MPP	N2.08.1.4	Jacket pressure test (to be confirm by Govind)	3	4	12	Jacket pressure test to be confirm	3	3	9	Jacket Pressure test performed	4
10	11	MPP	N2.10.1.2	Remove sight glass and provide either flow meter or flow switch	3	5	15	1. It will be replaced with distance piece as view glass is available in reactor. 2. Orifice to be provided in the sulphuric acid transferring line from day tank to reactor	3	2	6	1. It will be replaced with distance piece as view glass is available in reactor. 2. Orifice provided in the sulphuric acid transferring line from day tank to reactor	5
11	12	MPP	N4.03.1.1	Correct temp set point to 25-30 Deg C with operator action to stop NH3 feeding	3	3	9	NH3 Sol Preparation operation eliminated				NH3 Sol Preparation operation eliminated	6
12	13	MPP	N5 01.1.2	Provide Water Meter or Automate Water Receiving Function with Level Switch	3	4	12	Provide water meter	3	3	9	Water meter provided	7
13	14	MPP	N5 01.1.3	Provide Water Meter or Automate Water Receiving Function with Level Switch	3	4	12		3	3	9		
14	16	MPP	N5 01.2..2	Provide Water Meter or Automate Water Receiving Function with Level Switch	3	4	12		3	3	9		

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MPP - HAZOP - MEDIUM ACTION POINTS														
Sr. No	Report Sr. No.		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
15	18	MPP	N7.05.5	Provide J pipe to receive MDC and Acetylization Mass	4	4	16	Dip Pipe to be provided	4	2	8	Dip pipe provided	8
16	21	MPP	N9.05.1.1	Provide Flame Arrester	4	3	12	Flame arrestor to be provided	4	2	8	Flame arrestor provided	9
17	22	MPP	N9.05.1.3	Provide Flame Arrester	4	3	12		4	2	8		
18	25	MPP	N10.01.1.6	Provide automation to pump MDC or decide operating philoshopy to prevent high level	2	5	10	1. Prepare SOP for pumping or include in SOP 2. Remove valve from overflow line of MDC batch tank	2	4	8	1. Prepared SOP for pumping or include in SOP 2. Removed valve from overflow line of MDC batch tank	10
19	29	MPP	N10.05.4.1	Confirm the availability of anti shyphioning hole in Dip pipe	3	4	12	Perform the pressure testing of transfer line	3	3	9	Performed the pressure testing of transfer line	11
20	30	MPP	N10.05.4.2	Confirm the availability of anti shyphioning hole in Dip pipe	3	4	12		3	3	9		
21	33	MPP	N16.07.1	Consider providing high level switch and interlock with receiving pump	3	4	12	Provide the Overflow Line	3	2	6	Provided the Overflow Line	12
22	34	MPP	N18.04.24	Consider providing high level switch and interlock with charging pump	3	4	12	Consider providing high level switch and interlock with charging pump	3	2	6	Provided high level switch and interlock with charging pump	13
23	35	MPP	N19.05.1	Consider providing level switch and interlock with transferring pump.	3	4	12	Consider providing level switch and interlock with auto transferring through pump	3	2	6	Provided level switch and interlock with auto transferring through pump	14
24	37	MPP	N20.01.6	To provide the strainer in feeding line	2	5	10	To provide the strainer in feeding line	2	2	4	Provided the strainer in feeding line	15
25	38	MPP	N20.04.3	SOP needs to be revised for flowrate of FFE for feed	2	5	10	SOP needs to be revised for flowrate of FFE for feed	2	4	8	SOP revised for inclusion of flowrate of FFE for feed	16

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MPP - HAZOP - MEDIUM ACTION POINTS													
Sr. No	Report Sr. No.		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
26	39	MPP	N21.01.5	Observations 1. Hot water temp. not noted in log sheet 2. Upon discussion with the operator it was found that the electrical connection of vaccum pump is given from quipo(emergency supply) where as the FFE motor connection is given from GEB (Need to confirm from Electrical department.) Recommendations Consider Pressre instrument at FFE with audio visual alarm to be provide	3	4	12	Consider Pressre instrument at FFE with audio visual alarm to be provide	3	3	9	Pressre instrument at FFE with audio visual alarm provided	17
27	40	MPP	N21.01.12	Consider Pressre instrument at FFE with audio visual alarm to be provide	3	4	12		3	3	9		
28	41	MPP	N21.02.1	1. Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and vaccum pump and give alarm 2. consider PM schedule of FFE	3	4	12	1. Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm 2. Consider PM schedule of FFE	3	3	9	1. Provided high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm 2. Prepared PM schedule of FFE	18
29	44	MPP	N21.02.5	Need to re-study of condensor system (there is no vent in condensor utility side)	3	3	9	Review the condensor system	3	3	9	Reviewed the condenser for worst case and found OK.	19
30	45	MPP	N21.03.8	1. SOP needs to be revised 2. Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and vaccum pump and give alarm	3	3	9	1. SOP needs to be revised 2. Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm	3	3	9	1. SOP revised 2. Provided high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm	20
31	46	MPP	N21.04.8	Consider Pressure instrument at FFE with audio visual alarm to be provide	3	4	12	Provide PT with Alarm	3	2	6	Provided PT with Alarm	21
32	48	MPP	N22.04.2	Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and vaccum pump and give alarm	3	4	12	Consider providing a high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm	3	2	6	Provided high level switch in V-7210A/B with interlock to stop the FFE feed pump and give alarm	22

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MPP - HAZOP - MEDIUM ACTION POINTS														
Sr. No	Report Sr. No		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
33	49	MPP	N23.01.6	Observation In PSI document no sufficient data is available for EA recovery residue decomposition (DSC data report) As per experience basis it is runaway reaction after 122 deg C Recommendation Consider providing PT in Reactor with alarm & interlock with reactor LP steam supply cut off	3	4	12	Consider providing PT in Reactor with alarm & interlock with reactor LP steam supply cut off	3	2	6	Provided PT in Reactor with alarm & interlock with reactor LP steam supply cut off	23
34	50	MPP	N23.02.6	Consider to provide on/off valve in steam line and interlock with reactor temperature	3	4	12	Consider to provide on/off valve in steam line and interlock with reactor temperature	3	2	6	Provided on/off valve in steam line and interlock with reactor temperature	24
35	51	MPP	N23.02.7	Observation P&ID to be update for adward vaccum pump	3	3	9	P&ID to be update for edward vaccum pump	3	3	9	P&ID is updated after closing of MOC	25
36	54	MPP	N23.04.17	Separate the vent system of individual operation (To check the feasibilty of vent system by technical service)	4	4	16	Vent System to be reviewed				Vent System reviewed by technical services and found OK	26
37	56	MPP	N24.01.6	1. Consider to provide pressure transmitter with interlock to steam supply cut off 2.Condesor to be added in MIQA and make PM schedule for every quarterly	3	5	15	1. Consider to provide pressure transmitter with interlock to steam supply cut off 2.Condesor to be added in MIQA and make PM schedule for every quarterly	3	2	6	1. Provided pressure transmitter with interlock to steam supply cut off 2.Condesor added in MIQA and PM schedule for every quarterly made	27
38	57	MPP	N24.03.4	Observation 1. Load cell exsists on the tank but not mentioned in the P&ID 2. EA header node consider to be confirmed. From team C Recommendation To provide the high level alarm at 70% of level in V-7212A	3	4	12	Provide LH with alarm	3	2	6	Provided LH with alarm	28

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MPP - HAZOP - MEDIUM ACTION POINTS													
Sr. No	Report Sr. No		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
39	58	MPP	N25.01.6	1. Consider to provide pressure transmitter with interlock to steam supply cut off 2. Condesor to be added in MIQA and make PM schedule for every quarterly	3	5	15	1. Consider to provide pressure transmitter with interlock to steam supply cut off 2. Condesor to be added in MIQA and make PM schedule for every quarterly	3	2	6	1. Provided pressure transmitter with interlock to steam supply cut off 2. Condesor added in MIQA and make PM schedule for every quarterly	29
40	59	MPP	N25.03.4	To provide the high level alarm at 70% of level in V-7213C	3	4	12	Provide LH with alarm	3	3	9	Provided LH with alarm	30
41	60	MPP	N26.01.1	Observation It is considered that the bottom pump kept running after complete emptying out of V-7213C	3	3	9	Provide pump no load trip interlock	3	2	6	Provide MPD for pump no load trip interlock	31
42	61	MPP	N26.01.2	1. Consider Having separate Vent for V-7205A. 2. Consider verifying the vent of E-7205D is at which location.(To be confirmed)	3	3	9	Review the vent system	3	3	9	Review the vent system by technical services and ound OK	32
43	62	MPP	N26.02.2	Consider having TI in the collection line of V7213B	3	3	9	Consider having TI in the collection line of V7213B	3	1	3	Provided temperature gauge in the collection line of V7213B	33

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Hazop Recommendations Detailed Status Report

MPP - HAZOP - MEDIUM ACTION POINTS													
Sr. No	Report Sr. No.		Node No	Recommendation	S	L	R	Unique Action	S	L	R	Status of Implementation	Unique Sr. No
44	63	MPP	N27.01.6	Observation PSI document doesn't have reaction chemistry between ChBr(methanol) and MDC organic Recommendation 1.Consider to provide automatic control valve with reactor temp. in steam supply line 2.Consider providing digital pressure indication and interlock with steam control valve with alarm	3	4	12	On/off valve on steam line with interlock to reactor to be provided	3	2	6	On/off valve on steam line with interlock to reactor provided.	34
45	64	MPP	N27.01.7	1.Consider to provide automatic control valve with reactor temp. in steam supply line 2.Consider providing digital pressure indication and interlock with steam control valve with alarm 3.Consider temp. and pressure indication at ejector utility supply (steam and cooling) with alarm in DCS 4. Consider pressure indication at condenser E-7216 brine supply (ChBr) with alarm in DCS	3	4	12		3	2	6		
46	65	MPP	N27.03.9	Consider providing a on off valve in water line interlock with water flowmeter.	3	5	15	We have stopped use of NH3 (operation eliminated)				We have stopped use of NH3 (operation eliminated)	35
47	66	MPP	N27.03.10	Consider to review & implementing a automatic sequcene operation.									
48	67	MPP	N27.03.11	Consider to review & implementing a automatic sequcene operation.	3	4	12						

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Hazop Recommendations Detailed Status Report

Sr. No	Report Sr. No.	Plant	Node No	Recommendation	S	L	R	Unique action	S	L	R	Status of implementation	Unique action Sr. No.
49	68	MPP	N27.03.12	Consider providing high level alarm with operater action	3	4	12	LH to be provided to 1. R-7216 A 2. V-7216 A 3. V-7216 B 4. V-7216 D 5. V-7216 E	3	2	6	LH provided to 1. R-7216 A 2. V-7216 A 3. V-7216 B 4. V-7216 D 5. V-7216 E	36
50	69	MPP	N27.03.13	Consider providing high level alarm with operater action	3	4	12		3	2	6		
51	70	MPP	N27.03.15	Observation V 7216 B organic tank local vent and vent to MOC condenser present. Recommendation 1. Remove local vent of that tank. 2. Consider providing high level alarm with operater action	3	4	12		3	2	6		
52	71	MPP	N27.03.16	Consider providing high level alarm with operater action	3	4	12		3	2	6		
53	72	MPP	N27.03.17	Consider providing high level alarm with operater action	3	4	12		3	2	6		
54	73	MPP	N27.04.25	Separate the vent system of individual operation (To check the feasibility of vent system by technical service)	3	4	12	Review Vent System	3	3	9	Vent System reviewed by technical services and found OK	37
MPP - WHAT-IF - MEDIUM ACTION POINTS													
55	3	MPP	N1.02.2	1. Standardizing drum size 2. Install Fix M.S. pipe instead of using hose pipe with valve 3. Fixing the position of drum filling 4. Install weighing machine	3	3	9	Prepare SOP with Std drum Size	3	2	6	Prepared SOP with Std drum Size	38

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Compliance Audit Report

Of

Fire Protection System Installation

at

Coromandel

Coromandel International Limited
Sarigam, Gujarat

By

Chola MS
RISK SERVICES

Cholamandalam MS Risk Services Ltd.
(An ISO 9001:2008 Certified Company)
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August 2019

DOCUMENT HISTORY

Sr. No.	Document Identification	Revision		Comments / Nature of Changes
		No	Date	
1	CMSRS/CA/FP/SR/CIL/18-19/00	00	20-08-2019	Preparation of Draft Document
2	CMSRS/CA/FP/SR/CIL/18-19/00	01	31-08-2019	Updated considering the commissioning docs.

Prepared By	Reviewed	Approved By
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❖ STUDY BACKGROUND

Coromandel International Limited, (hereinafter referred to as CIL) India's second largest Phosphatic fertilizer player, is in the business segments of Fertilizers, Specialty Nutrients, Crop Protection and Retail.

Cholamandalam MS Risk Services Limited (hereinafter referred to as Chola MS Risk) has conducted as gap assessment followed by design adequacy study for the fire protection systems at CIL. The gap assessment report and design basis along with detail engineering reports for fire protection system modification was submitted as **"Fire Protection System Adequacy Study"** report in 2017. Based on the submitted study report CIL has initiated revamping of their existing fire protection system.

The management of **CIL** had approached Chola MS Risk to carry out **"Compliance Audit"** for the installation of fire protection systems in its manufacturing plant at Sarigam, Gujarat. An Engineer from Chola MS Risk conducted site visit on03th Aug 2019 to review the fire protection systems.

This report contains the Compliance status of fire protection systems against the Gap assessment and design adequacy study submitted by Chola MS Risk.

❖ EXECUTIVE SUMMARY

The fire protection systems installations at Coromandel Sarigam was found inline with the design documents submitted by Chola MS Risk. The testing and commissioning documents of fire protection systems were available for verification.

CIL has provided acceptable and functional temporary alternates for a few installations and assured immediate completion of those installation in all aspects.

❖ COMPLIANCE STATUS OF FIRE PROTECTION SYSTEM INSTALLATIONS

	Gap Assessment Report			Compliance Status and Remarks.		
Sl. No.	Reference Standard	Observation	Recommendation	Site Installation as on 13-08-2019	Compliance Status	Remark's
1	TAC FP Manual / IS 13039	As per the performance test of existing pumps conducted during the site visit, it was observed that the pumps are not conforming to the standard requirements of a fire pump.	It is recommended to replace the existing pumps with new pumps as per following details: Main Pump 1- 273 m3/hr Main Pump 2- 171 m3/hr Drive - Electric Operation - Both running on same time	Main Pump 1- Electrical motor driven centrifugal pump capable to deliver 273 m3/hr at 88MWC is installed.	Complied	
				Main Pump 2 -Existing pump of 300m3/hr at 70MWC head is retained.	Acceptable temporary alternate provided	It was informed that the new fire pump will be installed shortly. As per the performance test curve of existing 300m3/hr pump, the pump is delivering near to 80MWC head at 171m3/hr flow rate. Hence can be used till the new fire pump is in place.

				Standby Pump - Diesel engine driven centrifugal pump capable to deliver 273 m^3/hr at 88MWC.	Acceptable temporary alternate provided.	CMSRS recommendation is yet to be implemented. It was informed that the new diesel engine driven fire pump will be installed shortly. Currently a new electrical motor driven pump of 273m3/hr flow and 88 MWC head is installed with a dedicated diesel generator providing power supply to the motor.
2	TAC FP Manual	Negative suction is provided for the fire pumps.	If negative suction has to be provided, an automatic priming arrangement shall be provided. The priming system shall consists of a tank ((having a capacity at least three times that of the suction pipe from the pump to the foot valve subject to a minimum of 1000 litres) connected to the delivery side of the pump by a metal pipe having a minimum internal diameter of 100mm with a stop	Priming arrangement is provided.	Complied	

			valve and a non-return valve therein of the same size.			
3	IS 12469	The design and installation of medium velocity water spray system for NH3 bullets is not meeting the guidelines of IS 15325.	Ammonia Bullet Unloading- Medium velocity water spray system is recommended for NH3 bullets and tanker unloading area. It is recommended to reinstall the system as per the design details provided in this document.	Automatic deluge operated medium velocity water spray system is installed for the NH3 Bullet.	Complied	
				Manual operated water spray system for tanker unloading area is installed.	Complied	
4	Good Engineering Practices	There is no fire suppression system provided for the tanker unloading areas of Class A tank farm and Carbon disulphide.	It is recommended to provide manual operated water spray system for the tanker unloading areas of Class A tank farm and Carbon disulphide.	Manual operated water spray system is installed.	Complied	

5	IS 3594/ IS 15105/ NFPA 13	There are no automatic fire suppression system provided for the warehouses.	Automatic sprinkler systems are recommended for the warehouses.	Automatic Sprinkler Systems are installed in the warehouses as proposed by Chola MS Risk	Complied	
6	IS 3594	Water reactive chemicals and hygroscopic materials are found stored along with normal materials inside the warehouse.	It is highly recommended to segregate the storage of water reactive chemicals. Water based fire suppression systems shall not be applied for such materials.	Water reactive chemicals are segregated and separately stored.	Complied	
7	Good Engineering Practice/ NFPA 13	The water curtain system provided for Chlorine shed is not covering the south west side of Shed-01.	It is recommended to provide additional water curtain nozzles at south west side to ensure the complete coverage of water curtain system.	Water curtains and masonry brick walls are provided.	Complied	

8	IS 13039 / TAC FP Manual	There are no hydrant points provided for the extension factory shed for incinerator, located across the road.	It is recommended to provide yard hydrants around the extension factory shed, by taking tap-off from the hydrant ring main of the plant. Layout is attached with this document.	Hydrant System not provided in the area	Not Applicable	CIL informed that, extension factory shed for incinerator area, shall be demolished as soon as possible. Since last two years, the area is not being using for process.
9	IS 13039 / TAC FP Manual	The hydrant mains of warehouse area, canteen and NH3 bullet area are not forming a ring main, in the existing network.	Hydrant system shall be provided in a ring main format to ensure the availability of the system even in case of temporary isolation of part network. It is recommended to provide additional hydrant line connection with isolation valve to form a ring main network for the area. Layout is attached with this document.	The pipe line modifications suggested by Chola MS Risk is implemented in the field.	Complied	

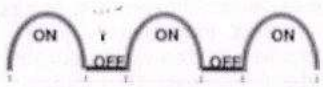
825

10	TAC FP Manual	The fire brigade inlets provided are provided as 02-way inlets.	Fire brigade - It is recommended to provide 04-way 6mm instantaneous inlets for the network	04-way fire brigade inlet is provided.	Complied	
11	IS 13309/ TAC FP Manual	The line sizes of hydrant mains are not meeting standard guidelines at multiple locations. For example, more than 05 no. of hydrants valves are connected on an 80mm dia. line at the south west boundary of the plant.	It is recommended to provide line sizes to meet the standard requirements. Only one single headed hydrant shall be provided on 80mm line. Up to 02yard hydrants can be provided on 100mm dia. line. The modified layout meeting the standard guidelines and verified by hydraulic analysis is attached along with this document.	The modifications suggested by Chola MS Risk is implemented. Testing and commissioning documents are in place.	Complied	

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THIRD PARTY SAFETY AUDIT JULY 2019
COMPLIANCE STATUS OF RECOMMENDATIONS SUGGESTED

Areas for improvements:

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
1.	Emergency preparedness of employees was found not up to the mark.	To give constant training regarding Emergency preparedness to employees. ERT Team should be strengthen more and more.	Ongoing process – we have trained ER team including trained first aiders and trained fire fighters through well-known agencies, attached list of ERT members along with other employees.
2.	Safety shower was installed in plant but not maintained. Drain was full of water logging.	To be maintained safety shower system with no water logging.	Complied – water logging removed and collected the water into pit on ground floor.
3.	Notice regarding first aid was missing near first aid box.	As per Rule 70 A of The Gujarat Factories Rules (GFR), 1963,, A notice containing the names of the persons working within the precincts of the factory who are trained in first aid treatment and who are in charge of the first aid boxes or cupboards shall be posted in every factory at a conspicuous place and near each such box or cupboard. The notice shall also indicate work room where the said person shall be available. The name of the nearest hospital and its telephone number shall also be mentioned prominently in the said Notice.	Complied - Plant wise list of first aiders pasted on the on the first aid boxes installed in the plants.
4.	Siren code was missing in entire plant premises.	Siren code should be displayed in prominent manner and in local language in entire plant premises. 	Complied – Emergency siren code boards displayed at prominent places
5.	There was only tag out and try out system for electrical isolation.	To be introduced the perfect Lock Out Tag Out system.	Complied – implemented LOTO system.
6.	Tool box talk system was not evident for the employees and contractors both.	To be initiated the Tool box talk system for the employees and contractors both. It is must to change the behavior.	Complied – ongoing process
	SECURITY GATE		

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
7.	Emergency sired code was displayed inside the emergency siren switch box.	Emergency siren code to be displayed outside of emergency siren switch box.	Complied-siren code displayed outside the siren board.
	OHC		
8.	All MSDS was not evident.	All MSDS to be provided.	Complied - MSDS copies kept in the OHC.
9.	Blood Pressure instruments – OIL/BPA-01 Calibration date: 21/11/2017 to 20/11/2018 observed.	Blood Pressure instruments – OIL/BPA-01 to be calibrated.	Complied – instrument calibrated from the Competent person.
	MANCOZEB PLANT -B		
10.	PG – 5308 – 10 (Nr. Safety Shower) Calibration date: 22/04/2018 to 18/10/2018 observed.	To be calibrated.	Complied – PG No. – 5308 re-calibrated.
	MANCOZEB PLANT -A (WET SECTION)		
11.	Control Room Panel Rubber mat was not observed.	To be provided	Complied - rubber mat provided.
12.	TMP – Solvent Storage Tank NFPA symbol was not observed.	NFPA symbol to be displayed.	Complied – NFPA symbol code displayed.
13.	ST -S 10 -D, CS Lye Tank CS Lye -Day Tank : S 101 Abstract of MSDS was not observed. Cautionary notice was not displayed.	• Abstract of MSDS to be displayed. • As per SCHEDULE 12 (6) of Rule 102 of The GFR, 1963, A cautionary notice in the following form shall be displayed/printed in prominent manner and in local language. CAUTIONARY NOTICE DANGER Acids and Alkalis cause severe burns and vapors thereof may be extremely hazardous. In case of contact, immediately flood the part effected with plenty of water for at least 15 minutes.	Complied – MSDS Abstract displayed at prominent places with cautionary notices.
14.	Safety Shower No.7 Unwanted material stored.	Unwanted material to be discarded.	Complied – discarded unwanted material from Safety shower No.7 area.
	MANCOZEB PLANT -A (WET SECTION)		
15.	Control Room Panel Rubber mate was not observed.	To be provided.	Complied – rubber mat provided in the control room panel.
	ETP		
16.	Sand bag was stored near final discharged area.	Sand bag to be stored designated place.	Complied – sand bag removed

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
17.	Temporary Ladder was observed without side railing near GP – I.	Temporary Ladder to be discarded.	Complied – removed temporary ladder
	PCL3 PLANT		
18.	Frequency of changing water in the melting tank can be decided & recorded for timely removal of bottom phosphorus layer.	To be attended.	Complied – complete water replacement not required; water make up done on daily basis as drums washing carried out for every drum. Frequency 6 months.
19.	Do's & Do Not's with pictorial instruction signage boards in this area is required for the operating team along with the SOP's in the local language.	To be implemented.	Complied – Do's & do not's boards displayed with pictorial instruction signages.
20.	Crane (EOT) for the phosphorus drums: Display of the status board for the inspection carried out & due dates is required to be corrected, as it was showing test date: 1-Jan-2018 & nothing about the due date.	To be rectified.	Complied – Due date changed and is valid till 20.01.2020.
21.	Proper hoods & suction hose for the PCl3 storage tank ST-107, 108 & 109: is required to be connected with the suction header of the scrubbing system, so that in case of any emergency, system can be operated efficiently without wastage of time & manual operation for the connection.	To be provided.	Complied – New high-performance effective scrubbing system installed in the PCl3 plant and all the PCl3 storage tank vents were connected to the Scrubber suction header.
22.	System to observe the system vacuum at any time, so that effectiveness of the scrubbing system is known easily to the operating team is required. 6" Dia. Vacuum gauge with the marking of vacuum range desired, on the dial can be provided.	To be provided.	Complied – manometer (mmwc) provided for the same to measure the -ve draft of the scrubbing system.
23.	Hooter for the sudden failure of the scrubbing system is recommended.	To be provided.	Complied – Process scrubber failure case hooter provided, also interlocks provided with P4 & Cl2 addition, both the interlocks activate in case of scrubber system failure.

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
24.	Consumption of the caustic lye can be monitored / recorded on the daily basis, so that any abnormal operation can be highlighted & attended, before any incident takes place.	To be provided.	Complied – provided High pressure switch interlocked with pH meter which maintains the scrubbing system. For caustic consumption, day tank with level indicator provided, caustic consumption taken on daily basis.
25.	Hot insulation on the top of the reactor R-101B is damaged partially.	To be repaired.	Complied- damaged hot insulation rectified.
	CHLORINE SHEDE		
26.	Safe & specious arrangement for the storage & handling of the chlorine toners.	Good practice.	Complied – Good practice.
27.	Position & location of the main valve for the water curtain can be reviewed, as it is little bit at difficult to approach for the operating team in case of emergency, one more valve near the operator team working area can be provided.	To be modified.	Complied – one more valve provided towards MCP Cl2 shed for easy access in case of emergency.
28.	Pressure gauge showing the marking for desired range of the water pressure is required for the water sprinkler headers.	To be provided.	Complied – Two No. of PGs provided I the sprinkler system at two locations near sprinkler valves to monitor the sprinkler pressure.
29.	Chlorine kits: Proper fixed storage place is required; its present condition needs to be improved as emergency preparedness.	To be painted & proper box for the storage is recommended	Complied – Two Cl2 kits are available with required accessories and maintained in good condition.
	QC AND R&D LABORATORY		
30.	Emergency escape for the instrument lab is required.	To be provided.	Complied – Emergency escape is provided.
31.	Gas cylinders without cap on the valve found, should not be allowed.	To be instructed accordingly.	Complied – valve caps provided on the cylinders and instructed QC personnel to follow this practice strictly.
32.	Water blockage near gas cylinder area found, should be attended by proper leveling of the floor.	To be attended.	Complied.
	WAREHOUSE C & D		
33.	Forklift No. GJ-15 BB 8510 hand brake is not working.	To be repaired.	Complied – hand brake maintenance done and is in working condition.

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
34.	Pipes stored in rack outside the warehouse in such a way that, the entry of the ware house gets blocked partly.	To be stored properly.	Complied – pipes kept in the pipe rack were rearranged and free access warehouse C provided.
35.	Looking to the size of the warehouse, only one fire extinguisher is not enough in both these warehouses.	No. of fire extinguisher as the fire load calculation can be provided.	Complied – provided.
36.	1" Dia. MS pipe for compressed air was in hanging position without proper support.	Proper supports are required.	Complied – fixed supports provided.
	MEE-3,4,5 & 6		
37.	MEE-3: Calendriya-2 earthing strip is disconnected for circulation pump no. 03.	To be repaired.	Complied – disconnected earthing strip reconnected.
38.	Lunch / Tiffin boxes in the process area were found.	Please stop this practice.	Complied – Lunch / tiffin boxes were strictly prohibited to keep in the plant area.
39.	MEE-3 Surface cond. CWS & R piping of 2" Dia. Got corroded badly, cleaning / painting required.	To be repaired	Complied – CWS & R pipeline painted.
40.	Most of the MS platform for working at height surrounding the equipment are without railing & creates falling hazard from the height.	To be provided	Complied – listed down all the railings and across the MEE areas and provided railings on the platform to prevent the falling hazards.
	TMP PLANT		
41.	There were vessels and reactors found with dull and without identification and hazards.	To be displayed the identification tag and hazards on each vessels and reactors with proper cleaning.	Partly complied – The identification tags were provided on vessels and reactors.
42.	Staircase was found inadequate civil works with stairs.	To be provided safe and adequate civil works to prevent slip hazards.	Complied
43.	There were no toe guards on railing on platform for separator.	To be provided toe guards to each railing.	Complied – Toe guards provided
44.	There was poor housekeeping observed in plant.	To be maintained the proper housekeeping standard.	Complied – housekeeping maintained properly
45.	Underground storage tanks. All are highly flammable chemicals.	1) Methanol---20 KLX 3 2) Ethanol----20 KL X 2 3) Toluene----20 KL X 1 4) Ethyl acetate—10 KL X 02 5) Solvent C-ix----20 KL X 01 6) Ethylene di chloride—	-

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
		---20 KL X 01 Methylene di chlorides --------- 20 KL X01	
46.	Under PESO License. It was under fencing . But fencing was Brocken.	To be repaired the Brocken fencing.	Complied – fencing provided
47.	It was unauthorized entry. But there was no entry/exit register at gate.	There should be entry/exit register at gate. No one should enter without entry. Register should be maintained. There should be no mobile in this premises.	Complied – entry – exit register maintained
48.	There was grass observed in to the tank farm.	There should be no dry grass beads in to the tank farm.	Complied – cleaned the area, grass removed
49.	Above ground storage tanks observed.	1) ZnSO4 2) MnSO4 3) Caustic lye 4) H2SO4 5) Di-Methyl Sulphate 6) Ethylene di chloride 7) DMPAT	
50.	There was no leak-spill kit near tanks.	There should be leak-spill kit near tanks.	Complied – Leak spill kit kept
	MULTI PURPOSE PLANT.		
51.	There was calibration date dt.18/07/2019 displayed on tag of instrument. Audit was carried out on dt.12/07/2019 Reactor N-7214 –A	To be ensured and rectified	Complied – rectification done
52.	There was no coupling guards to FFE-A pump.	Coupling guard o be provided.	Complied – coupling guards provided
53.	Some points regarding MSDS was displayed . There was awareness of employees regarding MSDS not satisfactory.	To be given training regarding MSDS to employees.	Complied – ongoing process
54.	Form no.11 of Nitrogen storage tank was not evident.	Form no.11 of Nitrogen storage tank to be ensured.	Complied – Form No.11 available for N2 storage tank, valid up to Jan. 2020
55.	Unloading and handling and storage and process of Flammable chemicals but check list was not evident.	checklist to be provided.	Complied – unloading & storage checklist of flammable chemicals is being maintained by Supply chain (RM) dept.) and plant persons receives the required quantity of material from Supply Chain dept., proper documentation

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
			is done in SAP system
	11 KV SWITCH YARD, DGVCL AT 11 KVA POWER THROUGH OVERHEAD SINGLE LINE, CONTACT DEMAND-1900 KVA		
56.	Outgoing cable of Switch yard to VCB details not found.	Feeder details should be clearly and permanent written on outgoing cable of switch yard. CEA Regulations 2010, Reg 19	Complied - Feeder details clearly and permanently written on outgoing cable of switch yard
	TRANSFORMER: - 1 11 KV/ 440 VOLT 2 MVA – 2666.74 AMP Oil – 2200 litter	TRANSFORMER: - 2 11 KV/ 440 VOLT 4 MVA – 5223 AMP Oil – 3061 litter	
57.	Incoming source not written on primary box	Incoming source should be clearly and permanent written on primary box (feeder Details)	Complied – feeder details mentioned
58.	Silica gel was observed white and oil cup found without oil.	Silica gel should be replaced with new one. IS 10028 Part 3I	Complied – Silica gel dried and restored
	ELECTRICAL WORKSHOP AREA :-		
59.	Earthing and Identification not found on RTCC Panel for 2 MVA Transformer.	Electrical panels were provided with double earthing. Identification should be clearly and permanent written. IS 3043 CEA Regulations 2010, Reg 41	Complied -
60.	Panel ID not found (PCC4)	Identification should be clearly and permanent written. CEA Regulations 2010, Reg 19	Complied
	HT & PCC ROOM		
61.	Smoke detector not found in admin building, lab, all substation and plant office.	Smoke detector should be provided in admin building, lab, all substations and plant offices.	Complied – installed smoke detectors in admin building, lab, substation and plant offices
	D G SET:- 1 – 1000 KVA /1392 AMP 2 – 500 KVA / 650 AMP – TWO SET 3 – 200 KVA / 2 62 AMP		
62.	Outgoing source not written on feeder of DG panel.	Outgoing source should be written on feeder of DG panel. (TO – PCC - feeder number)	Complied - Outgoing source written on feeder of DG panel. (PCC feeder number)
63.	Incoming source not written on all generator feeder.	Incoming source not written on all generators feeders. (I/C from DG & number)	Complied- Incoming source written on all generator feeders
64.	Outgoing source not	Outgoing source should be	Complied -

SR NO.	OBSERVATIONS	RECOMMENDATIONS	COPLIANCE STATUS
	written on DG terminal box.	written on DG terminal box. (TO – DG panel – feeder number)	
	CHEMICAL LAB :- MENCOZEB LAB		
65.	Eye wash bottle was not found.	Eye wash bottle should be there.	Complied – eye wash bottle kept with potable water
	INSTRUMENT LAB:-		
66.	N2, hydrogen, air cylinder found without cap.	Cap should be provided on cylinder.	Complied -
67.	Eye wash bottle found without water.	Eye wash bottle should be fill with water.	Complied – eye wash bottle kept with potable water
	CANTEEN :-		
68.	Earthing wire found open of counter switch and lugs was missing from earthing wire.	Earthing should be connected with lugs.	Complied – connected with lugs
69.	Smoke detector not found.	Smoke detector should be provide.	Complied – Smoke detectors installed in canteen building at prominent places

ENVIRONMENTL POINTS

SR NO	OBSERVATIONS	RECOMMENDATIONS	COMPLIANCE STATUS
	TMP PLANT – STORAGE TANK FARM		
1.	T-805 D Tank dyke Rainwater logging observed.	Rainwater logging to be attended.	Complied - Rainwater logging removed
	UTILITY		
2.	Chilled water secondary pump -- C High noise observed.	Earplug / Earmuff to be used.	Complied – ear plugs or earmuffs are being used to prevent noise pollution impact
3.	INCINIRATION PLANT		
4.	Water spillage observed near T-9217 (Ventury scrubber tank, Capacity:10 kl)	Water spillage to be attended.	Complied – area cleaned
5.	C.S. Tank – Capacity : 1.5 kl Seal leakage from caustic pump.	leakage to be attended.	Complied – seal leakage rectified
	PUMPHOUSE		
6.	Raw water pump-A (Flow – 55 m3/hr) Water leakage found.	Water leakage to be attended.	Complied – water leakage rectified
7.	Raw water pump-A (Flow – 55 m3/hr) High noise observed.	Earplug / Earmuff to be used.	Complied – ear plugs or earmuffs are being used to prevent noise pollution impact
8.	DG SET		

SR NO	OBSERVATIONS	RECOMMENDATIONS	COMPLIANCE STATUS
9.	DG Set – 3 (500 KVA) Coolant water spillage observed near DG Set.	Coolant water spillage to be attended.	Complied – coolant water spillage rectified
10.	DG Set – 3 (500 KVA) Discarded spent oil drum observed.	Discarded spent oil to be sent GPCB registered agencies.	Complied – spent oil drums disposed to GPCB registered agency
11.	DG Set – 1 (1000 KVA) Discarded spent oil leakage observed.	Discarded spent oil leakage to be attended.	Complied – area cleaned, spent oil spots removed
	PROCESS COOLING TOWER		
12.	Process cooling tower Louver observed damaged and water leakage observed.	Water leakage to be attended.	Complied – Cooling tower's damaged louver replaced and water spreading arrested
	LUBE OIL DRUM STORAGE AREA		
13.	Oil spillage observed.	Oil spillage to be attended.	Complied – oil spillage cleaned
14.	Secondary containment was not observed inside the drum oil leakage observed.	Secondary containment to be provided at suitable location.	Complied – secondary containment provided
	SPENT OIL STORAGE AREA		
15.	5 nos. drum of spent oil observed.	Spent oil to be sent GPCB registered agencies.	Complied.
	BOILER		
16.	High noise observed.	Earplug / Ear muff to be used.	Complied – enforced the employees working in the high noisy area or passing through this area to use ear plugs
17.	Oil spillage observed from oil heater.	Oil spillage to be attended.	Complied – oil spillage rectified
	MEE PLANT		
18.	MEE – 5 Water logging observed near NH4Cl packing area.	Water logging to be attended.	Complied – water logging removed
19.	PCL3 Plant – Nr. Chlorine shed (B-102 – Cl2 blower), (Cl shed scrubber tank-5 kl) Water logging observed in dyke area.	Water logging to be attended.	Complied – water logging removed.
20.	Bags of hazardous waste from MEE plant stored.	Bags of hazardous waste to be stored designated storage area.	Complied – hazardous waste bags transferred to EMS dept. for further disposal to TSDF site.
21.	Seal cooling tank – MEE 4 Water logging observed.	Water logging to be attended.	Complied.
22.	Barometric Water tank – MEE 6 Water logging observed.	Water logging to be attended.	Complied – water logging removed.
23.	Ml storage tank – T6 tank Rainwater logging observed in dyke area.	Rain water logging to be attended.	Complied – provided drain valve to the dyke and dyke rain water transferred to ETP
24.	First floor	Water logging to be attended.	Complied – removed water

SR NO	OBSERVATIONS	RECOMMENDATIONS	COMPLIANCE STATUS
	Water logging observed near safety shower.		logging.
25.	Salt powder accumulation was observed near screw conveyor area.	Salt powder accumulation to be removed.	Complied – area cleaned; salt powder removed
26.	Ammonium chloride powder accumulation observed below dryer.	Ammonium chloride powder accumulation to be removed.	Complied – accumulated Ammonium Chloride powder removed.
	ETP		
27.	SRT pump Water logging observed.	Water logging to be attended.	Complied – water logging removed.
28.	Water logging observed between old & new bio reactor.	Water logging to be attended.	Complied – water logging removed.
29.	Clarifier pump 1 & 2 Water logging observed.	Water logging to be attended.	Complied – water logging removed.
	TMP PLANT		
30.	Water logging observed near DT-2205 due to drainage/ trench line chocked.	Drainage line to be cleaned. Water logging to be attended.	Complied – drainage line cleaned; Water logging removed.
31.	DT-2205 A-3 tank Water leakage observed due to damaged pipeline.	Water leakage to be attended and damaged pipeline.	Complied – water leakage rectified and damaged pipeline replaced.
32.	TMP – 10 meters Water logging observed in safety shower no.22 water collection pit / dyke.	Water logging to be attended.	Complied – water logging removed.
	GLP PLANT		
33.	R-3109 A & B Water logging observed.	Water logging to be attended.	Complied – water logging removed
34.	Unwanted materials (cement bag, wood . etc.) stored near slurry transfer pump.	Unwanted materials to be removed	Complied – unwanted material removed
	PCL3 PLANT		
35.	R-101A&B- PCl3 blowdown tank Rainwater accumulation observed.	Rainwater accumulation to be attended.	Complied – rain water accumulation attended
	NAHTCP PLANT		
36.	Unwanted materials stored near NaHTCP plant.	Unwanted materials to be removed	Complied - Unwanted material removed

NAIK & ASSOCIATES
SAFETY & ENGINEERING CONSULTANTS

"IMBIBING SAFETY IN BUSINESS"
-ISO 9001 & OHSAS 18001 Certified Company-

SAFETY AUDIT REPORT

M/s COROMANDEL INTERNATIONAL LTD.

PLOT NO: 2102, G.I.D.C., SARIGAM,
DIST: VALSAD– 396155
GUJARAT

JULY - 2019

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Global Knowledge- Local Application

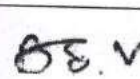
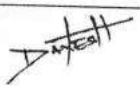
QUALITY CONTROL SHEET

Rev.	Date	Reason History	Prepared By	Reviewed By	Approved By
00 01	15/07/2019 27/08/2019	Safety Audit Report	BV	DG	YN

BV : BHARGAV VAIDYA

DG : DAXESH GAJJAR

YN : YAGNESH NAIK

Prepared by	BHARGAV VAIDYA, ENGINEER –EHS
Signature	
Reviewed by	DAXESH GAJJAR, SR. ENGINEER – EHS
Signature	
Approved by	DR. YAGNESH NAIK, PROPRIETOR & CEO
Signature	
Released by	PATHIKA NAIK, MANAGER-PROJECTS & FINANCE
Signature	

ACKNOWLEDGEMENT

We express our sincere thanks to Management and Employees of M/s Coromandel International Ltd, Sarigam, Gujarat Manufacturing Division, for their Co-operation and unstinted help without which the Safety Audit could not have been possible. The courtesy and Cordiality extended to the audit team is highly appreciated.

We do appreciate the best planning and constant co-operation from Mr. Himanshu Kumar Shukla, Mr. Santosh Pandey, Mr. Rajendra Thakur and their team and all other department head of respective plant for speedy completion of this report.

For, NAIK & ASSOCIATES

NAIK AND ASSOCIATES SURAT

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DISCLAIMER

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14/07/2019

Audit Certificate

We are pleased to certify that this Occupational Safety and Health Audit M/s Coromandel International Ltd, Sarigam, Gujarat has been conducted by us during July - 2019.

Safety Audit is a legal requirement u/r 12–C & 68–O of the Gujarat Factories Rules, 1963 and Rule 10 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.

This audit is carried out as per requirements of the above statutes and as per guidelines given in IS 14489: 1998.

We have sincerely tried to adhere to the terminology and methodology of IS 14489: 1998 and gone through the maximum details as suggested in Annexure B and C thereof.

The observations and recommendations are based on information supplied to us by the company and our plant visits. The points of our detailed plant visits are summarized in Chapter 8.

The Executive Summary is given in the beginning to highlight the short summary of our audit report.

We are thankful to the officers and workers of the company for their kind co-operation. In particular, we acknowledge the continuous help given to us Mr. Himanshu Kumar Shukla, Mr. Santosh Pandey, Mr. Rajendra Thakur and other team members for speedy completion of this safety audit report.

We hope the compliance of audit points suggested in this report will make the Company safer and healthy.

The Third-Party Regulatory Safety Audit is valid for 1 Year as per The MSIHC Rules,1989; hence next Audit will be due in July 2020.

Seal

NAIK AND ASSOCIATES SURAT

Surat

For, NAIK & ASSOCIATES

Dr. Yagnesh Naik
Ph.D. – BBS, M.Sc. PDIS,
NEBOSH-NGC,
Dip in Env& Poll Control
Accredited Safety Auditor
Lead Auditor OHSAS18001

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1. AUDIT GOALS AND OBJECTIVES

1.1 Audit Goals

Following goals are decided while starting this audit.

1. To provide the auditee with an opportunity to assess its own OH&S system against OH&S system standard and identify areas for improvement;
2. To determine the conformity of the implemented OH&S system with specified requirements and identify areas for improvement; and
3. To meet regulatory requirements.

1.2 Audit Objectives

Following objectives are kept before eyes while conducting this audit

1. To carry out a systematic, critical appraisal of all potential hazards involving personnel, plant, services, operations and procedures.
2. To ensure that OH&S system fully satisfy the legal requirements and those of the company's written policies, objectives and progress.

1.3 Audit Scope

Following are the scope of the OH&S Audit;

Physical boundary of the company

1. Organizational activity performed by company employees, contractors, transporters and other agencies.
2. Applicable (Relevant) legal requirements pertaining to OH & S

1.4 Audit Plan

Audit plan has been finalized after consultation with the client and communicated to all concerned, well in advance by Auditee.

Mainly manufacturing areas including material movement, hazardous chemical Storages and their safety aspects are audited on sample base. Areas like Storages of CS2, Tank Farm, Laboratory, Production Department, OHC & Safety Management System etc. was covered under Sample Audit.

Coromandel International Limited- Sarigam

(Crop Protection Division)

AUDIT SCHEDULE

DATE	DAY	PLANT / DEPARTMENT	TIME (In Hrs.)	DEPT & NAME OF AUDITEE	NAME OF AUDITOR
12-July	Friday	Opening meeting	10.30-11:00	All HODs. & HSE	A, B, C
		Mancozeb Plant B	11:00-13:00	Plant HOD	A
		TMP Plant	11:00-12:00	Plant HOD	C
		Engineering dept – Electrical, Mechanical, Instrument Dept	11:00-13:00	Plant HOD	B
		Under Ground and above ground RM storage tanks with Warehouses FG & RM	12:00-13:00	Plant HOD	C
Lunch 13-00 – 14.00					
12-July	Friday	Multi-Purpose Plant – which includes MCP with Cl2 shed, ACP & DDVP Plants	14:00 - 17 :00	Plant HOD	C
		Mancozeb Plant A – which includes MNZ Dry and wet section along with packing area	14:00 - 16 :00	Plant HOD	A
		ETP & Incinerator	16:00 - 17 :00	Plant HOD	A
		Utility Dept./ Electrical Department / Transformer / DG set	14:00 - 16 :00	Plant HOD	B
		Security	16:00 - 17 :00	Plant HOD	B
13-July	Saturday	HSE Dept – Safety, Fire fighting, onsite emergency and IS 14489 with Pre- Audit Questionnaire	10.00-13:00	Plant HOD	A
		PCl3 Plant including Cl2 shed	10.00-12:00	Plant HOD	D
		Warehouse	12:00-13:00	Plant HOD	D
		MEE Plant – MEE 3, 4, 5 & 6	10.00-12:00	Plant HOD	B
		Canteen	12:00-13:00	Plant HOD	B
Lunch 13-00 – 14.00					
13-July	Saturday	HSE Dept – Safety, Fire fighting, onsite emergency and IS 14489 with Pre- Audit Questionnaire	14:00 - 15 :30	HOD- HSE	A
		PYZ Plant	14:00 - 15 :30	Plant HOD	D
		Laboratory	14:00 - 15 :30	Plant Lab	B
		Auditors Meet	15:30 - 16 :15	------	A B D
		Closing Meeting	16:15 - 17 :00	All HODs. & HSE	A B D

Audit Team

A	Mr Bhargav Vaidya	C	Mr Nitin Patel
B	Mr Bharat Suryavansi	D	Mr Kanti Thakkar

2. IDENTIFICATION

2.1 Auditee & Client

Name and primary information of an organization appointing us to carry out this third-party Occupational Safety & Health Audit (hereinafter called as audit) are as under.

⇒ **Identification of the Factory**

No	Particulars	
1	**Full Name & Address of the Factory**	**M/s Coromandel International Ltd. (Crop Protection Division),** Plot No.: 2102, G.I.D.C., Sarigam-396155, Dist.: Valsad Gujarat
2	**Phone No:**	+91(260) – 2780395/96
3	**Full Name &Address of the Occupier**	**Mr. Sameer Goel** Coromandel International Ltd. Coromandel House, Sardar Patel Road, Secundarabad – 500003, +91 40 278442034
4	**Full Name & Address of the Factory Manager**	**Mr. Himanshu Kumar Shukla** M/s Coromandel International Ltd. (Crop Protection Division), Plot No.: 2102, G.I.D.C., Sarigam-396155, Dist.: Valsad Gujarat Mo.: +91 7573005727
5	**Manufacturing Process**	Chlorination, Acetylation, Esterification, Distillation, Crystallization.
6	**Product**	Acephate, Monocrotophos, PCl3, Tri Methyl Phosphite, Tri ethyl Phosphite, Mancozeb, Propineb, Glyphosate

⇒ **Company Profile**

Coromandel International Limited is in the business of Crop protection since 1991. It manufactures and markets vide range of Fungicides, Herbicides, and Insecticides & Specialty Chemicals. Over the years, Coromandel has gained expertise in its business and is a significant player in India in the field of Crop Protection. With manufacturing facilities in India and marketing offices in India, Brazil, Europe, Australia and Argentina, Coromandel supplies its products to a large number of customers including multi-national corporations across the globe.

Coromandel is a member of the US $ 4.4 billion diversified Murugappa Group, having significant presence in fertilizers, sugar, engineering and financial services.

Coromandel is a leader in Agri inputs involved in manufacture and marketing of Fertilizers, Crop Protection Chemicals, Specialty Nutrients, Organic Fertilizers and Retail

2.2 Audit Team

This audit is carried out as per IS 14489: 1998 and requirements under the Factories Act 1948, the Gujarat Factories Rules, 1963 and other safety statutes

We have designated suitably qualified and experienced auditors to perform this audit as under:

No	Name	Worked with	Experience
1.	**Dr. Y S Naik** DGFASLI- GOI trained Auditor & HSEMS Expert Ph.D – BBS, Post Graduate – Science, PDIS, NEBOSH- NGC from UK, Lead Auditor- OHSAS 18001, Dip. in Environment & Pollution Control, NEBOSH Approved Tutor, BBS Lead Trainer	Worked with Colouertex Ind Ltd. For More than 18 Years- Initial 5 Year in Production and 15 Years in HSE. Worked with L&T, Costain (UK) and PDO – a Shell Petroleum managed Company	>30 Years
2	**Mr. Bharat Suryavanshi** Electrical engineer, Electrical expert	Sigma Off Shore – UAE, Aluminum Project- UAE, Cyanide and Chemicals – Olpad, Petrofil and RIL- Surat	>35 Years
3.	**Mr. NITIN K PATEL** BSC Chemistry, PDIS, IRPM Lead auditor OHSAS, BBS Trainer, Safety Trainer	Fire and safety head in Kanoria chemicals and industries limited.	>30 Years
4.	**Mr. Kanti Thakkar** Chemical Engineer Safety Audit	Worked with M/s Meghmani industries, Deepak nitrate,Panoli intermediates	>30 years
5.	**Mr. Bhargav Vaidya** M.sc, PDIS, NEBOSH- HSW, ISO 18001 – Lead auditor	Worked with Sun Pharmaceutical Ltd, Colourtex India Ltd, Spectrum Dyes & chemicals	>10 Years

2.2 Management Representative

The officials of the auditee organization authorized to deal with us are as under:

Sr. No.	Name	Designation	Department
1.	Mr. Sarvesh Kumar Singh	Manager	MNZ Plant
2.	Mr. Shrey Shah	Asst. Manager	TMP Plant
3.	Shalin Gandhi	Manager	Engg. Dept. – Electrical,
4.	Mr. R S Pathak	Manager	Engg. Dept. – Electrical,
5.	Mr. Surendra Sharma	Manager	Engg. Dept. – Mechanical
6.	Mr. Umesh Patel	Manager	Engg. Dept. – Instruments
7.	Mr. Hardik Vania	Dy. Manager	U/G & A/G storage tanks
8.	Mr. Babubhai Vanjar	Sr. Manager	Warehouses
9.	Mr. Nitin Sachan	Manager	MPP
10.	Mr. Mitesh Thacker	Dy. Manager	ETP & Incinerator
11.	Mr. Chandra Bhan Singh	Manager	Utility
12.	Mr. Murali M Pandey	Security Officer	Security
13.	Mr. Rajendra Thakur	Manager	Legal - HSE
14.	Mr. Vinod Pandey	Dy. Manager	PCl3 with Cl2 shed
15.	Mr. Mithilesh Jha	Dy. Manager	MEE 3,4,5,6
16.	Dr. Kamlesh Patel	Manager	QC
17.	Canteen contract Supervisor	Canteen contract Supervisor	Canteen

3. OPENING MEETING

For the purpose of introduction of the members of the audit team and auditee, discussing the scope and methodology of the audit, informing the auditee about requirements of the necessary documents, records and other relevant information, an opening meeting was held on first day with the auditee.

Similarly, Auditee has also explained their processes, operations; safety management systems, Initiatives taken by individual departments etc. through presentation before Auditing of each plant.

In this opening meeting –

- Members of the auditor and auditee teams were introduced.
- Audit goals, objectives, plan and purpose of necessary documents and records were explained.
- A short summary of the methods and procedures was explained.
- Official communication links between the auditee and auditor was established.
- Availability of the resources and facilities needed by auditor was confirmed.
- A schedule of plant visits was fixed.
- The areas of audit were suggested and discussed.
- Date and time of the closing meeting and interim meetings were discussed.
- Queries of the management were replied.

Then after it was preceded as above, observations were recorded and were summarized with the recommendations in Chapter 7 & 8.

4. EXECUTIVE SUMMARY

1. Regulatory Safety audit was carried out to ensure robustness of existing industrial safety practices, occupational health and environmental protection within the factory premises. It is based on the statutory requirements under Factories Act/ Gujarat Factories Rule 1963 and IS 14489:1998. It was carried out during our visits on 12/07/2019 & 13/07/2019. It includes examination of relevant records, specific drive to evaluate electrical and process safety measures observation of questionnaires of IS 14489, Opening and Closing meetings with HOD, discussion with many plant people and workers and actual shop floor inspection of the plant and machinery.
2. Our audit approach is not only technical, but, techno -legal. Out Audit is considered as three-Dimensional Safety Audit i.e. Its covers Thorough Plant Inspection IS 14489 and EHS Related Legal Review. Engineering aspect is also seen through the law of the land i.e. our statutory; engineering and other requirements.

STRENGTH- Fire & Safety Management

Following are some of positive strength; we have observed during course of our safety audit.

- Company has ISO 9001, ISO 14001, OHSAS 18001 certifications.
- "Abstract of the Factories Act, 1948 and The Gujarat factories Rules, 1963" (Form No. 23) was displayed at near the main entrance of the factory.
- Positive and Cooperative Approach found at all level.
- Safety induction training for visitors.
- Safety devices, Interlocks, Alarms for processes.
- Lightning arrestors installed.
- Fire load calculation carried out. Wind sock installed.
- Onsite emergency plan available with regular mock drill and record maintained.
- MSDS of chemical were available
- OHC well maintained.
- Provided Fire Hydrant sprinklers to warehouse A, C & D in auto as well as manual mode
- Provided Fire Hydrant sprinklers to unloading stations of NH3 tanker, CS2 tanker and underground solvent storage tank yards.
- Reviewed fire hydrant sprinkler system of NH3 Bullets and modified.

- Installation fire alarm system with beam and smoke detectors in all the warehouses is u/p.
- Entire Fire Hydrant system reviewed and provided closed loops in entire fire hydrant network by providing isolation valves at different locations.
- Installed 2 No. of additional Main Fire Hydrant Pumps of 273 M3/ hr. each capacity, in addition to previous main electrical fire hydrant pump.
- Other improvements
- Installed CCTV cameras at 128 locations, all over the site.
- Made 2 years agreement with M/s. Dupont for implementation of Process safety Management System.
- Carried out QRA study through US based external expert agency.
- Provided double earthing to all the equipments and motors. Earthing testing being done periodically.
- Provided copper bonding to the solvent and flammable chemical transfer lines to prevent the fire hazard due to the generation of static charges
- Installed intrinsic safety earth relay system in the flammable material unloading systems.
- Use of mobile has been banned in the premises, except admin building and security gate.
- Issued Flame proof Walkie – Talkies to the plant personnel for communication purpose.
- Non compatible materials stored separately.
- The highly flammable chemical like CS2 is always stored under water. It is transferred to the plant under water pressure to avoid fire hazard.
- Installed lightening arrestors at different location to avoid fire hazard might be created due to lightening.
- 900 M3 dedicated fire hydrant water reservoir always maintained for emergency.

These good practices are always appreciable. We believe; they should be continuously followed.

Opportunity Avenues for Strengthening EHS

- As per Rule 70 A of The Gujarat Factories Rules (GFR), 1963,, A notice containing the names of the persons working within the precincts of the factory who are trained in first aid treatment and who are in charge of the first aid boxes or cupboards shall be posted in every factory at a conspicuous place and near each such box or cupboard. The notice shall also indicate work room where the said person shall be available. The name of the nearest hospital and its telephone number shall also be mentioned prominently in the said Notice.
- Max. permissible pressure limit to be marked on each pressure gauge.
- Siren code should be displayed in prominent manner and in local language in entire plant premises.
- All the employees should be given training for awareness of HIRA for routine and non routine activities

We do appreciate the best planning and constant co-operation from Mr. Himanshu Kumar Shukla, Mr. Santosh Pandey, Mr. Rajendra Thakur and their Team for speedy completion of this report.

Surat

14/07/2019

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NAIK AND ASSOCIATES SURAT

5. DOCUMENTS AND RECORDS EXAMINED

Following documents and records were required from the auditee for the purpose of investigation, necessary information and evidence to examine the Auditee's occupational Health & safety (OS&H) systems.

1. Annexure B & C of IS: 14489.
2. Statutory Forms under the Factories Act & Rules, documents required by the Chief Controller of Explosives – Vadodara and documents under the Environment Protection Act & Rules.
3. Formats designed by the auditee factory as their OH & S requirement e.g. work permit systems, safe operating procedures, specific formats etc.
4. Notices displayed in the factory premises.
5. Previous accident data and its investigations
6. Evidences collected from field visits, interrogation with the workers and supervisors, and information of physical observations, measurements and records etc.

6. PROCESS IN BRIEF

PROCESS DESCRIPTION:

1. PCl3 Manufacturing.

The following are the main steps for PCl3 production.

Phosphorus drums are transferred to melting tank containing water heated by sparging live steam into it. The melted phosphorus is transferred by water pressure through pump into phosphorus day tank which is installed in hot water tank.

Phosphorus is continuously fed into reactor filled with PCl3 at a controlled rate by water through pump.

Chlorine liquid from tonner is fed into chlorine vaporizers which are heated by steam. Chlorine gas at a controlled rate is fed to reactor via glass tube rotameter.

Phosphorus reacts with chlorine to form PCl3, which vaporized due to exothermic heat, vapour passes through packed column and condenser which is externally cooled by cooling water. The distilled PCl3 is transferred to storage tank and partly feed to the column as a reflux.

2. Glyphosate manufacturing.

Manufacturing of Phosphono Methyl Glycine (Glyphosate) :

Phosphono Methyl Imino Acetic Acid slurry is prepared by addition of ammonia solution and Ammonia salt of – Phosphono Methyl Imino Di Acetic Acid is further oxidized by molecular oxygen to Ammonia salt of Phoshono methyl Imino Acetic acid. Followed by pH adjustment by H_2SO_4 addition & followed by further drying.

3. Mancozeb Manufacturing.

Stage 1

Carbon Disulphide and Ethylene Diamine and Sodium Hydroxide are reacted in the presence of water to form the DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate (DBH).

Stage 2

DiSodium salt of Ethylene Bis Dithio Carbamate Hexahydrate is reacted with manganese sulphate to form manganese salt of Bis Dithio Carbamate.

Stage 3

The manganese salt further reacts with Zinc sulphate to convert into Mancozeb. Slurry is initially spray dried and subsequently vacuum dried for Mancozeb powder formulation.

4. TMP/TEP Manufacturing.

Trimethyl Phosphite is manufactured by reaction of Phosphorus Trichloride and Methanol and the liberated Hydrogen chloride is neutralized with Ammonia to make Ammonium Chloride.

Following are the basic steps of manufacturing Trimethyl Phosphite.

- Formation of Trimethyl Phosphite (Main Reaction) Methanol, Solvent with catalyst, and PCl3 and NH3 with equal molar proportion fed to reactor under stirring. The reaction is highly exothermic. The Phosphorus Trichloride reacts with Methanol to form TMP and HCl. Hydrochloric Acid immediately reacts with NH3 to form Ammonium Chloride as a by-product.
- The reaction mass is sent to washer where the slightly Ammoniacal Water is fed and stirred mixture is fed to separator.
- The mixture of organic layer containing TMP and Aqueous layer containing Ammonium Chloride gets separated. The organic layer containing TMP is sent to series of purification/distillation columns, while the aqueous layer containing NH4Cl is sent to NH4Cl recovery plant.
- The low boilers are stripped in the first distillation column while TMP along with the solvent sent for further purification to next distillation column.
- The distillation is carried out under vacuum where the pure 99% + Trimethyl Phosphate is getting distilled out from the top of the column while the solvent along with catalyst will be collected from the bottom of the column continuously and recycled back in first steps of reaction.

  The distilled product is stored under the nitrogen atmosphere in storage tank

5. Acephate Manufacturing.

DMPAT in MDC as solvent is 'Isomerized' by aid of Di methyl Sulphate (DMS) to give Methamidophos (MMP). This MMP is then further 'Acetylated' by Acetic Anhydride to yield Acephate. This reaction generates Acetic Acid, which is neutralized by Ammonia solution. The neutralized mass is then further extracted repeatedly with MDC. The aqueous layer generated contains 'Ammonium Acetate and is incinerated. The organic mass obtained is fed to MDC recover unit.

MDC is recovered by atmospheric and vacuum distillation. This recovered MDC is recycled back in the process. The residual mass of the distillation is carried forward for Acephate recovery by crystallization.

Ethyl Acetate is added to the residual mass and crystallized to get Acephate. The wet Acephate thus obtained from filtration, is further dried in rotary vacuum dryer.

The mother liquor obtained from filtration is further used to recover Ethyl Acetate under vacuum. The Ethyl Acetate recovered is recycled back in the process. The residue obtained after Ethyl Acetate recovery is incinerated.

6. Monocrotophos Manufacturing.

Monocrotophos is manufactured by a two stage reaction

In the first reaction Monomethyl Aceto-acetamide is chlorinated to Monochloro Methyl Aceto- acetamide Chloride (MMACl) in the presence of a suitable solvent. This reaction is carried out at low temperature. The chlorinated mass is neutralized and the solvent is distilled out. MMACl is then taken in an organic solvent and any moisture present in it is removed.Then MMACl is reacted with Trimethyl Phosphite (TMP) and crude Monocrotophos is obtained. From this crude material solvent and un-reacted TMP are removed and Technical grade Monocrotophos is obtained.

7. Propineb Manufacturing.

Stage 1

Carbon Disulphide and Propylene Diamine and Ammonia are reacted in the presence of water to form the Propylene Bis Dithio Carbamate Hexahydrate (PBH).

Stage 2

Propylene Bis Dithio Carbamate Hexahydrate is reacted with Zinc sulphate to form Zinc salt of Bis Dithio Carbamate (Propineb Slurry).

Stage 3

Propineb Slurry is initially spray dried and subsequently vacuum dried for Propineb powder formulation.

6.1 Products, Raw Materials, Hazards & Controls

List of products:

Sr. No.	Name of Product	Capacity [MT]
1.	**GROUP A** ,Mancozeb, mancozeb +Maneb, Zineb, or propineb	38000 MT/Year
2.	**GROUP B** Tri methyl phosphate, DETC, Thiamethoxam etc	3600 MT/Year
3.	**GROUP C** –DMTC	4796 MT/Year
4.	**GROUP D** Glyphosate	5000 MT/Year
5.	**GROUP E** Chlorpyriphos	5000 MT/Year
6.	**GROUP F** Acephate	7000 MT/Year
7.	**GROUP G** Monocrotophos/dicrotophos	7000 MT/Year
8.	**GROUP H** DDVP	6000 MT/Year
9.	**GROUP I** Phosphorous Trichloride	13000 MT/Year
10.	**GROUP J** Trimethyl phosphate	9240 MT/YEAR
11.	**GROUP K** Phosphorus sulphochloride	2000 Mt/Year
12.	**GROUP L** Methamidafos	0
13.	**GROUP M**	0
14.	**GROUP N** Troclopyr Butotyl Ester etc	933 Mt/Year
15.	**GROUP O** 5 amino 3- cyano 1- pyrazole, Fipronil etc	933 Mt/Year

List of Hazardous Raw Materials:

No	Name of the Raw Materials	Storage Capacity				
		Type of container	Capacity of container	No. of container	Total Quantity	Control Measures
1.	Phosphorous	Drums MS	200 Kgs.	200	50 MT	- Stored under water in drums. - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Enclosed system - PPE's available
2.	Chlorine	Toner	900 Kgs	153	137.7 MT	- PESO approved Separate storage shed. - In case of leakage, Alkali neutralizing scrubber system provided which can be connected to nozzles provided in the header piping to suck all leaking material. - Caustic pit available. - Online Chlorine detector available. - Chlorine kits available. - Periodic preventive maintenance - carried out. - Kept away from Phosphorus storage. - Periodic Amb. Air monitoring. - Regular medical checkups.
3.	Methanol	MS U/G Tank	60 KL	1	60 KL	Same as Ethanol #15
4.	Solvent C-IX	MS U/G Tank	20 MT	1	20 KL	Same as Ethanol #15
5.	Phosphorous Tri Chloride	MS Lead Bonding tanks (a/g)	50 MT	1	50 KL	- Enclosed system - Storage in separate area with dyke wall & RCC flooring - Regular medical checkups - First Aid facilities available - Kept away from water

No	Name of the Raw Materials	Storage Capacity				Control Measures
		Type of container	Capacity of container	No. of container	Total Quantity	
6.	Ammonia	MS horizontal bullet	20 KL	2	40 MT	- Separate storage with fencing - Scrubber provided - FHS with Sprinkler provided - Proper preventive maintenance - Daily checkup of flange joint ,etc - Air monitoring / ETP
7.	DMPAT	SS tank A/G	100 KL	1	100 MT	- Storage in a separate area with dykewall and RCC flooring - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Kept away from incompatibles - Labeling and marking - MSDS Available
8.	DMS	MS A/G tank	20 KL	1	20 KL	- Enclosed system - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Separate storage with dyke wall & - RCC flooring - Outside storage provided - Inert M.O.C. - FRP - Periodical Amb. Air Monitoring - PAM / Atropine antidotes available.
9.	MDC	MS tank u/g	20 KL	1	20 KL	- Underground storage - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping

No	Name of the Raw Materials	Storage Capacity				Control Measures
		Type of container	Capacity of container	No. of container	Total Quantity	
						earthed. - ETP / Air monitoring - PAM / Atropine Antidotes avl.
10.	Acetic Anhydride	SS tank a/g	40 KL	1	40 KL	- Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Separate storage with dyke - wall & RCC flooring - Outside storage provided - Corrosion resistant MOC-SS316 - Enclosed system - Flame arrestor & vent provided - Kept away from ethylene di amine, water, oxidizers & caustic soda storage - PAM / Atropine antidotes avl. - PPE's available
11.	Ethyl Acetate	SS U/g tank	10mt	2	20 MT	- Underground storage in a separate area - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - PAM / atropine antidotes available. - PPE's available
12.	EDA	SS a/g tank	100mt	1	100 MT	- Separate storage with dyke wall & RCC flooring - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping

No	Name of the Raw Materials	Storage Capacity				Control Measures
		Type of container	Capacity of container	No. of container	Total Quantity	
						earthed. - Corrosion resistant MOC SS316 - Enclosed system - Flame arrestor & vent provided - Kept away from acetic anhydride, - CS2; Hcl storage - PAM / Atropine antidotes available.
13.	Carbon Di Sulphide	MS a/g tank	60mt	2	120 MT	- Under positive water storage in a separate area with dyke wall - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Enclosed system - Kept away from strong oxidizers, organic amines - Periodical Amb. Air Monitoring - PAM / Atropine antidotes avl. - PPE's available
14.	Caustic Soda Lye	MS a/g tank	100mt	1	100Kl	- Neutralizing media available - First Aid facilities available - Separate storage with dyke wall
15.	Ethanol	MS tank u/g	20KL	2	40 KL	- Underground storage in a separate area - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Kept away from incompatibles - Ventilation provided - PPE's available
16.	Ethylene Dichloride	SS a/g tank	20KL	1	20 KL	- Fire extinguishers

No	Name of the Raw Materials	Storage Capacity				
		Type of container	Capacity of container	No. of container	Total Quantity	Control Measures
						provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed.
17.	Tri Methyl Phosphite	SS tank	40 MT	2	80 MT	- Storage in a separate area with dykewall and RCC flooring - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Kept away from incompatibles - First Aid facilities available.
18.	Hydrochloric ACID	HDPE	20Kl	1	20 KL	- Enclosed system - Neutralizing media available-vent connected to dilute caustic - Hydrant points provided - Separate storage with dyke wall & RCC flooring - Outside storage provided - Inert M.O.C. - FRP - ETP / Air monitoring - First Aid facilities available - PPE's available
19.	Sulphuric Acid	MS a/g	20 kl	1	20 KL	- Separated storage area with dyke wall and RCC flooring - Neutralizing media available - Kept away from incompatibles - Ventilation provided - ETP / Air monitoring - Regular Medical Checkup
20.	ZnSO4	MS a/g	50 KL	1	50 KL	- PPE's provided - Housekeeping

No	Name of the Raw Materials	Storage Capacity				Control Measures
		Type of container	Capacity of container	No. of container	Total Quantity	
						- Regular medical checkups
21.	MnSO4	SS a/g	100	1	100 KL	- PPE's provided - Housekeeping carried out - Regular Medical Checkup - Underground storage - Fire extinguishers provided - Hydrant points provided - Flameproof electrical eqpt. - Vessel & piping earthed. - Neutralizing media available - Kept away from Sulfuric Acid, - Methylene dichloride storage - Periodic Amb. Air monitoring
22.	Toluene	MS U/g	20	1	20 KL	- Same as Ethanol #15

6.2 Storage – Hazards & Controls

- Main storage of product and raw materials as mentioned in above 6.1 are hazardous chemicals. Those chemicals are flammable, corrosive and toxic chemical. Its required utmost care while handling and storage particularly to avert Fire and Explosion hazards. Flameproof electrical installation as per Hazard area classification, Earthing and bonding, Maintenance under PTW system, No smoking zone, spark proof tools etc. are highly essential and needs to be strictly complied with for area where Flammables are handled / processed. In case of insufficient ventilation, wear suitable respiratory equipment. Canister type mask. Avoid contact with skin and eyes. Keep away from incompatibles materials, combustible materials and other inorganic materials. Keep tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Store under incensed and fenced area.

6.3 Operational hazards and control

Sr. No.	Hazardous Process			Hazard Details		Env. Pollution mitigation measures
	Name	Materials Involved		Type @ possible	Control Measures	
		Name	Qty.(Kg)			
1	Chlorination of Phosphorus for PCl_3 Mfg.	Phosphorus Chlorine PCl_3 in reactor	300/hr 300/hr 2400	• Fire in P4 • Exothermic • Pollution • Health • Spillage of PCL3 • Chlorine leakage	• Jacket cooling • Temp. recorders • High level & low level alarm for PCl3 & P4 level • Scrubber for neutralization • Fire extinguishers provided • Hydrant points provided • Flameproof electrical eqpt. • Vessel & piping earthed. • Enclosed system • Vent provided • First Aid facilities avl. • PPE's available	- Collect fire water in ETP through drainage. Try to absorb chlorine in chlorine scrubber - Clean up area and transfer solid to solid waste incineration.
2	Etherification Reaction for TMP mfg.	PCl_3 Methanol	1100/ hr 1100/ hr	• Fire in Methanol • Explosion • Exothermic • Pollution • Health	• Jacket cooling • External HE for cooling • Feed flow control loop for PCl3 & Methanol • Temp. recorders with high temp. alarm • Scrubber for neutralization • Fire extinguishers provided • Hydrant points provided • Flameproof electrical eqpt. • Vessel & piping earthed. • Enclosed system • Flame arrestor & vent provided • PAM/ Atropine antidotes avl. PPE's available	Collect fire water in ETP through drainage.

Sr. No.	Hazardous Process			Hazard Details		Env. Pollution mitigation measures
	Name	Materials Involved		Type @ possible	Control Measures	
		Name	Qty.(Kg)			
3	Distillation for TMP mfg.	TMP Solvent	1000/hr	• Explosion • Health	• Closed loop vacuum control system • Closed loop feed flow control system. • Temp. control loop • Centralized automatic control room • Fire extinguishers provided • Hydrant points provided • Flameproof electrical eqpt. • Vessel & piping earthed. • PAM/ Atropine antidotes available. • PPE's available	• Try to maintain vacuum in system by ejector running.
4	Isomerisation & Acetylation for Acephate mfg.	DMTC Acid Dimethyl Sulphate Acetic Anhydride	3000 300 2500	• Explosion • Exothermic • Pollution • Health • Spillage of material	• Closed loop for control of cooling water temp. • High temp. feed cut off & alarm • Rupture disk • Pressure indicator • Fire extinguishers provided • Hydrant points provided • Flameproof electrical eqpt. • Vessel & piping earthed. • PAM/ Atropine antidotes avl. • PPE's available	Collect solid for incineration
5	Complex salt formation reaction for Mancozeb mfg.	Carbon Disulphide EDA Caustic Lye 47% Water	2709 2070 3497 1000	• Fire of CS2 • Explosion • Exothermic • Pollution • Health	Fully Automatic PLC controlled process Process operated under positive pressure of 100-150 mm of Water Column. -30°C chilled brine circulation through reactor limpet coil & inner coil Feed & flow rate control closed loop for CS2 & EDA	Try to absorb fumes in ventury scrubber. Collect fire water in ETP through drain.

Sr. No.	Hazardous Process			Hazard Details		Env. Pollution mitigation measures
	Name	Materials Involved		Type @ possible	Control Measures	
		Name	Qty.(Kg)			
					Temp. control closed loop system Pressure indicator Fire extinguishers provided Hydrant points provided Flameproof electrical eqpt. Vessel & piping earthed. PAM/Atropine antidotes avl. PPE's available	

6.4 Other Hazards & Controls

Loading and unloading of materials, handling of materials, working near D.G. Sets, pumps and motors, transmission and transportation machinery etc. with use of utilities, contribute variety of hazards like fire, Explosion, Noise induce hearing Loss, and physical hazards due to unguarded machineries, hot burns etc. Necessary control measures depending on the type of hazards are adequately provided and recommend to be maintained in good working condition. Their proper maintenance and safe working procedures are available & are expected to be followed on rigorous basis.

Information regarding trade waste generation and disposal are to be maintained by EHS department as per GPCB guideline.

When entire Plant will be fully operational, following Hazardous waste will be generated – It's shown in GPCB Consent.

Sr. No	Waste	Quantity (Ton/Annum)	Schedule-Category	Facility
1.	ETP Sludge	2640MT/year	35.3	Collection, storage transportation, disposal at TSDF facility
2.	Discarded container/ bags	24000 Nos/Year	33.3	Collection, storage transportation, disposal by selling to GPCB approved vendors
3.	Oil & Grease Skimming residues	32.40 MT/Yr	35.4	Collection, storage transportation, disposal at common Hazardous waste incinerator facility of SEPL Kutch
4.	Used oil	0.30 Mt/Yr	5.1	Collection, storage transportation, disposal by selling to registered re- processors
5.	Spent carbon	257.40 Mt/Yr	36.2	Collection, storage transportation, disposal at TSDF site.
6.	Chemical sludge containing residue pesticides	2145 MT/Yr	29.2	Collection, storage transportation, disposal at TSDF site

Sr. No	Waste	Quantity (Ton/Annum)	Schedule-Category	Facility
7.	Ash from ncinerator of Hazardous waste flue gas cleaning residues	4755 MT/Yr	37.2	Collection, storage transportation, disposal at TSDF site
8.	Sludge from wet scrubber	0.240 MT/Year	37.1	Collection, storage transportation, disposal at TSDF site
9.	Spent HCL 30% Acetic Acid	24588 MT/Yr 7000 MT/Year	29.6	Collection, storage transportation, disposal by selling at actual registered re users through manifest system only
10	Organic Residue	2032 MT/ Yr	29.1	Collection, storage, disposal by incineration within premises,
11	Salts from MEE	4570.44 MT /Yr	37.3	Storage of ash in solid waste storage area & dispose off to TSDF site
12	Spent solvents i.e MDC,EDC, EA,CPN etc	1955 MT/Yr	29.4	Collection, storage transportation, disposal by selling to authorized unit
13	Date expired and off specification on residues	50 MT/Year	29.3	Collection, storage, transportation, disposal through house incineration.

7. APPLICABLE LAWS & STATUOTORY COMPLIANCE

7.1 Applicability of The Safety Laws

Looking to the above Raw materials; products and processes, their storage quantities and process parameters, applicability of some safety laws are discussed below: -

7.1.1 The Factories Act, 1948 and The Gujarat Factories Rules, 1963

The manufacturing process of this factory falls under Item No.17,18,27 & 29 of Schedule 1 of the Factories Act, 1948 and nature of the manufacturing process falls u/s 2(cb). Therefore, the factory carries out "Hazardous process". Therefore, provisions of Chapter 4-A of the Factories Act- 1948 & Rules 68K to 68Y of the Gujarat Factories Rules 1963 are applicable.

Therefore, following provisions are applicable and should always be followed.

- Disclosure of information to workers (Safety Booklet / manual in Local Language to be published).
- Disclosure of information to the Chief Inspector.
- Review of the information furnished to workers, etc.
- Compulsory disclosure of information of dangers due to hazardous chemicals and their measures to general public in vicinity in local language
- Confidentiality of information- to be maintained
- Health and Safety Policy
- Information on industrial waste
- Collection, Development and dissemination of information
- Making available Health Records to workers
- Qualified Supervisors to supervise handling of Haz Substances.
- Medical Examination (Factory Medical Officer)
- Occupational Health Center
- Emergency Vehicle
- Decontamination facilities
- Compliance with guidelines issued by DISH
- Formation and functioning of Safety Committee

Hence, it is to be ensured that above requirements to be fulfilled.

Following chemicals are used / evolved in this factory and their prescribed TLV and STEL values under Schedule 2 of the Factories Act, 1948 are as under:

No	Chemical	TLV	STEL
1.	HCL	5ppm	--
2.	PCl3	0.2 ppm/ 1.5 mg/m3.	0.5 ppm / 3 mg/m3
3.	NaOH	2mg/m2	--
4.	Phosphoric Acid	1 mg/m3	3 mg/m3
5.	Phosphorous (Yellow)	0.1 mg/m3	---
6.	Dichlorvos (DDVP) – Skin	0.1 ppm / 1 mg/m3	
7	Sulphuric Acid	1 mg/m3	---
8.	Ammonia	25 ppm / 18 mg/m3.	35 ppm / 27 mg/m3
9.	Acetic Acid	10 ppm / 25 mg/m3	15 ppm / 37 mg/m3
10.	Carbon Disulphide – Skin	10 ppm / 30 mg/m3	30 ppm
11.	Chlorine	1 ppm / 3 mg/m3	3 ppm / 9 mg/m3
12.	Ethyl Acetate	400 ppm / 1400 mg/m3	---
13.	Ethyl Alcohol	1000 ppm / 1900 mg/m3	---
14.	Hydrogen Sulphide	10 ppm / 14 mg/m3	15 ppm / 21 mg/m3
15.	Methyl Alcohol (Methanol) – Skin	200 ppm / 260 mg/m3	250 ppm / 310 m g/m3
16.	Diesel	800 ppm	--
17.	Furnace Oil	0.2mg/m^2	--

* TLVs from ACGIH Booklet 2000 / Schedule –II of the Factory Act 1948.// Internet

Above permissible limits should not be exceeded in work environment (breathing zone) when plant is in operation / commissioned and where workers are working. Form no. 37, u/r 12-B, GFR- 1963, should be maintained in respect of monitoring of above chemicals in working environment in the factory. Necessary equipment to take samples of exposures of above chemicals (in breathing zone) and to measure their values (as stated above) should be utilized and maintained in form No 37.

Following chemicals handled and stored in this factory are listed in part 2 of Sch. 1 of Rule 68-J of The Gujarat Factories Rules, 1963.

No.	Chemical
1.	Acetic anhydride
2.	Ammonia
3.	CS2
4.	Caustic Soda Lye
5.	Chlorine
6.	Ethanol
7.	Ethyl acetate
8.	Ethylene Diamine
9.	HCl
10.	Manganese Sulphate
11.	Methanol
12.	Oxygen
13.	Yellow phosphorus
14.	H2SO4
15.	Zinc Sulphate

Therefore, it can be said that the factory uses **'Hazardous Chemicals'.**

The storage quantity of **Chlorine (137.7 MT) and CS2 (120 MT)** is **more** than the threshold quantity mentioned in Schedule 3 of Rules 68-J (GFR -1963). i.e.

Therefore, this factory is classified as a **MAH (Major Accident Hazard)** Installation, Therefore, following provisions should always be followed.

1. Provisions pertaining to development of MSDS and their information to workers
2. Labelling of containers of hazardous chemicals,
3. Identification of major accident hazards and adequate steps to prevent major accident hazards,
4. Steps to limit their consequences to persons and environment and to provide information, training and equipment including antidotes necessary to ensure their safety and health,
5. Approval and notification of sites,

6. Notification of sites, in case of any change in approved site,
7. Preparation of On-site Emergency Plan as per prescribed schedule and giving information for Off-site Emergency Plan to the concerned authorities,
8. Information and safety measures (Dos and don'ts') to public likely to be affected.
9. Updating of the site notification.
10. Safety audit shall be carried out once in a year.
11. Safety Report as per prescribed schedule to be made / updated and submitted to Authority.

1. General provisions of the Factories Act 1948 and the Gujarat Factories Rules 1963 will be applicable. Attention is drawn towards sections 7-A, 11 to 75, 78 to 82, 87 to 89 and 108 to 111-A and Rules there under. Rules 66 and 66-A and Schedules 12, 14, 19, 23 and 24 u/r 102 are to be strictly followed.

- Factory has taken valid **license no-19956** which is valid up to **31/12/2019.**
- Max. No. of workers to be employed on any day during the year: **1000**
- Max. installed power in B.H.P. on any day during the year: **5000**
- Factory Plan (for revised and Extension) #DISH/ F-Plan/ 2017/ 1213 Dated- 3-8-217
- Stability Certificate KAN/STB/247-17 in form No- 1(A) for above mentioned Factory Plan has been taken and was found valid.

7.1.2 The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, (As amended in 2000)

Following chemicals used in this factory are listed in part 2 of Sch. 1 of MSIHC Rules:

No	Chemical	Storage Quantity
1.	Acetic anhydride	30 MT
2.	Ammonia	20 MT
3.	CS2	120 MT
4.	NaOH lye	100 MT
5.	Chlorine	137.7 MT
6.	Dimethyl Sulphate	30 MT
7.	Ethanol	40 KL

No	Chemical	Storage Quantity
8.	Ethyl acetate	20 KL
9.	Ethylene Diamine	100 MT
10.	HCl 30%	20MT
11.	Manganese Sulphate	100 MT
12.	Methanol	60 KL
13.	Methylene Dichloride	20 MT
14.	Yellow phosphorus	50 MT
15.	H2SO4	30 MT
16.	Zinc Sulphate	50 MT

Therefore, it can be said that the factory uses **'Hazardous Chemicals'.**

In above list; The storage quantity of Chlorine (137.7 MT) and CS2 (120 MT) is **more** than the threshold quantity mentioned in the said Rules. Therefore, this factory is classified as a **MAH (Major Accident Hazard)** factory.

Therefore, Rule 4, 5, 7 to 9 & 13 to 15 of MSIHC Rules are applicable and information in Schedule 2 to 12 should be kept updated and submitted to the authorities as and when required.

7.1.3 The Petroleum Act, 1934 and the Petroleum Rules, 2002

Because of the storage and use of Class A petroleum product, Petroleum Act, 1934 and the Petroleum Rules, 2002 are applicable. Therefore, statutory provisions mentioned in this Act and Rules should always be followed.

Company had taken for license under this rule – Details are as shown below.

- License No. P/WC/GJ/15/2571(P10887) for the storage of 160 KL of Petroleum Class A, 20 KL of Petroleum Class B & 40 KL of Petroleum Class C in underground storage tanks valid up to 31/12/2022.
- License No. P/HQ/GJ/15/1365(P10890) for the storage of 60 KL of Petroleum Class B & 196 KL of Petroleum Class C in storage tanks above ground valid up to 31/12/2022

7.1.4 The Gas Cylinder Rules, 2016

Looking to the use / storage of various compressed gas cylinder in premises, this rule is applicable. **Hence** following provision should always be followed.

- License No. G/WC/CJ/06/909/ (G14102) for 153 nos. Cl2 Cylinders. License valid up to 30.09.2028

Cylinders shall be stored in a cool, dry, well ventilated place under cover, away from boilers, open flames, steam pipes or any potential sources of heat and such place of storage shall be easily accessible.

1. The storage room or shed shall be of fire resistant construction.
2. Thin wall cylinders such as liquefied petroleum gas cylinders and dissolved gas cylinders shall not be stacked in a horizontal position.
3. Cylinders containing flammable gases and toxic gases shall be kept separated from each other and from cylinders containing other types of gases by an adequate distance or by a suitable partition wall.
4. Cylinders shall not be stored under conditions, which will cause them to corrode.
5. Cylinders shall not be stored along with any combustible material.
6. Empty cylinders shall be segregated from the filled ones and care shall be taken that all the valves are tightly shut. Almost all cares shall be taken for Empty cylinder as well.

7.1.5 The Chemical Accidents (EPPR) Rules, 1996

Looking to the quantities of the hazardous chemicals more than the threshold quantities mentioned in above para, these Rules are applicable. Therefore, the factory has become a member of the Local Crisis Group and District Crisis Group of the Off-site Emergency Plan made for the local (industrial pocket) area and the Bharuch district respectively. It should aid, assist and facilitate the functioning of these groups. It is learnt that the district authorities have included the name of this factory for this purpose.

7.1.6 The Environmental law

Consolidated Consent and Authorization AWH- 84402 is valid up to 30/03/2021 from the GPCB with respect of applicability of the Water Act, Air Act, Environment (Protection) Act and Rules and Hazardous Waste Management

Rules for the safe disposal of liquid, gaseous and solid wastes. GPCB authorities visit and monitor the compliance of statutory provisions.

7.1.7 The Public Liability Insurance Act, 1991 and Rules, 1991

Company has taken a valid pubic liability insurance policy from the New India Assurance Co. Ltd Policy no. is 62030036193300000001 which was found valid .

7.1.8 The Static and Mobile Pressure Vessels (Unfired) Rules, 1981

Because of the storage of liquid Ammonia and liquid Chlorine; the SMPV (U) Rules are applicable. Therefore, these statutory provisions should be strictly followed.

- For Ammonia (NH3) storage License No. S/HO/GJ/03/1320 (S 38839) is found valid till 30/09/2020 from Chief Controller of Explosives, Nagpur.

7.1.9 State Prohibition & Excise Rules and Poison License under poison Act 1919

- MA-1 License No. 52/2019-2020. Licensing authority: District Magistrate. Renewed up to 31/03/2020
- License no. 5/2019-2020 for manufacture Ammonium chloride (AC-1) valid up to 31- 03-2020.
- License no. 09/2019-2020 to store Ammonium Chloride valid up to 31-03-2020

7.1.10 The Insecticides Act and Rules-1968.

For manufacturing pesticides and insecticides, License No. 407 Dated 18-02-1998 is found valid up from Dy. Director of Agriculture, Gandhinagar, and Gujarat.

- Statutory provisions of the Insecticides Act and Rules are applicable and they should be strictly followed.

- Schedule 15 (Manufacturing & Manipulation of Dangerous Pesticides) u/r 102 of the Gujarat Factories Rules 1963 is also applicable and it should be implemented for the purpose of Safety and Health of the Workers.

7.1.11 The MV Act, 1988 and the Central MV Rules, 1989

Following requirement needs to be fulfilled for all the vehicle own/hired by company

1. Because of the transport vehicles owned, hired and run by the factory, provisions of the Motor Vehicles Act and Rules are applicable. Necessary RC books, driving licenses and insurance policies are obtained. They should be kept renewed.
2. No driver shall be allowed or required to drive any vehicle without appropriate driving license.
3. All drivers to carry hazardous chemicals should be trained as required by Rule 135 of the Central Motor Vehicles Rules 1989.
4. Compliance of Rules 129 to 137 of the Central Motor Vehicles Rules 1989 is required in respect of transportation of hazardous chemicals by road tankers. This includes displaying of prescribed class labels, techno-graph fitted in motor vehicle, use of spark arrestor, responsibilities of the consignor, transporter and driver, emergency information panel on goods carriage, training to driver and reporting of accident by the driver etc.
5. Valid insurance policy should be maintained for all vehicles.

7.1.12 Following are the General legal requirements as per The Factories Act 1948 and as per The Gujarat Factories Rules, 1963 shall be applicable:

- **General Recommendations for Legal Requirements:**

1. The details of pre-employment and periodic medical (once in six months) carried out and shall be recorded in Register in Form No. 32 and Fitness Certificate in Form No. 33 shall be recorded.- We have Observed that it was maintained well.
2. Occupational Health Centre (OHC) shall be provided with 1 nos. of Full time Medical Officer, OHC having at least two room with minimum floor area of 15 sq. meter with floor and walls made of smooth and impervious surface and adequate illumination and ventilation as well as equipment.- Its observed that its maintained adequately.
3. In OHC, there shall be with sufficient staff.- Its observed that its maintained adequately operational.
4. The provision of First Aid box, readily accessible means of water for washing by workers, a sufficient number of eye wash bottles filled with distilled water or

suitable liquids, kept in boxes or cupboards conveniently situated and dearly indicated by distinctive sign with visible condition which shall be made to meet emergency. First aider name shall be displayed at prominent location, preferably near first aid box. – Maintained Adequately

5. All Lifting tools and tackle and pressure vessel with Plant to be Inspected and tested by DISH Approved Competent Person. – Following are the sample Records of all these ITP.

A. Lifting tool and tackles

STATUS FOR STATUTORY REQUIREMENTS - TESTING OF HOIST, SLINGS AND CHAIN PULLEY BLOCKS FORM NO : 10							
SR NO	PLANT	EQUIPMENT DESCRIPTION	LOCATION	CAPACITY	INSP. DT	DUE DATE	FORM NO.
		FORM NO.10 LIFTING EQUIPMENT					
1	CIL-35	Safex WRH Fitted On MONORAIL,1st Floor Middel	GLP PLANT	1 TON	15/01/19	14/01/20	10
2	CIL-36	Safex WRH Fitted On MONORAIL,1st Floor Middel	GLP PLANT	1 TON	15/01/19	14/01/20	10
3	CIL-37	Safex Make WRH Fitted on EOT Crain.	Chlorine Shed(PCL3)	2 TON	15/01/19	14/01/20	10
4	CIL-38	Safex Make WRH Fitted on EOT Crain, SRL No 9091	Chlorine Shed(MCP)	2 TON	16/01/19	15/01/20	10
5	CIL-39	Safex WRH Fitted on Monorail ,G.Floor	PCL3 PLANT	1 TON	16/01/19	15/01/20	10
6	CIL-40	Safex Make Wire Rope Hoist Fitted on Monorail	GLP PLANT	2 TON	16/01/19	15/01/20	10
7	CIL-41	Morris Make CHAIN PULLY BLOCK 1T	MAIN.DEPT	1 TON	17/01/19	16/01/20	10
8	CIL-42	Morris Make CHAIN PULLY BLOCK 1T	ATOMISER(MNZ-A)	1 TON	17/01/19	16/01/20	10
9	CIL-43	Morris Make CHAIN PULLY BLOCK – SR.No.MH-114831	ATOMISER(MNZ-B)	1 TON	17/01/19	16/01/20	10
10	CIL-44	INDEF make CHAIN PULLY BLOCK - SRL No TG 13293	MAIN.DEPT	2 TON	18/01/19	17/01/20	10
11	CIL-45	Goods Lift G + 3 Floor, Sr. No. 3704	MCP Plant	1.5 TON	18/01/19	17/07/20	9
12	CIL-68	Morris Make CHAIN PULLY BLOCK – SR.No.MH-114832	MAIN.DEPT	1 TON	19/01/19	18/01/20	10
13	CIL-69	Indef Make CHAIN PULLY BLOCK – SR.No.K1 516025556	Utility	1 TON	19/01/19	18/01/20	10
14	CIL-71	CHAIN SLING 2 LEG, Make INKKA SRL NO 2110	CL2 SHED (PCL3)	6 TON	24/01/19	23/01/20	10
15	CIL-	CHAIN SLING 2 LEG, Make INKKA SRL	CL2 SHED	6 TON	24/01/	23/01/2	10

STATUS FOR STATUTORY REQUIREMENTS - TESTING OF HOIST, SLINGS AND CHAIN PULLEY BLOCKS

FORM NO.: 10

SR NO	PLANT	EQUIPMENT DESCRIPTION	LOCATION	CAPACITY	INSP. DT	DUE DATE	FORM NO.
	72	NO 2120	(MCP)		19	0	
16	CIL-73	Indef Make CHAIN PULLY BLOCK – SR.No.K1718006125	MAINT DEPTT	1 TON	21/01/19	20/01/20	10
17	CIL-74	Indef Make CHAIN PULLY BLOCK – SR.No.K1718006515	GLP - Candle Filter	2 TON	21/01/19	20/01/20	10
18	CIL-75	P4 drum Lifting Clamp No. A,	PCl3 Plant	400 Kg	22/01/19	21/01/20	10
19	CIL-76	P4 drum Lifting Clamp No. B,	PCl3 Plant	400 Kg	22/01/19	21/01/20	10
20	CIL-77	Chlorine Tonner Lifting Beam	Chlorine Shed (PCl3)	1.5 TON	22/01/19	21/01/20	10
21	CIL-78	Chlorine Tonner Lifting Beam	Chlorine Shed (MCP)	1.5 TON	22/01/19	21/01/20	10

B. Pressure vessel and Plant

COROMANDEL INTERNATIONAL LIMITED

STATUS OF STATUTORY EQUIPMENT - TESTING OF PRESSURE VESSEL

FORM NO .11

Sno	FORM REF.NO.	EQUIPMENT DESCRIPTION	TAG NO	LOCATION	CAPACITY	INSP. DATE	DUE DATE	FORM NO.
1	CIL-01	M.S.Vertical Main Air Receiver T-001, Sr. No.394	T-1801 A	Utility Area	2500 Ltrs	15-01.2019	14/07/19	11
2	CIL-02	M.S.Vertical Dry Air Receiver, T-002	T-1800 A	Utility Area	10000 Ltrs	15-01.2019	14/07/19	11
3	CIL-03	SS 316 Agitated Nutch Filter	5104 A	New MNZ Plant	14 KL	15-01.2019	14/07/19	11
4	CIL-04	M.S.Hor .Ammonia Receiver Booster A System	T-028	Utility Area	3250 Ltrs	15-01.2019	14/07/19	11
5	CIL-05	M.S.Vertical N2 Buffer Tank WDG-N2 Plant	T-301	Utility Area	1000 Ltrs	15-01.2019	14/07/19	11
6	CIL-06	SS 316 Agitated Nutch Filter(5004 B)	5104 B	New MNZ Plant	5.5 KL	16/01/19	15/07/19	11
7	CIL-07	MS Vertical Nitrogen Storage Tank -WDG	T-1700 E	Utility Area, N2 Plant	13000 Ltrs	16/01/19	15/07/19	11

COROMANDEL INTERNATIONAL LIMITED

STATUS OF STATUTORY EQUIPMENT - TESTING OF PRESSURE VESSEL

8	CIL-08	MS Vertical Nitrogen Storage Tank -DETC Plant	T-1700 D	Utility Area	10000 Ltrs	16/01/19	15/07/19	11
9	CIL-09	MS Horizontal Ammonia Receiver MCP Booster-B	T-029	Utility Area	1850 Ltrs	16/01/19	15/07/19	11
10	CIL-10	SS 316 Agitated Nutch Filter(5004 C)	5104 C	New MNZ Plant	5.5 KL	16/01/19	15/07/19	11
11	CIL-11	MSFRP Agitated Nutch Filter	3106 A	GLP PLANT	15 KL	17/01/19	16/07/19	11
12	CIL-12	MS HOR Ammonia Receiver 130 TR BRINE		Utility Area	500 X 6000	17/01/19	16/07/19	11
13	CIL-13							11
14	CIL-14	M.S.Vertical Nitrogen Buffer/Surge Tank	T-013	Old-MNZ	1700 Ltrs	17/01/19	16/07/19	11
15	CIL-15	M.S.Vertical Nitrogen Receiver Tank (LP)	T-012	Old-MNZ	10000 Ltrs	17/01/19	16/07/19	11
16	CIL-16	M.S.Vertical Air Receiver Tank		Plot No 735	3000 Ltrs	17/01/19	16/07/19	11
17	CIL-17	MS Vertical Air Tank MNZ	T-1704 A	Utility Area	1.0 M3	17/01/19	16/07/19	11
18	CIL-18	SS 316 Agitated Nutch Filter	7208 A	ACP	8KL	18/01/19	17/07/19	11
19	CIL-19	MSPVDF Agitated Nutch Filter	3106 A	GLP PLANT	15 KL	18/01/19	17/07/19	11
20	CIL-20	MSFRP Agitated Nutch Filter	3106 C	GLP PLANT	15 KL	18/01/19	17/07/19	11
21	CIL-21	SS 316 Agitated Nutch Filter	7208 B	ACP	8 KL	18/01/19	17/07/19	11
22	CIL-22	MS Vertical Air Receiver Sr No .PF -3729	T-1803 A	NEW MNZ PLANT Utility Area	5000 ltrs	18/01/19	17/07/19	11
23	CIL-23	Vertical Nitrogen Buffer Tank		300 NM3N2 Plant Utility	2 M3	18/01/19	17/07/19	11
24	CIL-24	Vertical Air Receiver (40NM3 N2 plant)	T-1703 A	Utility Area	1.5 m3	19/01/19	18/07/19	11
25	CIL-25	REMOVED						
26	CIL-26	Vertical L.P N2 Storage Tank,Job No.08175	T-1700 F	New MNZ And DBH Plant	8 KL	19/01/19	18/07/19	11
27	CIL-27	Horizontal H.P.N2 Storage Tank NO.1(Booster)	CP-1701 B	Utility Area Outside MNZ & DBH Plant	500 Ltrs	19/01/19	18/07/19	11
28	CIL-28	Horizontal H.P.N2 Storage Tank NO.2(Booster)	AC-1701 A	Utility Area Outside MNZ & DBH Plant	500 Ltrs	19/01/19	18/07/19	11
29	CIL-29	Vertical H.P.N2 Storage Tank ,	T-1700 G	Utility Area Outside MNZ & DBH Plant	1000 LTR	19/01/19	18/07/19	11
30	CIL-30	Vertical Air Receiver		Old MNZ Plant	9 m3	19/01/19	18/07/19	11
31	CIL-31	Vertical Air Receiver for ACP plant	T-1705 A	Out side MCP plant	10 KL	20/01/19	19/07/19	11

COROMANDEL INTERNATIONAL LIMITED

STATUS OF STATUTORY EQUIPMENT - TESTING OF PRESSURE VESSEL

32	CIL-32	SS 316 OXIDATION REACTOR	3103 A	GLP PLANT	10KL	21/12/18	20/06/19	11
33	CIL-33	SS 316 OXIDATION REACTOR	3103 B	GLP PLANT	10KL	21/12/18	20/06/19	11
34	CIL-34	Vertical Air Receiver		300 NM3N2 Plant Utility	5 M3	20/01/19	19/07/19	11
35	CIL-46	SS 316 Reactor R- 7205 A with Jacket	R-7205 A	ACP Plant.	10 KL	20/01/19	19/07/19	11
36	CIL-47	SS 316 Reactor R- 7206 A with Jacket	R-7206 A	ACP Plant.	5 KL	20/01/19	19/07/19	11
37	CIL-48	SS 316 Reactor R- 7211 B with Jacket	R-7211 B	ACP Plant.	5 KL	20/01/19	19/07/19	11
38	CIL-49	SS 316 Reactor R- 7212 A with Jacket	R-7212 A	ACP Plant.	5 KL	21/01/19	20/07/19	11
39	CIL-50	SS 316 Reactor R- 7215 A with Jacket	R-7215 A	ACP Plant.	12 KL	21/01/19	20/07/19	11
40	CIL-51	MS Glass Line Reactor R-7213 with MS Jacket	R-7213	ACP Plant.	6.3 KL	21/01/19	20/07/19	11
41	CIL-52	MS Glass Line Reactor R-7305 A with MS Jacket	R-7305 A	MCP Plant.	12.5 KL	21/01/19	20/07/19	11
42	CIL-53	MS Glass Line Reactor R-7309 A with MS Jacket	R-7309 A	MCP Plant.	3 KL	21/01/19	20/07/19	11
43	CIL-54	MS Glass Line Reactor R-7304 A with MS Jacket	R-7304 A	MCP Plant.	12.5 KL	22/01/19	21/07/19	11
44	CIL-55	MS PCL3 Reactor R-101 B with MS Jacket	R-101 B	PCL 3 Plant	10 KL	22/01/19	21/07/19	11
45	CIL-56	MS HORIZONTAL Ammonia Receiver ,150 TR		Utility Area	650X6000	22/01/19	21/07/19	11
46	CIL-57	Horizontal H.P.N2 Storage Tank NO.3(Booster)		Utility Area Outside MNZ & DBH Plant	500 Ltrs	22/01/19	21/07/19	11
47	CIL-58	Vertical N2 Storage Tank (HP)	T-1705 B	ACP Plant Outside	10 KL	22/01/19	21/07/19	11
48	CIL-59	Vertical N2 Buffer Tank (200 Nm3 N2 Plant)		Utility Area	1300X3000	22/01/19	21/07/19	11
49	CIL-60	Vertical Air Receiver (200 Nm3 N2 Plant)		Utility Area	700X2000	23/01/19	22/07/19	11
50	CIL-61	Vertical Air Receiver		Utility Area(Nr. T-1803 A)	1000X2600	23/01/19	22/07/19	11
51	CIL-62	Vertical N2 Storage Tank (HP)		Utility Area(Nr. T-1700 D)	10 KL	23/01/19	22/07/19	11
52	CIL-63	SS 316 Agitated Nutch Filter		MNZ-B PLANT	10KL	23/01/19	22/07/19	11
53	CIL-64	SS 316 Agitated Nutch Filter	7208 C	ACP Plant.	4 KL	23/01/19	22/07/19	11
54	CIL-65	MS Reactor R-101 A (PCL3) with MS Jacket	R-101 A	PCL3 Plant	10 KL	23/01/19	22/07/19	11
55	CIL-66	SS 316 Agitated Nutch Filter	ANF-	Plant MMZ-B (5 mtrs)	10 KL	24/01/1	23/07/	11

COROMANDEL INTERNATIONAL LIMITED								
STATUS OF STATUTORY EQUIPMENT - TESTING OF PRESSURE VESSEL								
			5304 A			9	19	
56	CIL-67	SS 316 Agitated Nutch Filter	ANF-5304 B	Plant MMZ-B (5 mtrs)	10 KL	24/01/19	23/07/19	11

7. AUDIT OBSERVATIONS AND RECOMMANDATIONS

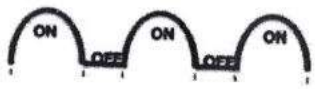
A. Good Practices observed during Audit

- Company has ISO 9001, ISO 14001, OHSAS 18001 certifications.
- "Abstract of the Factories Act, 1948 and The Gujarat factories Rules, 1963" (Form No. 23) was displayed at near the main entrance of the factory.
- Positive and Cooperative Approach found at all level.
- Safety induction training for visitors.
- Safety devices, Interlocks, Alarms for processes.
- Lightning arrestors installed.
- Fire load calculation carried out. Wind sock installed.
- Onsite emergency plan available with regular mock drill and record maintained.
- MSDS of chemical were available
- OHC well maintained.
- Provided Fire Hydrant sprinklers to warehouse A, C & D in auto as well as manual mode
- Provided Fire Hydrant sprinklers to unloading stations of NH3 tanker, CS2 tanker and underground solvent storage tank yards.
- Reviewed fire hydrant sprinkler system of NH3 Bullets and modified.
- Installation fire alarm system with beam and smoke detectors in all the warehouses is u/p.
- Entire Fire Hydrant system reviewed and provided closed loops in entire fire hydrant network by providing isolation valves at different locations.
- Installed 2 No. of additional Main Fire Hydrant Pumps of 273 M3/ hr. each capacity, in addition to previous main electrical fire hydrant pump.
- Other improvements
- Installed CCTV cameras at 128 locations, all over the site.
- Made 2 years agreement with M/s. Dupont for implementation of Process safety Management System.
- Carried out QRA study through US based external expert agency.
- Provided double earthing to all the equipments and motors. Earthing testing being done periodically.
- Provided copper bonding to the solvent and flammable chemical transfer lines to prevent the fire hazard due to the generation of static charges

- Installed intrinsic safety earth relay system in the flammable material unloading systems.
- Use of mobile has been banned in the premises, except admin building and security gate.
- Issued Flame proof Walkie – Talkies to the plant personnel for communication purpose.
- Non compatible materials stored separately.
- The highly flammable chemical like CS2 is always stored under water. It is transferred to the plant under water pressure to avoid fire hazard.
- Installed lightening arrestors at different location to avoid fire hazard might be created due to lightening.
- 900 M3 dedicated fire hydrant water reservoir always maintained for emergency.

These good practices are always appreciable. We believe; they should be continuously followed.

B. Areas of Improvement

SR NO	OBSERVATIONS	RECOMMENDATIONS
1.	Emergency preparedness of contractors and employees was found not up to the mark.	To give constant training regarding Emergency preparedness to employees. ERT Team should be strengthen more and more.
2.	Safety shower was installed in plant but not maintained. Drain was full of water logging.	To be maintained safety shower system with no water logging.
3.	Notice regarding first aid was missing near first aid box.	As per Rule 70 A of The Gujarat Factories Rules (GFR), 1963,, A notice containing the names of the persons working within the precincts of the factory who are trained in first aid treatment and who are in charge of the first aid boxes or cupboards shall be posted in every factory at a conspicuous place and near each such box or cupboard. The notice shall also indicate work room where the said person shall be available. The name of the nearest hospital and its telephone number shall also be mentioned prominently in the said Notice.
4.	Siren code was missing in entire plant premises.	Siren code should be displayed in prominent manner and in local language in entire plant premises. 
5.	There was only tag out and try out system for electrical isolation.	To be introduced the perfect Lock Out Tag Out system .
6.	Tool box talk system was not evident for the employees and contractors both.	To be initiated the Tool box talk system for the employees and contractors both . It is must to change the behaviour.
	SECURITY GATE	
7.	Emergency sired code was displayed inside the emergency siren switch box.	Emergency siren code to be displayed out side of emergency siren switch box.
	OHC	
8.	All MSDS was not evident.	All MSDS to be provided.
9.	Blood Pressure instruments – OIL/BPA-01 Calibration date : 21/11/2017 to 20/11/2018 observed.	Blood Pressure instruments – OIL/BPA-01 to be calibrated.
	MANCOZEB PLANT -B	
10.	PG – 5308 – 10 (Nr. Safety Shower) Calibration date : 22/04/2018 to 18/10/2018 observed.	To be calibrated.

SR NO	OBSERVATIONS	RECOMMENDATIONS
	MANCOZEB PLANT -A (WET SECTION)	
11.	Control Room Panel Rubber mat was not observed.	To be provided
12.	**TMP – Solvent Storage Tank** NFPA symbol was not observed.	NFPA symbol to be displayed.
13.	**ST -S 10 -D, CS Lye Tank** **CS Lye -Day Tank : S 101** Abstract of MSDS was not observed. Cautionary notice was not displayed.	• Abstract of MSDS to be displayed. • As per SCHEDULE 12 (6) of Rule 102 of The GFR, 1963, A cautionary notice in the following form shall be displayed/printed in prominent manner and in local language. **CAUTIONARY NOTICE** **DANGER** Acids and Alkalis cause severe burns and vapors thereof may be extremely hazardous. In case of contact, immediately flood the part effected with plenty of water for at least 15 minutes.
14.	**Safety Shower No.7** Unwanted material stored.	Unwanted material to be discarded.
	MANCOZEB PLANT -A (WET SECTION)	
15.	Control Room Panel Rubber mate was not observed.	To be provided
	ETP	
16.	Sand bag was stored near final discharged area.	Sand bag to be stored designated place.
17.	Temporary Ladder was observed without side railing near GP – I.	Temporary Ladder to be discarded.
	PCL3 PLANT	
18.	Frequency of changing water in the melting tank can be decided &recorded for timely removal of bottom phosphorus layer.	To be attended
19.	Do's & Do Not's with pictorial instruction signage boards in this area is required for the operating team along with the SOP's in the local language.	To be implemented
20.	Crane (EOT) for the phosphorus drums: Display of the status board for the inspection carried out & due dates is required to be corrected, as it was showing test date: 1-Jan-2018 & nothing about the due date.	To be rectified
21.	Proper hoods & suction hose for the PCl3 storage tank ST-107, 108 & 109: is required to be connected with the suction header of the scrubbing system, so that in case of any emergency, system can	To be provided

SR NO	OBSERVATIONS	RECOMMENDATIONS
	be operated efficiently without wastage of time & manual operation for the connection.	
22.	System to observe the system vacuum at any time, so that effectiveness of the scrubbing system is known easily to the operating team is required. 6" Dia. Vacuum gauge with the marking of vacuum range desired, on the dial can be provided.	To be provided
23.	Hooter for the sudden failure of the scrubbing system is recommended.	To be provided
24.	Consumption of the caustic lye can be monitored / recorded on the daily basis, so that any abnormal operation can be highlighted & attended, before any incident takes place.	To be provided
25.	Hot insulation on the top of the reactor R-101B is damaged partially.	To be repaired
	CHLORINE SHEDE	
26.	Safe & specious arrangement for the storage & handling of the chlorine toners	Good practice
27.	Position & location of the main valve for the water curtain can be reviewed, as it is little bit at difficult to approach for the operating team in case of emergency, one more valve near the operator team working area can be provided.	To be modified
28.	Pressure gauge showing the marking for desired range of the water pressure is required for the water sprinkler headers.	To be provided
29.	Chlorine kits: Proper fixed storage place is required, Its present condition needs to be improved as emergency preparedness.	To be painted & proper box for the storage is recommended
	QC AND R&D LABORATORY	
30.	Emergency escape for the instrument lab is required.	To be provided
31.	Gas cylinders without cap on the valve found, should not be allowed.	To be instructed accordingly
32.	Water blockage near gas cylinder area found, should be attended by proper leveling of the floor.	To be attended
	WAREHOUSE C & D	
33.	Forklift No. GJ-15 BB 8510 hand brake was not working.	To be repaired
34.	Pipes stored in rack outside the warehouse in such a way that, the entry of the ware house gets blocked partly.	To be stored properly
35.	Looking to the size of the warehouse,	No. of fire extinguisher as the fire load

SR NO.	OBSERVATIONS	RECOMMENDATIONS
	only one fire extinguisher is not enough in both these warehouses.	calculation can be provided
36.	1" Dia. MS pipe for compressed air was in hanging position without proper support.	Proper supports are required
	MEE-3,4,5 & 6	
37.	MEE-3: Calendriya-2 earthing strip is disconnected for circulation pump no. 03.	To be repaired
38.	Lunch / Tiffin boxes in the process area were found.	Please stop this practice.
39.	MEE-3 Surface cond. CWS & R piping of 2" Dia. Got corroded badly, cleaning / painting required.	To be repaired
40.	Most of the MS platform for working at height surrounding the equipments are without railing & creates falling hazard from the height.	To be provided
	TMP PLANT	
41.	There were vessels and reactors found with dull and without identification and hazards.	To be displayed the identification tag and hazards on each vessels and reactors with proper cleaning .
42.	Staircase was found inadequate civil works with stairs.	To be provided safe and adequate civil works to prevent slip hazards..
43.	There was no toe guards on railing on platform for separator.	To be provided toe guards to each railing..
44.	There was poor house keeping observed in plant.	To be maintained the proper housekeeping standard.
45.	Underground storage tanks. All are highly flammable chemicals.	1) Methanol---20 KLX 3 2) Ethanol----20 KL X 2 3) Toluene----20 KL X 1 4) Ethyl acetate—10 KL X 02 5) Solvent C-ix----20 KL X 01 6) Ethylene di chloride ---20 KL X 01 7) Methylene di chlorides -20 KL X01
46.	Under PESO License. It was under fencing . But fencing was Brocken.	To be repaired the Brocken fencing.
47.	It was unauthorized entry. But there was no entry/exit register at gate.	There should be entry/exit register at gate. No one should enter without entry. Register should be maintained. There should be no mobile in this premises.
48.	There was grass observed in to the tank farm.	There should be no dry grass beads in to the tank farm.
49.	Above ground storage tanks observed.	1) ZnSO4 2) MnSO4 3) Caustic lye

SR NO	OBSERVATIONS	RECOMMENDATIONS
		4) H2SO4 5) Di-Methyl Sulphate 6) Ethylene di chloride 7) DMPAT
50.	There was no leak-spill kit near tanks.	There should be leak-spill kit near tanks.
	MULTI PURPOSE PLANT.	
51.	There was calibration date dt.18/07/2019 displayed on tag of instrument . Audit was carried out on dt.12/07/2019 Reactor N-7214 –A	To be ensured and rectified
52.	There was no coupling guards to FFE-A pump.	Coupling guard to be provided.
53.	Some points regarding MSDS was displayed . There was awareness of employees regarding MSDS not satisfactory.	To be given training regarding MSDS to employees.
54.	Form no.11 of Nitrogen storage tank was not evident.	Form no.11 of Nitrogen storage tank to be ensured.
55.	Unloading and handling and storage and process of Flammable chemicals but check list was not evident.	checklist to be provided.
	11 KV SWITCH YARD, DGVCL AT 11 KVA POWER THROUGH OVERHEAD SINGLE LINE, CONTACT DEMAND-1900 KVA	
56.	Outgoing cable of Switch yard to VCB details not found.	Feeder details should be clearly and permanent written on outgoing cable of switch yard.(CEA Regulations 2010, Reg 19)
	TRANSFORMER - 1 **11 KV/ 440 VOLT** **2 MVA – 2666.74 AMP** **Oil – 2200 litter**	**TRANSFORMER - 2** **11 KV/ 440 VOLT** **4 MVA – 5223 AMP** **Oil – 3061 litter**
57.	Incoming source not written on primary box	Incoming source should be clearly and permanent written on primary box (feeder Details)
58.	Transformers were not provided with emergency isolation switch (LCS)	Emergency push button station shall be provided at the fence of the transformer yard to isolate the transformer without entering the yard in case of transformer fire or in case of any emergency. A clear warning/display is to be provided so that a responsible person can isolate the transformer during any emergency.

SR NO.	OBSERVATIONS	RECOMMENDATIONS
	ELECTRICAL WORKSHOP AREA :-	
59.	Earthing and Identification not found on RTCC Panel for 2 MVA Transformer.	Electrical panels were provided with double earthing. Identification should be clearly and permanent written. IS 3043 CEA Regulations 2010, Reg 41
60.	Panel ID not found (PCC4)	Identification should be clearly and permanent written. CEA Regulations 2010, Reg 19
	HT & PCC ROOM	
61.	Smoke detector not found in admin building, lab, all substation and plant office.	Smoke detector should be provided in admin building, lab, all substations and plant offices.
	D G SET :- 1 – 1000 KVA /1392 AMP 2 – 500 KVA / 650 AMP – TWO SET 3 – 200 KVA / 2 62 AMP	
62.	Outgoing source not written on feeder of DG panel.	Outgoing source should be written on feeder of DG panel. (TO – PCC - feeder number)
63.	Incoming source not written on all generator feeder.	Incoming source not written on all generators feeders. (I/C from DG & number)
64.	Outgoing source not written on DG terminal box.	Outgoing source should be written on DG terminal box. (TO – DG panel – feeder number)
	CHEMICAL LAB :- MENCOZEB LAB	
65.	Eye wash bottle was not found.	Eye wash bottle should be there.
	INSTRUMENT LAB :-	
66.	N2, hydrogen, air cylinder found without cap.	Cap should be provided on cylinder.
67.	Eye wash bottle found without water.	Eye wash bottle should be fill with water.
	CANTEEN :-	
68.	Earthing wire found open of counter switch and lugs was missing from earthing wire.	Earthing should be connected with lugs.
69.	Smoke detector not found.	Smoke detector should be provide.

C. Areas of Improvement (Environment)

SR NO	OBSERVATIONS	RECOMMENDATIONS
	TMP PLANT – STORAGE TANK FARM	
1.	**T-805 D Tank dyke** Rainwater logging observed.	Rainwater logging to be attended.
	UTILITY	
2.	**Chilled water secondary pump – C** High noise observed.	Earplug / Earmuff to be used.
3.	**INCINIRATION PLANT**	
4.	Water spillage observed near T-9217 (Ventury scrubber tank, Capacity:10 kl)	Water spillage to be attended.
5.	**C.S. Tank – Capacity : 1.5 kl** Water leakage from caustic pump.	Water leakage to be attended.
	PUMPHOUSE	
6.	**Raw water pump-A (Flow – 55 m3/hr)** Water leakage found.	Water leakage to be attended.
7.	**Raw water pump-A (Flow – 55 m3/hr)** High noise observed.	Earplug / Earmuff to be used.
8.	**DG SET**	
9.	**DG Set – 3 (500 KVA)** Coolant water spillage observed near DG Set.	Coolant water spillage to be attended.
10.	**DG Set – 3 (500 KVA)** Discarded spent oil drum observed.	Discarded spent oil to be sent GPCB registered agencies.
11.	**DG Set – 1 (1000 KVA)** Discarded spent oil leakage observed.	Discarded spent oil leakage to be attended.
12.	**PROCESS COOLING TOWER**	
13.	**Process cooling tower** Louver observed damaged and water leakage observed.	Water leakage to be attended.
	LUBE OIL DRUM STORAGE AREA	
14.	Oil spillage observed.	Oil spillage to be attended.
15.	Secondary containment was not observed inside the drum oil leakage observed.	Secondary containment to be provided at suitable location.
	SPENT OIL STORAGE AREA	
16.	5 nos. drum of spent oil observed.	Spent oil to be sent GPCB registered agencies.
	BOILER	
17.	High noise observed.	Earplug / Ear muff to be used.
18.	Oil spillage observed from oil heater.	Oil spillage to be attended.
	MEE PLANT	
19.	**MEE – 5** Water logging observed near NH4Cl packing area.	Water logging to be attended.
20.	**PCL3 Plant – Nr. Chlorine shed (B-102 – Cl2 blow), (Cl shed scrubber tank-5 kl)** Water logging observed in dyke area.	Water logging to be attended.

SR NO	OBSERVATIONS	RECOMMENDATIONS
21.	Bags of hazardous waste from MEE plant stored.	Bags of hazardous waste to be stored designated storage area.
22.	**Seal cooling tank – MEE 4** Water logging observed.	Water logging to be attended.
23.	**Barometric Water tank – MEE 6** Water logging observed.	Water logging to be attended.
24.	**MI storage tank – T6 tank** Rainwater logging observed in dyke area.	Rain water logging to be attended.
25.	**First floor** Water logging observed near safety shower.	Water logging to be attended.
26.	Salt powder accumulation was observed near screw conveyor area.	Salt powder accumulation to be removed.
27.	Ammonium chloride powder accumulation observed below dryer.	Ammonium chloride powder accumulation to be removed.
	ETP	
28.	**SRT pump** Water logging observed.	Water logging to be attended.
29.	Water logging observed between old & new bio reactor.	Water logging to be attended.
30.	**Clarifier pump 1 & 2** Water logging observed.	Water logging to be attended.
	TMP PLANT	
31.	Water logging observed near Dy-2205 due to drainage/ trench line chocked.	Drainage line to be cleaned. Water logging to be attended.
32.	**DT-2205 A-3 tank** Water leakage observed due to damaged pipeline.	Water leakage to be attended and damaged pipeline
33.	**TMP – 10 meters** Water logging observed in safety shower no.22 water collection pit / dyke.	Water logging to be attended.
	GLP PLANT	
34.	**R-3109 A & B** Water logging observed.	Water logging to be attended.
35.	Unwanted materials (cement bag, wood . etc.) stored near slurry transfer pump.	Unwanted materials to be removed
	PCL3 PLANT	
36.	**R-101A&B- PCl3 blowdown tank** Rainwater accumulation observed.	Rainwater accumulation to be attended.
	NAHTCP PLANT	
37.	Unwanted materials stored near NaHTCP plant.	Unwanted materials to be removed

8.1 ANNEXURE – B: Examination of Records (IS 14489: 1998)

Observations including nonconformities and good practices by the auditee factory are given below in Annexure B to C. Necessary recommendations / suggestions or improvement measures are also suggested in the last column.

NO	ITEM	PERTAINING LEGAL REQUIREMENT	OBSERVATION	RECOMMANDATION
1.	OS & H Policy	The GFR- Rule 12-(C), 68- O.	Available	---
2.	Safety Organization Chart	The FA 1948 – Section 40- B.	Available	---
3.	Training Records on Safety, Fire & First Aid	The FA 1948 - 7 (A), 111 (A) The GFR- Rule GFR – 12 (C) 4(g).	Available	---
4.	Record of Plant Safety Inspections	The GFR- Rule 112.	Available	---
5.	Accident Investigation Reports	The GFR- Rule 103, 111.	Available	---
6.	Accidents & Dangerous Occurrences, Statistics & Analysis	The GFR- Rule 103, 111.	Available	---
7.	Record of tests & Examinations of Equipment & Structures as per Statues	The GFR- Rule 58, 59, 60,102.	Equipment test records were available and Maintained by respective department. Structure stability report available.	---
8.	Safe Operating Procedures for various Operations.	-----	Available	---
9.	Record of Work Permits	The GFR- Rule 102 Chemical works sch. 19.	Available	---.
10.	Record of Monitoring of Flammable & Explosives	The GFR- Rule 68 J and 12 – B The FA 1948 Section 7-A (2) (E).	Available	---

NO	ITEM	PERTAINING LEGAL REQUIREMENT	OBSERVATION	RECOMMANDATION
	Substances at Work Place			
11.	Maintenance & Testing Records of fire detection & firefighting equipment	The GFR- Rule – 66A.	Available	---
12.	Medical records of employees	The GFR- Rule 68 R.	Available. Maintained by OHC.	---
13.	Records of industrial hygiene surveys (noise, ventilation levels, illumination levels, airborne & toxic substances, explosive gases).	The GFR- Rule - Rule 12-B The FA 1948 - Section 7A (2)(E).	Available	---
14.	Material Safety Data sheets	The GFR- Rule 68 J, MSIHC Rule 1989, Rule 17, Schedule 9.	Available	---
15.	On-site emergency plan & record of mock drills	CA EPPR 1996, The GFR- Rule 68 J, The FA 1948 Schedule – 8-A.	Available	---
16.	Records of waste disposal	The GFR- Rule - 18, The FA 1948 section 12.	Maintained	---
17.	Records of effluent discharges to the environment	The GFR- Rule - 18, The FA 1948 section 12.	Maintained	---
18.	Housekeeping inspection records	The GFR – Rule 16, 17, 17 A, The FA 1948 section 11.	Maintained	---
19.	Minutes of safety committee meetings	The GFR- Rule – 68 F, Y.	Maintained	---
20.	Approval of layouts & other approval from statutory	The GFR- Rule -3.	Maintained	---.

NO	ITEM	PERTAINING LEGAL REQUIREMENT	OBSERVATION	RECOMMANDATION
	authorities			
21.	Records of any modifications carried out in plant or process	The GFR- Rule -3,7.	Maintained	---
22.	Maintenance procedure records	---	Available	---
23.	Calibration & testing records	The FA 1948, Section 36.	Available	---
24.	Shut down maintenance procedures	-----	Available	---
25.	In service inspection manuals, records including that of material handling	------	Maintained	---
26.	Safety budget	The GFR- Rule 12 C & 68-0.	Available	---
27.	Inspection books & other Statutory records	The GFR- Rule – 112.	Available	---
28.	Records of previous audits.	The GFR- Rule 68 J.	Records of previous audit was available.	---
29.	Safety in transportation of hazardous substances	MV Act.	All precaution taken	---

8.2 ANNEXURE – C: General Points (IS 14489: 1998)

No	ITEM	OBSERVATION	RECOMMANDATION
OH & S POLICY (The GFR- Rule 12-C, 68- O)			
1.	Does the organization have a health and safety policy? If yes, please attach it	Corporate safety policy was available	---
2.	Whether it is prepared as per guidelines of the statutory provisions.	Yes	---
3.	Do you have any corporate safety policy?	Yes	---
4.	Who has signed the health and safety policy?	Signed by occupier	---
5.	When was safety policy declared and adopted?	April 2011	---
6.	How many times it has been updated till now?	3 times	---
7.	Whether the policy is made known to all?	Yes	---
8.	Whether safety policy was scrutinized by outside expert agency?	Yes	---
9.	Does it find place in the annual report?	Yes	OH & S policy and abstract of the safety performance (HSE Performance) shall be included in the Annual Report of the Company.
10.	What was the last date of updation?	01-10-2015	---
SAFETY & HEALTH ORGANIZATION			
	(A) Safety Department (The FA 1948 –Section 40- B)		
11.	Does the factory have a safety department?	Yes	
12.	a. If yes furnish the following information i. Head of safety department ii. Name iii. Designation iv. Experience	i. Mr. Rajendra Thakur ii. EHS - Manager iii. >15 Years	---

No	ITEM	OBSERVATION	RECOMMANDATION
	v. Status b. Strength of safety department	iv. Management b. 14 Total 14 No. EHS head -1 Manager Safety-1 Safety Officers-4 Firemen – 8	
13.	Does the head of safety department/safety officer report to the chief executive?	Reported to Unit Head	---
14.	How often is the safety officers retrained in the latest techniques of total safety management? What is the frequency of retraining?	Being sent periodic refresher courses. Participated in various activities taken up by the Factory inspectorate and local agencies. –	---
15.	What additional duties the safety officer is required to do?	Safety officer was looking after safety related work only.	---
16.	What is the power of safety officer visa -vis unsafe condition or Unsafe act?	If there are any unsafe conditions or acts, these will be brought to the notice of the concerned HOD and In the case of imminent danger, the job stopped until unsafe conditions/ act were removed / corrected.	---
	(B) Safety Committees (The GFR- Rule – 68 F, Y)		
17.	Does the factory has a safety committee(s) Give the details of their types, structures and terms of	Yes 1) One No. of Central Safety Committee. 25	---

No	ITEM	OBSERVATION	RECOMMANDATION
	reference?	members 2) 7 No. of Divisional Safety Committees Approx. 7-8 members each.	
18.	Is the tenure of the safety committee's) as per the statute?	Yes, 2 years	---
19.	How are the members of safety committee's) selected? (elected / nominated)	Nominated	---
20.	How often the meetings of safety committees are held?	CSC meeting – Quarterly DSC meetings - monthly	---
21.	What are the subjects? Are the problems discussed in the meetings? (Attach a copy of agenda and minutes of the last meeting)	Safety & fire issues of the plant, internal audit findings, safety improvement activities etc. were discussed.	---
22.	How are the recommendations of the committee's implemented?	The recommendations were implemented by action plan by respective department head.	---
23.	Are the minutes of the safety committee's meetings circulated among the members?	Yes. Minutes of safety committee's meetings circulated through e mail.	---
24.	Are the minutes forwarded to the trade unions and chief executive and occupier?	Yes and to all members and Plant Head	---
25.	How the management and	Management Play	---

No	ITEM	OBSERVATION	RECOMMANDATION
	trade union play their active roles in supporting and accepting the committee's) recommendations?	active role	
26.	How are the safety committee's members apprised of the latest development in safety, health and environment	Members of the safety committee's members were participating in safety training program actively.	---
	(C) Safety Budget (The GFR- Rule 12 C & 68-0)		
27.	What is the annual safety budget?	As per requirement capex is prepared.	It should be reflected separately in the annual budget of the company.
28.	How much percentage is this budget of the total turnover of the company	As per requirement and when needed it was provided.	---
29.	How much budget has utilized till date?	Data available with EHS department	---
30.	Is the safety budget adequate?	Adequate	---
31.	How is the safety budget arrived at?	Review of previous years utilization & present requirements.	---
32.	What is the pattern of expenditure for the last 5 years?	Mostly Increasing trend. Price hike & the requirement. Data available with concern department	---
33.	What are the approved sanctions for the expenditure in this budget?	Sanctions for Third party safety audit, In purchasing of PPEs, Safety essential items	---

No	ITEM	OBSERVATION	RECOMMANDATION
		like firefighting equipment maintenance & servicing Training and safety day & week celebration	
34.	Does this budget get reflected in the annual report of the company?	Not reflected	It should (safety budgets) be reflected separately in the annual budget of the company.
	ACCIDENT REPORTING, INVESTIGATION AND ANALYSIS (The GFR- Rule 103, 111)		
35.	Whether the accident data for the last three years for reportable and non-reportable accidents available?	Yes. All accidents data were available with EHS department	---
36.	Is there any system of classifying and analyzing the near miss incidents and accidents? Give details.	Yes, Near miss is classified in three categories: High Risk, Medium Risk and Low Risk.	---
37.	Are all near miss incidents and accidents reported and investigated?	Yes, Reported and investigated	---
38.	For how many years are the investigation reports retained.	Retained for long time.	---
39.	By whom the accident statistics and data are maintained?	EHS department	---
40.	How is the top management apprised of these data?	It is being reviewed monthly at Unit level, Function level, Department level, Section level.	---
41.	Is the accident statistics	Yes, Analysed	---

No.	ITEM	OBSERVATION	RECOMMANDATION
	effectively utilized? If yes, how?	and find root cause and to implement action plan.	
42.	What nature of injuries occurred during the last three years?	One Major Incident occurred where serious Burns injury of 5 employees was reported. Accident was investigated and CAPA taken	---
43.	How do you ensure implementation of the recommendations to avoid the recurrence of the incidents and accidents?	By discussion, inspection, different types of safety reports and CAPA [Corrective Action Preventive Action] measures. Date of completion data on line maintained.	---
	SAFETY INSPECTIONS (The GFR- Rule – 112)		
44.	What type of safety inspections is carried out and what are their frequencies?	Daily plant visit done	---
45.	Is there any system of internal inspection?	Yes, Periodic inspection of workplaces as per defined frequencies	---
46.	Who does the inspections?	Safety inspection carried out safety Department & multidisciplinary team.	---
47.	Are the checklists prepared for these inspections? (Specify item-	Yes Available item wise like	---

No	ITEM	OBSERVATION	RECOMMANDATION
	wise, for example, housekeeping, fire protection, etc.	5S, PTW, Stairs & ladders, EOT cranes, Electric tools, Earthing system, safety standard wise etc.	
48.	To whom the recommendations are submitted?	Department heads with Copy to functional heads	---
SAFETY EDUCATION AND TRAINING (The FA 1948 – Section 7 (A), 111 (A), The GFR- Rule GFR – 12 (C) 4(g))			
(A) Training			
49.	Is there any training department?	Yes, HR department conducted training.	---
50.	Is there any program of induction training?	Yes, for employees	Scope of Induction Training should be increased to cover visitor and contractor's employees. Now a day Digital Safety Induction Modules area also available to be used. All Induction training shall be Validated to increase effectiveness.
51.	Mention the duration of induction training for each category of employees	For new joining employee – 2 day, contract workers, drivers – 2 hours & visitors : 10 min.	---
52.	Whether the assessment of the trainee worker is done or not?	Validation done verbally by Departmental Heads, Safety Manager,	---

No	ITEM	OBSERVATION	RECOMMANDATION
		and Medical Officer- Managed by HR department etc	
53.	What infrastructure facilities with audio-visual support are available for training?	Yes, training room, white board, projector etc.	---
54.	Do the programs cover the plant safety rules, hazard communication and any other special safety rules or procedures unique to the plant or specific departments?	Yes	---
55.	Whether the training programs are conducted in the local language?	Yes, Training Programs were conducted in regional, National and English language.	---
56.	Whether visits to safety institutions/organizations are arranged?	Yes, Visits to safety institution/organization arranged periodically.	--.
	(B) Periodic Training/Retraining		
57.	Are all the employees trained and what is the frequency of such training?	Yes, Yearly for Fire Fighting and First Aid.	---
58.	Do the training programs cover safety and health aspects and if so how much (in terms of number of sessions/hours)?	Yes	---
59.	Do the trained supervisors train their own employees in safety and health aspects?	Yes	---
60.	Is the retraining performed whenever new	Yes Specific need based trainings	---

No	ITEM	OBSERVATION	RECOMMANDATION
	hazards/process changes are followed / introduced?	were provided whenever a process changes,	
61.	How are the senior management personnel trained in safety and health?	Yes, To introduce seminar from external agency. And At Corporate office.	---
62.	How many employees have been trained in safety and health in the last five years? Give break up with details	Almost 95% employees have been trained in last year. Records were available with HR department	---
63.	How many man-days/hours are used in training the employees?	02-man day on average basis per person per year.	---
64.	How do you ensure that the training is put to use by the employees trained in safety and health.	By inspection/ Supervision, feedback.	---
65.	What is the training plan for the next two years? Give details	Training plan was available.	---
66.	What Documentation system has been established regarding safety and health training?	Training schedule indicating the subject, frequency, duration & name of the trainer was planned. The Feedback received from the participants was recorded and retained.	---
	(C)Safety Communication/Motivation/Promotion		
67.	Does the factory have safety suggestion schemes? Give details.	Suggestion drop box available.	---
68.	Does your factory	Factory	

No	ITEM	OBSERVATION	RECOMMANDATION
	participate in National Awards/Suggestion schemes?	participates instate awards scheme. In the Year 2018	---
69.	Has your factory been awarded during last five years?	Factory participates in state awards scheme. In Year 2015 Mr. Jagdish Bhoya received first prize for Shram Puraskar awarded by Gujarat State. Similarly; Factory participates in state awards scheme. In Year 2016 Mr. Anup Garuda received second prize for Shram Puraskar awarded by Gujarat State.	---
70.	Are safety contests organized in the factory? Give details	Yes. During the safety week celebration, the Safety contests were organized.	---
71.	What are the publications of your organization? Do they include information on safety and health subjects?	Corporate news letter	---
72.	Is the literature on safety and health made available	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
	to the employees?		
73.	How is the safety and health publicized in your factory?	Notice board, Display	---
	i) Bulletin boards?	No	---
	ii) Past serious Accidents?	No	---
	iii) News letter?	No	
	iv) Others? Specify	Posters, slogan	---
74.	Does the organization celebrate safety day/week or organize safety exhibition?	Yes	---
75.	When was the last safety day/week celebrated?	Safety day - 4th March 2019	---
	FIRST AID (The FA 1948 Section 45, The GFR- Rule 70, 70 A)		
76.	Is adequate number of first aid boxes provided? Give location details?	Yes. First aid boxes are made available in all the departments and in OHC/Ambulance room. 20 nos.	---
77.	Is there any first aid/ambulance room?	Yes OHC provided.	---
78.	Are qualified/trained first aid's available in each shift?	Yes	---
79.	How many qualified/trained first aid/s are available at each plant/department?	Trained first aider available in each shift- Total 54 Number s	---.
80.	How many persons are trained/given refreshers training in first aid in a year?	Adequate- Total 54 Numbers	---
	OCCUPATIONAL HEALTH CENTER (The GFR- Rule 68 U)		

No	ITEM	OBSERVATION	RECOMMANDATION
81.	Whether occupational safety and health center is provided or not?	Yes	---
82.	Does it conform to the provisions of the existing legislation?	Yes	---
83.	Are the medical attendants/ doctors available in each shift	Yes	---
84.	Is ambulance van available in each shift?	Yes	---
85.	Any liaison with the nearest hospital(s)? Give details.	Yes, Haria Hospital, Vapi. & Usha Shalby – Vapi, 21st Century Vapi	---
	GENERAL WORKING CONDITIONS		
	(A) Housekeeping (The GFR – Rule 16, 17, 17 A, The FA 1948 section 11)		
86.	Are all the passages, floors and the stairways in good condition?	Yes	---
87.	Do you have the system to deal with the spillage?	Spill control kits are there with Spill control procedure	---
88.	Do you have sufficient disposable bins clearly marked and whether these are suitably located.	Disposable bins were placed in prominent places	---
89.	Are drip trays positioned wherever necessary?	No	It is advisable to keep drip tray bellow all fuel tanks.
90.	Do you have adequate localized extraction and scrubbing facilities for dust, fumes and gases	Yes. NH3 scrubber, Cl2 scrubber, HCL scrubber, TMP scrubber, Mancozeb dust collector, CS2 scrubber, Chlorination	---

No	ITEM	OBSERVATION	RECOMMANDATION
		scrubbers.	
91.	Whether walkways are clearly marked and free from obstruction?	Yes	---
92.	Do you have any inter-departmental competition for good housekeeping?	Yes- TQM	---
93.	Has your organization elaborated good housekeeping practices and standards and made them known to the employees.	Yes	---
94.	Are there any working conditions, which make the floor slippery? If so, what measures are taken to make them safe?	Yes	---
95.	Does the company have adequate measures to suppress polluting dust arising out from road transport?	Yes, all internal roads were kept clean. However, plant premises need more attention	---
	(B) Noise		
96.	Are there any machines / processes generating noise? Specify.	Utility section.	---
97.	Was any noise study conducted?	Yes, Regular monitoring of Noise was conducted for ambient. Records maintained.	---
98.	Which are the areas having high-level noise?	Blower, DG set area and utility section	---
99.	Have engineering and administrative controls been implemented to reduce noise exposure below the permissible	Yes, usage of PPEs [Ear muff and ear plug]	---

No.	ITEM	OBSERVATION	RECOMMANDATION
	limits?		
100.	Is there a system of subjecting all those employees to periodic audiometric test who work in high-level noise areas?	Yes, Audiometric test is being done for the persons exposed to high noise zone	---.
101.	Whether the workers are made aware of the ill effects of high noise.	Yes	---
102.	Whether any personal protective equipment along with ear muffs /plugs are provided and used.	Yes	---
	(C) Ventilation		
103.	Whether natural ventilation is adequate or not?	Adequate	---
104.	Whether dust / fumes / hot air is generated in the process? Give details.	Yes. Boiler, Mancozeb, PCl3, MCP, DDVP, NH3, TMP	---
105.	Is there any exhaust dilution ventilation system in any section of the plant?	Natural ventilation	---
106.	Whether any ventilation study has been carried out in the section (s) to check the record?	No	Ventilation study to be carried out as per IS 3103.
107.	Are periodic /preventive maintenance of ventilation system carried out and record is maintained.	Adequately done	---
108.	Does any ventilation system re-circulate the exhausted air in work areas?	Yes	---
109.	Is the work environment assessed and monitored?	Yes	---
110.	Whether personal protective equipment are given to workers exposed to dust /fumes and gases?	Yes, dust mask was given to worker.	---

No.	ITEM	OBSERVATION	RECOMMANDATION
	Give details.		
	(D) Illumination		
111.	Was any study carried out for the assessment of illumination level?	Yes	---
112.	Is there any system of periodical cleaning and replacing the lighting fittings/ lamps in order to ensure that they give the intended illumination levels?	Yes	---
113.	Are the workers subject to periodic optometry tests and records maintained? Give details.	Yes	---
	HAZARD IDENTIFICATION AND CONTROL		
114.	Are all the hazardous area identified?	Yes	--
115.	What are the types of hazards (physical-noise, heat etc. and chemical-fire, explosion, toxic release, etc.)	Physical- Noise, Heat Chemical- Fire & Explosion, Toxic Release, etc	---
116.	What steps have been taken to prevent these hazards? Give details	Use of PPE, exhaust ventilation, close supervision	---
117.	Are there any safety interlocks, alarms and trip system? Give details.	Yes.	---
118.	Are these tested periodically? How often? Please specify.	Yes	---
119.	Are there any ambient monitoring devices with alarms for leakage of hazardous materials?	Detector installed. NH3 sensors, CL2 sensors, CS2 sensors, Stack sensors	---
120.	Are safety audit or HAZOP	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
	or any other studies carried and recommendations implemented? Give details		
121.	What has been the major modification done in plant/process and has the approval of the competent authority concerned?	No Major Modification was done.	---
122.	What decision and monitoring equipment are available and used for checking the environmental conditions in and around the plant? Give details.	Oxygen meter, Multi gas monitoring equipment, VOC meter	---
	SAFE OPERATING PROCEDURES		
123.	Are written safe operating procedures available for all operations?	Yes. Available	---
124.	Whether the written safe operating procedures displayed or made available and explained in the local language to the workers?	Yes	---
125.	Whether the safe operating procedures are prepared jointly by the plant and safety departments?	Yes. Safe operating procedures were prepared jointly by plant and safety head.	---
126.	What system is used to ensure that the existing safe operating procedures are updated? Give details.	SWPs are being reviewed as per need basis.	---
127.	Have the workers been informed of the consequences of failure to observe the safe operating procedures?	Yes	---
128.	Are contractor workers	Yes	---

No	ITEM	OBSERVATION	RECOMMENDATION
	educated and trained to observe safety at work place.		
129.	Whether contractor's workers are permitted on process / operation? Give details.	No	---
	WORK PERMIT SYSTEM (The GFR- Rule 102 Chemical works Sch. 19)		
130.	What necessary type of work permits exists in your factory? Give details.	General and Special Work Permits, hot work permit, confined space entry permit, height work permit, Pipeline opening permit, excavation permit, cold work permit,	---
131.	What are the hazardous chemicals handled?	Lis given in above para e	---
132.	Are the keys kept for individual locks, which are used for electrical lockouts with the supervisor concerned?	Yes	---
	WASTE DISPOSAL SYSTEM (The GFR- Rule - 18, The FA 1948 section 12)		
133.	Is identification done for various types of wastes? Give details.	Yes. As per GPCB norms	---
134.	Are these quantities less than those specified by the hazardous wastes (Management & handling Rules, 1989)?	Yes	---
135.	What are their disposal modes?	As per GPCB norms	---

No.	ITEM	OBSERVATION	RECOMMANDATION
136.	**What are the systems /** measures adopted for controlling air / water / land pollution?	As per GPCB norms	---
137.	What is the system of effluent treatment plant and whether is it approved by the competent authority?	GPCB approved ETP. Collection storage, and goes to CETP GIDC Sarigam. Recycling Solutions Pvt. Ltd. – Panoli. High TDS waste goes to Ankleshwar cleaner process technology Ankleshwar. Bhachao-Saurashtra Enviro Pvt. Ltd. by tankers.	--
138.	How are the treated effluent used?	Disposed to common effluent treatment plant, Sarigam, GIDC.	---
	PERSONAL PROTECTIVE EQUIPMENT (PPE) (The GFR- Rule 68-B)		
139.	Has a list of required PPE for each area / operation been developed and the required PPE is made available to the workers?	Yes, Hand glows, Dust Mask, Shoes, Helmets, Air Line Respirator, Mask with Cartridge. PPE Matrix prepared	---
140.	Are the safety department and the workers consulted in the selection of PPE	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
141.	Have the workers been trained in proper use of PPE?	Yes	---
142.	What is the system of replacement / issue of PPE?	As per requirement issued by store dept.	---
143.	What are the arrangements for safe custody and storage of PPE provided to the workers?	Every employee provided Separate lockers.	---
144.	Are the contractor's workers provided with the required PPE? Who is responsible? Give details.	Provided	---
145.	Are the PPE conforming to any standard? Give details.	All PPE as per IS/CE/EN Standard.	---
146.	Give the details of PPE and also specify the responsibility for their inspection and maintenance?	Data available with concern department.	---
	FIRE PROTECTION (The FA 1948 section38, The GFR- Rule- 66-A)		
147.	Indicate on a plant lay out the location, number (Quantity) and types of portable fire extinguishers available.	Yes. Total – 190 No. of fire extinguishers available,	---
148.	Is the firefighting system and equipment approved, tested and maintained as per relevant standard?	Yes	---
149.	What is the inspection and maintenance schedule of the above extinguishers? Who performs these functions?	Yes, by third party Maintained by 3rd party Bombay fire & safety service on quarterly basis	---
150.	Which areas of the plant are covered by fire	Wet fire water hydrant system	---

No	ITEM	OBSERVATION	RECOMMANDATION
	hydrants? Indicate the locations of the hydrant points and how the required pressure maintained in the system and ensured.	is provided. 7 kg/cm^2 pressure is maintained at the farthest point.	
151.	What is the capacity of dedicated water reservoir for supply to the hydrants? What is the source of water?	900 M3. G.I.D.C	---
152.	i) How is the power supply to the fire hydrant pump ensured?	D.G & Power plant.	---
	ii) What is the alternate source of supply in case of power failure? Give details.	Electrical F H Pumps are connected to DG Power supply in case of GEB power failure	---
153.	Are all personnel conversant with the fire prevention and protection measures? Give details.	Yes	---
154.	What percentage of plant personnel and staff and officers, have been trained in the use of portable fire extinguishers? Give details.	50% plant personnel and staff were trained in the use of portable fire extinguisher.	---
155.	Do you have fixed or automatic fire fighting installation(s) in any section of your plant?	Fixed firefighting facility was installed.	---
156.	Are the fire alarms adequate and free from obstruction?	Fire alarm was available	---
157.	Do you have fire department? If yes, give details.	No	---
158.	What is the system for	Mock drills are	As per GFR 66-A fire

No	ITEM	OBSERVATION	RECOMMANDATION
	conducting mock drills? Give details.	conducted in every three months.	fighting drills shall be carried out once in every period of two months.
159.	Do you have any mutual aid scheme with any of your neighboring industry or any local organization (s)?	Yes. mutual aid scheme with Yes. Aarti Industries, McCleod' s, Caliber Industries.	---
160.	Give details of existing fire resistance walls and doors?	Yes, PCC room & MCC room	---
161.	Do you have any system of colour coding for all the pipelines for hazardous chemical? Give details including marking of flow directions.	Partially done	Colour coding system for pipeline to be implemented as per IS 2379.
162.	Are there any safe containers for the movement of small quantities of hazardous chemicals? Give details.	Yes	---
163.	Are all self-closing fire doors in good condition and free from obstructions?	Yes	---
164.	How many major and minor incidents/fires were there in the factory during last five years? Give department/plant wise.	One Major Incident of Burns injury reported. All data has been maintained at EHS Department.	---
165.	Have all the fires/incidents been investigated and corrective actions taken?	Yes	---
EMERGENCY PREPAREDNESS (CA EPPR 1996, The GFR- Rule 68 J, The FA 1948 Schedule – 8-A)			
166.	Is there an onsite	Yes. Copy was	---

No	ITEM	OBSERVATION	RECOMMANDATION
	emergency plan for your factory? (Attach a copy of the plan).	available.	
167.	What is the frequency of conducting mock drills of on-site emergency plan?	Mock drill was conducted once in 3 months.	---
168.	What are the number and location of emergency control center, assembly points?	ECC – 1 no. – EHS Office Assembly points – 3 Nos. – Old Project Office, B Gate, C-Gate	---
169.	Whether emergency team or the key members identified?	Yes	---
170.	Are suitable and adequate protective and rescue equipment available? How is the emergency rescue team trained to use this equipment?	Yes, training was given	---
171.	How is the emergency communication with the local bodies and other organizations ensured? Give break up.	By internal phones, siren, mobile phone	---
172.	Is any alternate power source identified? Give details.	Available	---
173.	What is the medical emergency response system? Give details.	OHC available	---
174.	Are you a member of any MUTUAL AID SCHEME of your area? If so give details.	Yes	---
175.	How many emergency alarm systems is /are available? Give details.	Electrically operated main alarm and manually operated siren 2	----

No	ITEM	OBSERVATION	RECOMMANDATION
		km range	
	PLANT LAYOUT AND AREA CLASSIFICATION		
176.	What is the system of classification of hazardous zones in the plant for electrical installations? Please specify.	HAC study carried out	---
177.	Whether a qualified person does periodic inspection and preventive maintenance of electrical installations and record is maintained?	Yes, done & record maintained	---
178.	Whether plant layout with area classified has been displayed at appropriate place(s)?	Yes	---
	STATIC ELECTRICITY (The GFR- Rule 102 Sch. XIX)		
179.	Whether the process(s) and equipment generate and accumulate static charge has been identified? Give details.	Yes, at HC, Solvent and few organics Powder area.	---
180.	Whether all such equipment are properly bonded and earthed?	Missing at some places	All precautions taken for Static Electricity shall be maintained always in good working Conditions.
181.	How is electrical resistance for earthing circuits maintained? Are periodic inspections done and recorded?	Yearly checked	---
182.	Are adequate earthing arrangements made at the terminal points where hazardous chemicals are handled through pipes?	Yes	---
183.	Are anti-static charge devices fitted wherever necessary?	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
184.	Whether these devices are periodically checked and maintained by a qualified person?	No	---.
	PRESSURE VESSELS (FIRED AND UNFIRED) (The FA 1948 section 31, The GFR- Rule-61)		
185.	Give details of the plants, piping and vessels, which are operated at a pressure greater than the atmospheric pressure?	Ammonia Tank, Air compressor Tank, Steam pipes, chemical reactors, Receivers of chilling plant etc.	---.
186.	How is it ensured that the working pressure inside the pressure vessels/pressure plants will not exceed their maximum working pressure for which it is designed?	Safety valve, pressure gauge, PRV, rupture disc, vents, scrubber etc.	---
187.	What means of isolating the pressure vessels or means to prevent rise in pressure are installed?	PRV & rupture disc. Safety valve	---
188.	What standards/codes of practice are adopted for design, fabrication, operation and maintenance of pressure vessels and records maintained?	As per IS standards.	---
189.	How are the pressure vessels tested? Give details.	As per GFR and by competent persons.	---
190.	Is there any competent person for testing this pressure vessel? Give details.	Yes by recognized competent persons.	---
191.	How are the recorded results verified?	Completion of testing and certification in	---

No	ITEM	OBSERVATION	RECOMMANDATION
		time limit was verified for year 2008 but not the correctness of the result as required by Rule 61.	
192.	Give details of the safety devices available for these pressure plants?	Safety valve, pressure gauge, PRV, SRV, alarm etc.	---
193.	Whether logbook for pressure vessels and pressure plants has been maintained?	Yes.	---
	NEW EQUIPMENT REVIEW		
194.	What is the system for effecting any change in the existing plant, equipments or process? Whether is it approved by appropriate competent authority?	Approval by authority	---
195.	Whether the P & I diagrams and other related documents are updated accordingly?	Yes	---
	LIFTING MACHINES AND TACKLES (The FA 1948 section 29, The GFR- Rule 60)		
196.	Whether all the lifting machines are marked with their SWL?	Some where it was missing.	All the lifting equipment including fork lift shall be marked with SWL and next due date for testing.
197.	Are all the examinations and tests documented in the prescribed form?	Yes	---
198.	Are all the examinations and tests carried out and certified by competent person(s)? Give details.	Yes	---
199.	Are adequate lifting tackles provided at all the places where it is required? Give details	Yes	---
200.	Are the trained operators	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
	engaged for operating the equipment? Give details.		
201.	What is the system of training such operators?	Induction and refresher training.	---
202.	Are all the lifting machines and tackles maintained in good conditions and records maintained?	Yes	---
	MOBILE EQUIPMENT AND VEHICULAR TRAFFIC		
203.	Is all the mobile equipment in good condition?	Yes	---
204.	Are trained drivers engaged for forklift trucks?	Yes	---
205.	What is the system for identifying these drivers from other drivers?	Identification mark given to forklift drivers	---
206.	What system do you adopt to assess their standard of driving as poor/fair/satisfactory/ good?	Training is imparted and should be evaluated by 3rd party. Periodical monitoring by their respective staff.	---
207.	Are there adequate numbers of warning signs/signals?	Yes	---
208.	Are the hazards associated with transportation within the plant identified and safety measures taken? Give details	Yes	---
	ACCESS		
209.	Is adequate safe access provided to all places where workers need to work?	Yes	---
210.	Are all such access in good condition?	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
211.	Are portable access platforms necessary? If yes:	Yes	---
	i) Are these sufficient?	Yes	---
	ii) Are these regularly inspected?	Yes	---
	iii) Are these readily available?	Yes	---
	iv) Are these provided with toe boards and railings?	Yes	---
212.	Oiling and greasing points		---
	i) Are these located and extended to safe place clear of moving parts?	Yes	---
	ii) Are these easily accessible?	Yes	---
	iii) Are these liable to drip into walkways?	No	---
	iv) Whether such workers were trained and whether they are provided with fit-tight clothing and register is maintained?	Not evident	---
213.	Are all drain covers in good condition and fitting flush?	Partially	---
	MATERIAL HANDLING (The GFR- Rule 102, Sch. XIX)		
214.	Are there adequate storage facilities available	Yes	---
215.	Are these areas clearly defined	Yes	---
216.	Are all racks and steel cages in good condition	Yes	---
217.	Have you got adequate equipment for handling materials.	Yes	---
218.	Do the workers know the hazards associated with manual material handling	Yes	---
219.	Where manual handling is necessary, are the	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
	workers been trained		
220.	Do they practice this?	Yes, by providing training	---
221.	Do workers follow safe procedures for storage of materials?	Yes	---
222.	Whether contractor workers are trained in safety?	Yes	---
223.	What is the system for handling over plant to the maintenance department and receiving back?	Work permit system only	---
224.	Is the system consistently applied	Yes, Permit system applied.	---
225.	What is the system for the preventive and predictive maintenance and how do you ensure its effectiveness Give details	Yearly preventive maintenance schedule	---
TANK STORAGE VESSEL AREA (The FA 1948 section 31, The GFR- Rule-61)			
226.	Whether it is pressure vessel or not?	No	---
227.	Give storage vessels designation (exceeding threshold quantities specified in MSIHC Rules, 1989)	As per Plant inspection Note	---
228.	Give the names of storage materials in each of them	As per Plant inspection Note	---
229.	What are the vessel sizes (capacities in tones)	As per Plant inspection Note	---
230.	What is the material of construction for each vessel and what standards followed in designing / fabricating the vessel	Details available at concern department	---
231.	What are the operating pressure and temperature	Details available at concern	---

No	ITEM	OBSERVATION	RECOMMANDATION
		department	
232.	What are the vessel location (please indicate on-site plan or plot plan)	Details available at concern department	---
233.	Indicate whether vessels are above ground or underground	Above ground	---
234.	If any of the tanks storing flammable material, whether electrical installations are flame proof or not	Yes	---
235.	Are these storage vessels bunded/dyked	Yes	---
236.	If yes, What is the capacity of the bunds/dyke	Adequate	---
237.	Are the vessels properly bonded and earthed and whether periodically checked and record maintained	Yes	See plant note
238.	How are vessels isolated in the event of a mishap?	By valves	---
239.	Are the vessels fitted with remotely controlled isolation valves	No	---
240.	Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge, overflow line	Yes, as applicable.	---
241.	Where do such vents discharge	Yes	---
242.	Are the vessels provided with alarms for high level, high temperature and high pressure?	Yes	---
243.	Are stand-by empty tanks provided for emptying in case of emergencies?	No	---

No	ITEM	OBSERVATION	RECOMMANDATION
244.	What are the provisions made for firefighting / tackling emergency situations around the storage vessels	Fire hydrants, portable extinguishers, sand buckets etc	---
245.	Has any consequence analysis been carried out for these vessels (if yes, please give details)	Yes	---
246.	What periodical testing are carried out on the vessels to find out the integrity of the vessels?	Details available with concern department.	---
247.	Whether these tests are certified by the approved competent persons?	Yes	---
248.	Whether log sheets are filled up on daily basis for recording the parameters of these vessels?	Yes	---
ON-SITE GAS CYLINDERS STORAGE AREA (The Gas Cylinder Rules- 1981, The GFR- Rule 102 Sch. XXIV)			
249.	What is the various gas cylinders used in the plant? (Give details).	Ammonia, N_2, O_2, H_2, Acetylene	---
250.	What are the storage facilities?	Yes	---
251.	What are the measures taken for combating any emergency in the cylinder's storage area?	Control measures were taken.	---
252.	Are valid licenses available for storing all these cylinders?	Not require	---
253.	Whether integrity test certificates are obtained from the suppliers of the cylinders?	Yes	---
COMMUNICATION SYSTEMS ADOPTED IN PLANT			
254.	Are public address systems available in all plant areas?	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
255.	Are public address systems provided with uninterrupted power supply?	Yes	---
256.	Whether public address system is checked periodically for its proper functioning?	Yes	---
257.	Is there any hot line provided to fire station?	No	---
258.	What is the means of communicating emergency in the plants?	By messenger, Internal phones and emergency siren	---
	TRANSPORTATION		
259.	What potentially hazardous materials are transported to or from the site (including wastes)?	Yes. As per para 6.1 The security check at the Main Gate ensures the same.	---
260.	What modes of transport are used:		---
	i). Road?	Yes	---
	ii). Rail?	Yes	---
	iii). Pipelines?	Yes	---
	Road		
261.	Does the company employ licensed vehicle of its own/outside sources?	Yes, outside source	---
262.	Are the loading / unloading procedures on-site and safety precautions displayed?	Yes, loading / unloading procedures	---
263.	Are loaded tankers or trucks parked in a specific area on-site?	Yes	---
264.	Do all truck and tanker drivers carry TREM card or instruction booklet? & other document like RTO ,PUC, PERMIT Etc.	Yes, TREM CARD or instruction booklet provided and RTO, PUC PERMIT etc also checked and	---

No	ITEM	OBSERVATION	RECOMMANDATION
		ensured.	
265.	Do all truck and tanker drivers get training in handling emergencies during transport?	Certification truancy is imparted to drivers at site who carrying hazardous chemicals at site by certify agency in yearly basis	---
	Rail		
266.	What hazardous materials are transported by rail?	Not applicable	---
267.	Does the company have a direct siding on site?	Not applicable	---
268.	Are tankers or others wagons used in transportation?	Not applicable	---
	Pipelines		
269.	What materials are transported to and from the site by pipelines?	Natural Gas	---
270.	Are the pipelines underground or over ground?	For Natural Gas- Underground in public domain and above ground in plant.	---
271.	Are corrosion protection measures employed in pipelines?	By painting	---
272.	Whether intermediate booster pumps are used?	No	---
273.	What is the maximum, minimum and average transfer rate?	Details available with concern department	---
274.	Are the pipelines extended in the public domain?	Yes	---
275.	Are the pipelines dedicated for each type of chemicals?	Yes	---
276.	Are the pipelines fitted with safety equipment such as	Yes	---

No	ITEM	OBSERVATION	RECOMMANDATION
	leak detectors, automatic shut-off valves, etc.?		
277.	What is the frequency and method of testing of the pipelines?	As per risk-based management system / mechanical integrity programme was available. Record was available.	---
278.	Is there written procedure for tackling leakages in pipelines?	Not evident	---

RANKING AS PER IS QUESTIONNIARY

SR. NO.	ELEMENTS OF IS 14489	POINTS (OUT OF 10)
1.	OH & S POLICY	6
2.	SAFETY & HEALTH ORGANIZATION	
	(A) SAFETY DEPARTMENT	10
	(B) SAFETY COMMITTEES	9
	(C) SAFETY BUDGET	7
3.	ACCIDENT REPORTING, INVESTIGATION AND ANALYSIS	8
4.	SAFETY INSPECTIONS	8
5.	SAFETY EDUCATION AND TRAINING	
	(A) TRAINING	7
	(B) PERIODIC TRAINING/RETRAINING	10
	(C) SAFETY COMMUNICATION /MOTIVATION/PROMOTION	9
6.	FIRST AID	10
7.	OCCUPATIONAL HEALTH CENTER	4
8.	GENERAL WORKING CONDITIONS	
	(A) HOUSE KEEPING	6
	(B) NOISE	7
	(C) VENTILATION	7
	(D) ILLUMINATION	3
9.	HAZARD IDENTIFICATION AND CONTROL	7
10.	SAFE OPERATING PROCEDURES	8
11.	WORK PERMIT SYSTEM	6
12.	WASTE DISPOSAL SYSTEM	10
13.	PERSONAL PROTECTIVE EQUIPMENT (PPE)	8
14.	FIRE PROTECTION	8
15.	EMERGENCY PREPAREDNESS	9
16.	PLANT LAYOUT AND AREA CLASSIFICATION	0
17.	STATIC ELECTRICITY	5
18.	PRESSURE VESSELS (FIRED AND UNFIRED)	10
19.	NEW EQUIPMENT REVIEW	10
20.	LIFTING MACHINES AND TACKLES	7
21.	MOBILE EQUIPMENT AND VEHICULAR TRAFFIC	10
22.	SAFE ACCESS	10
23.	MATERIAL HANDLING	8
24.	TANK STORAGE VESSEL	10
25	ON-SITE GAS CYLINDERS STORAGE AREA	8
26.	COMMUNICATION SYSTEMS ADOPTED IN PLANT	10
27.	TRANSPORTATION	9
	TOTAL	**264/340**
		77.64%

9.CLOSING MEETING/PREPARATION & SUBMISSION OF THE AUDIT REPORT

After preparing the significant observations and recommendations, a closing meeting was held on last day of audit with the auditee's senior managers and the observations and recommendations were explained to them.

Each point was discussed, some missing information was obtained and the recommendations were finalized. The intention of the recommendations and their mode of compliance were explained to the management.

After finalizing the audit observations and recommendations in the closing meeting as mentioned in the previous chapter, the audit report was dictated by the Lead Auditor and it was ensured that the report was containing all the items required by IS 14489: 1998.

To highlight the products, processes, their hazards and controls separately, Chapter 6 is separately designed and it is arranged in the report at proper place. Without understanding the contents of this chapter, it is meaningless to proceed for any observation or recommendation pertaining to occupational health and safety. Observations and recommendations pertaining to this chapter are given in chapter 8.

Though the recommendations are given in chapter 8 and along with Annexure A & B in Chapter 8. We hope this system will be useful for speedy going through all the recommendations at a time.

The auditee factory is requested to prepare an action plan for implementation of this audit report, specifying action by concerned departments and time limits for action. If needed, we may be contacted for "compliance or follow-up audit" to review implementation of recommendations of this audit.

10. CONCLUDING REMARK

Naik& Associates- Surat's Audit team had a privilege to enjoy the hospitality and cordial warm welcome by company Management.

Following area can be considered as a major opportunity avenue for Safety & Fire performance.

- Mandatory Safety Training as required under Sec 111 A ii of the Factories Act to be given to all Employees and Contract Workmen.
- All precautions taken for Static Electricity shall be maintained always in good working Conditions.
- Safety inspection to be carried out by multidisciplinary team

Above said improvement avenues will yield excellent result if it is regularly monitored by top management. EHS system development using Behavior-based safety approach, will yield rapid result and we, NAIK & ASSOCIATES has an enough competency including DISH Approved Safety Training Institute & other resources / Facilities to assist in all aspect of EHS development process.

Once again, we are thankful to M/s Coromandal International Ltd. Sarigam, Gujarat for giving opportunity to become your business partner. We shall be happy to retain our relationship.

END OF REPORT

NAIK AND ASSOCIATES SURAT

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

June 27, 2019 GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents of revocation conditions.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,

This has reference to the above. We are hereby submitting following additional documents for point no. 5 (Certificates of chief electrical inspector) as asked by your good office in revocation order no. 509992 dated 14.06.2019.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

29/06/19
Gujarat Pollution Control Board
Head Office
Sector No. 10-A,
Gandhinagar-382010

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

RECEIVED
Sign.
Date : 09-07-2019
G.P.C. BOARD SARIGAM.

romandel International Limited
Protection Division
t No. 2102, GIDC,
am-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

istered Office : Coromandel House:
Sardar Patel Road
T : +91 40 27842034 E : info@coromandel.murugappa.com

CERTIFICATE

This Is to Ceritfy That The Inspection of Elelctrical Installation of M/S Coromandal International Ltd Plot No 2102 , GIDC Sarigam Ta. Umargam , Dist Valsad (Consumer No 37528) on Date 19/06/19 and Inastallation Has Been Found In Safe Condition at The Time of Inspection

No - AEI/VLD/INS/ 737 /2019
Office Of The Assistant Electrical Inspector
5 th Floor , Jilla Seva Sadan - 2
Tithal Road , Valsad
Date:- 20/06/2019

Assistant Electrical Inspector
Valsad

OFFICE OF THE ASSTT. ELECTRICAL INSPECTOR VALSAD

M/s
Coromandal International Ltd
Plot No 2102 ,GIDC Sarigam
Ta. Umargam , Dist Valsad

Copy Submitted To The Chief Electrical Inspector , Gandhinagar , for Information

CERTIFICATE

This Is to Ceritfy That The Inspection of Elelctrical Installation of M/S Coromandal International Ltd Plot No 735 , GIDC Sarigam Ta. Umargam , Dist Valsad (Consumer No 38540) on Date 19/06/19 and Inastallation Has Been Found In Safe Condition at The Time of Inspection

No - AEI/VLD/INS/ 739 /2019
Office Of The Assistant Electrical Inspector
5 th Floor , Jilla Seva Sadan - 2
Tithal Road , Valsad
Date:- 20/06/2019

Assistant Electrical Inspector
Valsad

M/s
Coromandal International Ltd
Plot No 735 ,GIDC Sarigam
Ta. Umargam , Dist Valsad

Copy Submitted To The Chief Electrical Inspector , Gandhinagar , for Information

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

July 5, 2019,

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents of revocation conditions.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,

This has reference to the above. We are hereby submitting following additional documents for revocation compliance.

- Point no. 6: Warehouse plan capacity (material wise) and safety system for storage of finished goods and raw material in our facility.
- Point No. 10: CCA Compliance Report.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

Himanshu Kumar Shukla
(AVP and Unit Head)

CORMANDEL INTERNATIONAL LIMITED ★ SARIGAM

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

RECEIVED
Sign.
Date : 09-07-2019
G.P.C. BOARD SARIGAM.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Annexure: Warehouse Detail

We have three ware houses at site namely
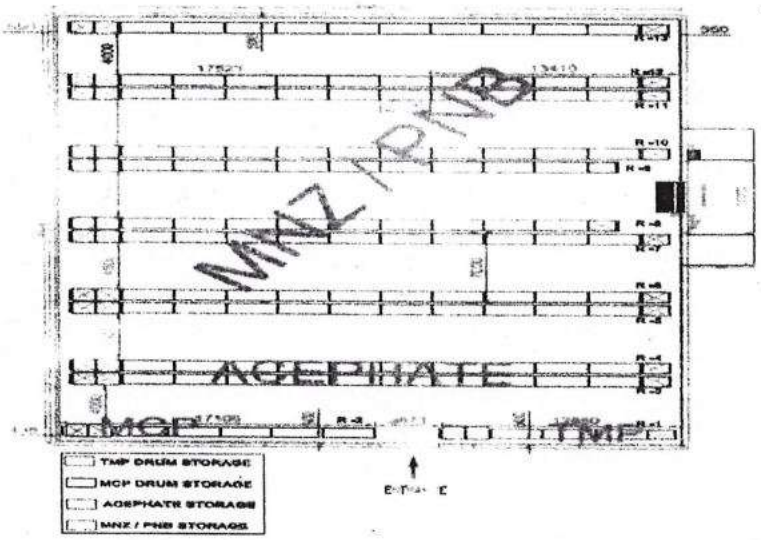
1. Warehouse A (For Finished Good)
2. Warehouse C (For Raw Material & Packaging Material)
3. Warehouse D (For Finished Good)

The detail of warehouse plan, capacity (material wise), and safety system for the at existing facility is as follows

1) Ware house A

Warehouse A with area 15394 Sq. ft.

a. Plan



b. Storage Capacity

Sr. No.	Material	Storage Capacity (MT)
1	Mancozeb/Propineb/Maneb	541
2	Acephate	115
3	Monocrotophos/Other	46
4	TMP/TEP/PYZ/Other	29
Total		731

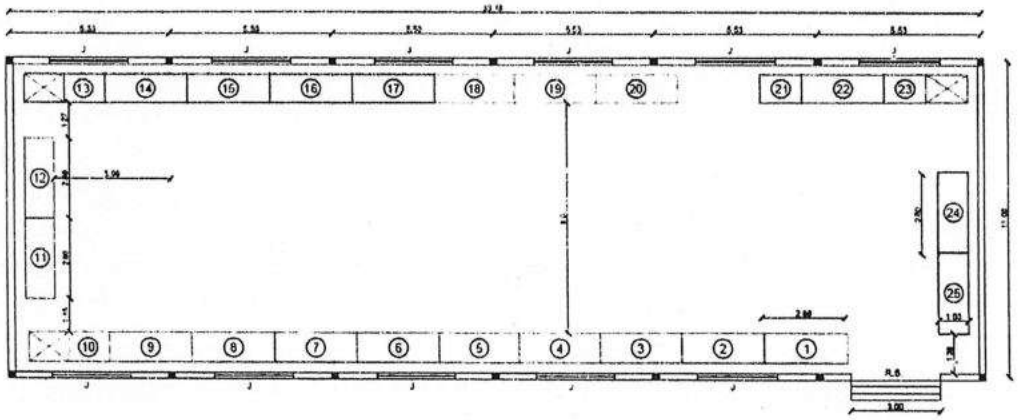
c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse A	Yes	Yes	Yes	Yes	Yes

2) Warehouse – C

Warehouse C with area 3929 Sq. ft.

a. Plan



1- 10 : Raw Material
11-17 : Paper Bags
18-20 : HDPE Liners
21-23 : Jumbo Bags
24-25 : Boxes/Pouches/Stickers

b. Storage Capacity

Sr. No	Material	Storage Capacity (MT)
1	Raw Material	46
2	Paper bags	16
3	HDPE Liners	7
4	Jumbo Bags	5
5	Boxes/Pouches/Stickers	5
Total		79

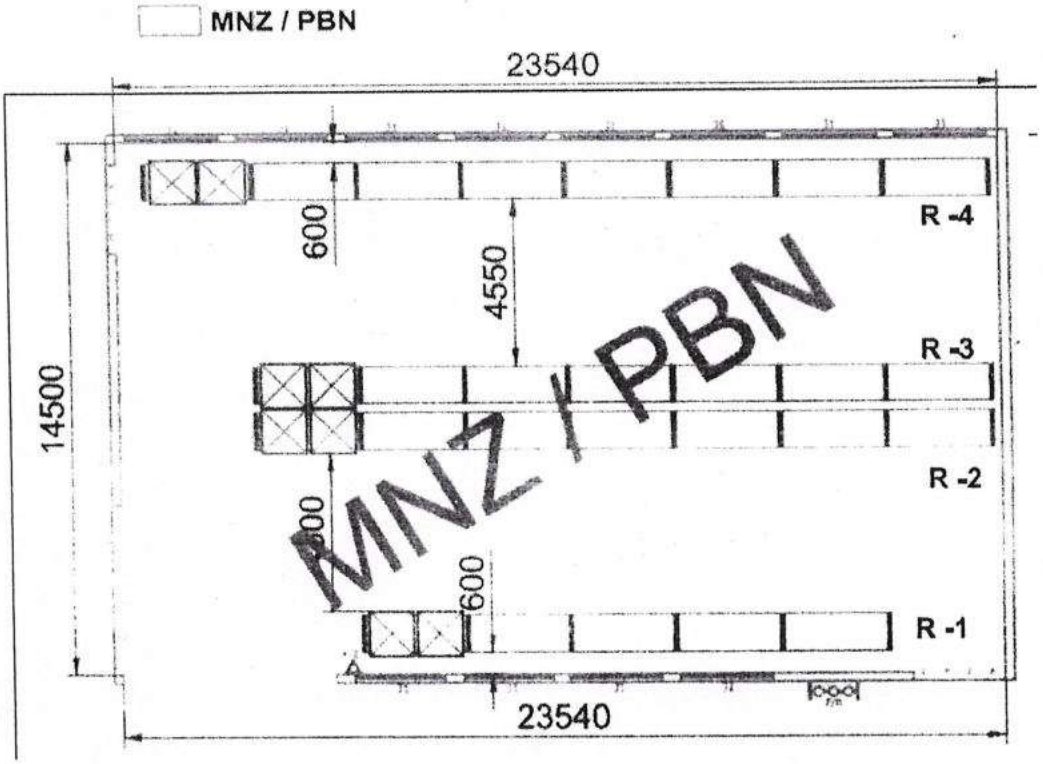
c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse C	Yes	Yes	Yes	Yes	Yes

3) Warehouse – D

Warehouse D with area 3760 Sq. ft.

a. Plan



b. Storage Capacity

Sr. No.	Material	Storage Capacity (MT)
1	MNZ/PNB/Maneb	152

c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse D	Yes	Yes	Yes	Yes	Yes

CCA Compliance Report

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Consent Order No. AWH-84402, Date of Issue: 22/02/2017.</td><td></td></tr>
<tr><td>2.</td><td>The consent shall be valid up to 30/09/2021 for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following internal products.
<table>
<tr><th>Sr. No.</th><th>Name of the Products</th><th>Capacity (MT/Annum) (As per CC&A)</th><th>Total Production (MT/Annum)</th></tr>
<tr><td colspan="4">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb (Tech.)</td><td>38000</td><td rowspan="4">20410.73</td></tr>
<tr><td>2</td><td>Mancozeb (Tech.) + Maneb (Tech.)</td><td>38000</td></tr>
<tr><td>3</td><td>Mancozeb (Tech.) + Zineb (Tech.)</td><td>38000</td></tr>
<tr><td>4</td><td>Mancozeb (Tech.) + Propineb (Tech.)</td><td>22116</td></tr>
<tr><td></td><td>Total Production capacity of Group A</td><td>38000</td><td></td></tr>
<tr><td colspan="4">GROUP B</td></tr>
<tr><td>1</td><td>Diethyl Thiophosphoryl Chloride (DETC)</td><td>3600</td><td rowspan="6">0</td></tr>
<tr><td>2</td><td>DMTC</td><td>2160</td></tr>
<tr><td>3</td><td>Diafenthiuron</td><td>1650</td></tr>
<tr><td>4</td><td>Thiamethoxam</td><td>1650</td></tr>
<tr><td>5</td><td>Pymetrozine</td><td>1650</td></tr>
<tr><td>6</td><td>Diflubenzuron</td><td>1650</td></tr>
<tr><td></td><td>Total Production capacity of Group B</td><td>3600</td><td></td></tr>
<tr><td colspan="4">GROUP C</td></tr>
<tr><td>1</td><td>DMTC Amide</td><td>4796</td><td>0</td></tr>
<tr><td></td><td>Total Production capacity of Group C</td><td>4796</td><td></td></tr>
<tr><td colspan="4">GROUP D</td></tr>
<tr><td>1</td><td>Glyphosate (Tech.)</td><td>5000</td><td rowspan="2">212.12</td></tr>
<tr><td>2</td><td>PMIDA</td><td>3300</td></tr>
<tr><td></td><td>Total Production capacity of Group D</td><td>5000</td><td></td></tr>
<tr><td colspan="4">GROUP E</td></tr>
<tr><td>1</td><td>Chlorpyriphos (Tech.)</td><td>5000</td><td>0</td></tr>
<tr><td></td><td>Total Production capacity of Group E</td><td>5000</td><td></td></tr>
</table>
</td><td>• Complied.
• Total Production Quantity in FY-2018-2019 is within permitted Production Capacity.</td></tr>
</table>

GROUP F			
1	Acephate (Tech.)	7000	**2088.30**
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	**1768.56**
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	**2760.65**
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	**4125.66**
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	**3319.62**
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	**0**
	Total Production capacity of Group K	**2000**	
GROUP L			
1	Methamidafos (Tech.)	0	**0**
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	**0**
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic Acid	429	**0**
2	2,3-Difluoro-5-chloro	353	

	pyridine		
3	Clodinafop propargyl (Tech.)	933	
4	Triclopyr Acid (Tech.)	933	
5	Triclopyr Butotyl Ester (Tech.)	933	
6	Picloram (Tech.)	495	
7	Pretilachlor (Tech.)	933	
8	Bispyribac sodium (Tech.)	330	
9	Azoxystrobin	52.8	
10	Boscalid	660	
11	Metalaxyl	933	
12	Proclaraz	933	
	Total Production capacity of Group N	**933**	
	GROUP O		
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	**0**
2	Fipronil (Tech.)	933	
3	Emmamectin Benzoate (Tech.)	495	
4	Difenoconazole (Tech.)	660	
5	Triazophos (Tech.)	933	
6	Glufosinate Ammonium Salt	933	
7	Metribuzin	933	
	Total Production capacity of Group O	**933**	
	GROUP P		
1	Imidacloprid (Tech.)	990	**0**
2	Acetamiprid (Tech.)	990	
	Total Production capacity of Group P	**990**	
	BY PRODUCTS		
1	Ammonium Chloride Powder (NH4Cl)	13398	6685
2	Sodium Chloride (NaCl)	8238	0
3	Sodium Sulphate (Na2SO4)	19779	10201
4	Ammonium Sulphate (NH4)2SO4	8370	270

Total Production capacity of all Groups and By-Product	160277	

LIST OF FORMULATION PRODUCTS

Sr. No.	FORMULATION PRODUCTS	Qty. (MT/Annum) (As per CC&A)	Total Production (MT/Annum)
1	Mancozeb 80% WP	26400	0
2	Mancozeb 75% WP/WDG	28050	0
	LIQUID FORMULATIONS		
1	Glyphosate 41% IPA	34650	753.20
2	Glyphosate 62% IPA	26136	0
3	Monocrotophos 36% SL	7920	0
4	Acephate 75% SP	8514	0
5	Chloropyriphos 20% EC	15840	0
6	Mancozeb SC (420-600 gm/Ltr)	3300	0
7	Mancozeb SE (420-500 gm/lit)	3300	0
8	Mancozeb OS 600 gm/lit	3300	0
9	Mancozeb (63%)+Carbendazim(12%)	1650	0
10	Mancozeb (64%)+Metalyxyl (8%)	1650	0
11	Mancozeb (64%)+ cymoxanil (8%)	1650	0
12	Glyphosate 71% ammonium salt(prills)	4620	0
13	Glyphosate 5% ammonium salt	6600	0
14	Monocrotophos 40% SL (W/V)	2640	0

15	Diclorovos 76% EC	1980	0	
16	Acephate 40% SL	1650	0	
17	Acephate 75% prills	660	0	
18	Acephate 95% prills	660	0	
19	Chloropyriphos 38.7% EC	1650	0	
20	Chloropyriphos 480 gm/lit EC	1650	0	
21	Chloropyriphos 50% EC	1650	0	
22	Chloropyriphos 50% + Cypermethrine 5% EC	1650	0	
23	Cypermethrin 10% EC	1650	0	
24	Cypermethrin 25% EC	1650	0	
25	Maneb 80% WP	8910	0	
26	Propineb 70% WP	9240	0	
27	Zineb 80% WP	8910	0	
28	Triclopyr Butotyl ester 480 gm/lit	990	0	
29	Methamidophos 600 gm/lit SL	5280	0	
30	Imidaclopyrid 17.8% SL	8580	0	
31	Clodinafop propargyl 15% WP	10230	0	
	Total	**243210**		

3.0	**CONDITIONS UNDER WATER ACT:**	
3.1	The source of water supply shall be GIDC Sarigam	Complied
3.2	The quantity of total water consumption shall not exceed 1078 KLPD as per below break up a) Industrial: 1018 KLPD b) Domestic: 60 KLPD	• Complied. • Total average Water consumption in

		FY 2018-2019 is 918.86 KLD including domestic.
3.3	The quantity of total waste water shall not exceed 1073.33 KLPD as per below break up a) Industrial: 1013.33 KLPD b) Domestic: 60 KLPD	• Complied. • Total average Waste water generation in FY 2018-2019 is 445.96 KLD including domestic.
3.4	Out of 1013.33 KL/day the concentrated and toxic effluent stream generated i.e. 93.63 KL/day shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or shall be disposed through common incineration facility SEPPL Kutchh or GSEPL-Palsana. 669.5 KL/Day High TDS Low COD effluent shall be evaporated through Multiple Effective Evaporator (MEEs)/ in case of any breakdown or maintenance of in house MEE, high TDS effluent will be sent to SEPPL for evaporation and drying. 190 KL/day dilutes stream + 60 KL/day domestic i.e. 250 KL/day along with MEE condensate 331 KL/day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharged as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day. The mechanism to monitor of the concentrated stream generated, treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis. In no case, concentrated stream shall be sent with diluted stream for the further treatment. Unit shall affix of Water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act -1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required.	• Complied. • Total Average Waste water discharge quantity in FY 2018-2019 is 445.96 KLD including domestic.
3.5	**TRADE EFFLUENT:**	
3.5.1	The concentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or SEPPL Kutchh or GSEPL-Palsana incineration facility or co-processing facility. The incineration facility shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc. The industry shall operate fully and efficiently incineration system/ air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partially non operational for any reason what so ever (whether for maintenance/repairs/electricity failures or otherwise) They shall not restart such activity unless and until the incineration facility is fully in operation. The pipeline connecting various equipments of sump of incineration	• Complied. • We are disposing off incinerable hazardous waste to SEPPL – Kutch and RSPL – Panoli for incineration. • We are operating incinerator system with CEMS attached to CPCB and GPCB Server.

	system should be minimum in numbers and shall have permanent connection (no losses or flexible connection) The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for consumption & temperature measuring devices within incinerator at different points & scrubber outside the incinerator shall be provided. These all data shall be recovered every day. The applicant shall have to register under the provisions of factories act – 1948 and shall be obtained necessary factory provisions. The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store and handle solid waste in accordance with provisions of the effluent rules in behalf The printed logbook shall be maintained for: a. Energy Consumption b. Waste water flow at inlet and outlet of incineration system c. Quantity of sludge generated d. Laboratory analysis reports for each of the specified parameters of liquid effluent, gaseous discharge & sludge samples. The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production through such figure shall be supplied on monthly basis. The unit shall supply separate figure for consumption of electricity for running the incinerator by having separate measuring meters for such incinerator.	
3.5.2	The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards.	• Complied. • We are operating ETP with primary, secondary and tertiary system and installed Continuous effluent monitoring system with GPCB and CPCB server connectivity. • Treated waste water quality is well within permitted limit. • Analysis Report of the same attached as Annexure-1.

PARAMETERS	**PERMISSIBLE LIMIT**
pH	5.5-6.5
Temperature	40°C
Color (pt-co scale) in units	100 Units
Suspended solids	200 mg/l
Oil and grease	10 mg/l
Phenolic Compound	1.0 mg/l
Cyanide (as CN)	0.2 mg/l
Fluoride	2 mg/l
Sulphide	2 mg/l
Ammonical Nitrogen	100 mg/l
Arsenic (As)	0.2 mg/l
Total Chromium	2.0 mg/l
Hexavalent Chromium	0.1 mg/l
Copper (Cu)	3.0 mg/l
Lead (Pb)	0.1 mg/l
Mercury (hg)	0.01 mg/l
Nickel(Ni)	3.0 mg/l
Zinc(Zn)	5.0 mg/l
Cadmium (Cd)	1.0 mg/l
Iron	3 mg/l
BOD (5 Days at 20C)	300 mg/l
COD	750 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l

	Total Dissolved solids: 2100 mg/l Insecticides/Pesticides: Absent Sodium absorption ratio: 26 Sodium percent: 60 Bio – essay test: 90% survival of fish after 98 hrs in 100% effluent. • All efforts shall be made to remove color & unpleasant odor as far as predictable.	
3.5.3	The final treated effluent conforming the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being, managed by Sarigam Waste Effluent Management Co. Ltd.	• Complied. • Final treated effluent discharged into CETP through GIDC underground drainage system.
3.5.4	Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.	Complied.
4.0	**CONDITIONS UNDER THE AIR ACT:**	
4.1	The following shall be used as fuel in dryers, boiler, incinerator & DG sets respectively. **Sr. No / Fuel / Existing / UTILITY** 1. Natural gas — Approx. 2500 SCM/Hr — Boiler / Incinerator / MEE 2. Furnace Oil — 2 KL/Hr — Boiler 3. Natural Gas — 1000 SCM/Hr — Hot Air Generator 4. HSD — 6 KL/day — DG	• Complied. • Average natural Gas consumption is 1451 SCM / Hr, Furnace Oil is 0.0 KL/Hr and HSD is 0.130 KL/Day in FY 2018-19.
4.2	The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.	Complied.
4.3	The flue gas emission through stack attached to stack shall conform to the following standards: **Sr. No. / Stack Attached to / Height meter / APCM / Parameter / Permissible Limit** 1. Boiler-3 Nos. — 50 — -- — PM, SO_x, NO_x — 150 mg/Nm³, 100 ppm, 50 ppm 2. D G Set – 01 Nos.(1000 KVA) — 12 — -- 3. D G Set – 2 Nos.(500 KVA) — 12 — -- 4. D G Set– 01 Nos.(200 KVA) — 12 — -- 5. Liquid and Gas Incinerator 01 — 52 — Ventury Alkali scrubber — PM, SO_2, NO_x, HCL, CO — 50, 200, 400, 50, 100 6. Solid Incinerator Incinerator 03	• Complied. • Emission are well within permitted norms. • In incinerator CEMS installed with GPCB and CPCB server connectivity. • Regular third party monitoring is carried out and emissions found well within

				scrubber			
GROUP F							
16	Acephate(Tech.)	Ammonia solution preparation reactor- 01 Nos. – 4 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH_3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
GROUP G							
17	Monocrotophos (T) **OR** Dicrotophos	Chlorination Reactor and Neutralizer	20	Two scrubbers in series water scrubber &alkali scrubber	HCl Cl_2	20 9	Either or combination of theproducts
GROUP H							
18	DDVP	Gas to Incinerator			CH_3Cl		
GROUP I							
19	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor& Storage tank	11	Alkali Scrubber	HCl Cl_2 PCl_3	20 9 9	
GROUP J							
20	Trimethyl Phosphite (TMP) **OR** Triethyl Phosphite (TEP)	TMP plant reactor andstorage tank	20	Acid Scrubber	NH_3 Odor	30 Nil	Either of the product
		TMP/DETC products storage tanks	11	Acid Scrubber			
GROUP K							
21	Phosphorous Sulphochloride ($PSCl_3$)	PSCl3 plant reactor and storage tank	22	Alkali Scrubber	HCL PCl_3	20 9	
GROUP L							
22	Methamidafos	NO process gas emission					
GROUP M							
23	Phosphorous Acid	phosphorous acid Reactor	20	Water Scrubber	HCl	20	
GROUP N							
24	2-(4-Hydroxy phenoxy) Propionic acid	--	No process stack				Either of the product will be manufacture
25	2,3-Difluoro-5-chloro pyridine	--	No process stack				
26	Triclopyr Acid / TriclopyrButotyl Ester	--	No process stack				
27	Clodinafop Propargyl						
28	Picloram	Picloram&pretilachlorreactors	20	Alkali Scrubber	HCl	20	
29	Pretilachlor		No process stack				

30	Bispyribac Sodium	--	No process stack				
31	Azoxystrobin		No process stack				
32	Boscalid	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
33	Metalaxyl	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
GROUP O							
34	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	--	No process stack				Either of the product will be manufacture
35	Fipronil	Fipronil reactor	20	Alkali Scrubber	HCl	20	
36	Emmamectin Benzoate	--	No process stack				
37	Difenoconazole	--	No process stack				
38	Triazophos	--	No process stack				
39	Glufosinate Ammonium Salt	--	No process stack				
40	Metribuzin	--	No process stack				
41	NH4Cl	NH4Cl Storage Tank	11	Acid Scrubber			
42	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
OTHERS							
43	HCl Storage Tank	HCl Storage Tank	11	Alkali Scrubber	HCl Cl_2	20 9	
44	Chlorine Shed	Chlorine Shed	13.5	Alkali Scrubber	Cl_2	9	
45	Drum Filling Station	Drum Filling Station	11	Alkali Scrubber	Odor		
46	Sodium Sulphate Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
47	Ammonium Chloride Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
48	Qurippo (1.364 MW)	Stack Attached to Power plant	45	--	PM SO_2 NOx	150 100 50	
49	Incinerators – 03 Nos. – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO_2 NOx	50 200 400	

<table>
<tr>
<td>4.5</td>
<td>Ambient air quality within the premises of the industry shall conform to the following standards:
<table>
<tr><th>PARAMETERS</th><th>PERMISSIBLE LIMIT</th></tr>
<tr><td>Particulate Matter(PM $_{10}$)</td><td>100 microgram /M^3</td></tr>
<tr><td>RSPM (PM$_{2.5}$)</td><td>60 microgram /M^3</td></tr>
<tr><td>Oxides of Sulphur (SOx)</td><td>80microgram /M^3</td></tr>
<tr><td>Oxides of Nitrogen (NOx)</td><td>80 microgram /M^3</td></tr>
<tr><td>HCl</td><td>200 microgram /M^3</td></tr>
<tr><td>Cl_2</td><td>100 microgram /M^3</td></tr>
<tr><td>H_2S</td><td>500 microgram /M^3</td></tr>
<tr><td>HC</td><td>100 microgram /M^3</td></tr>
<tr><td>Ammonia</td><td>400 microgram /M^3</td></tr>
<tr><td>HF</td><td>80 microgram /M^3</td></tr>
<tr><td>CS_2</td><td>2000 microgram /M^3</td></tr>
<tr><td>CO</td><td>5000 microgram /M^3</td></tr>
</table>
• 4 Hourly or 08 Hourly or 01 Hourly monitored values as applicable shall be complied the 98% of the limit in a year, 2% of the time. They may exceed the limits out not one two consecutive days of monitoring.</td>
<td>• Complied.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis report of the same attached as Annexure-4.</td>
</tr>
<tr>
<td>4.6</td>
<td>The applicant shall operate industrial plant/ air pollution control equipment very efficiently and continuously so that the gaseous emission always conform to the standards specified in condition no. 4.3 and 4.4 as above.</td>
<td>• Complied.
• We operate APCM efficiently.
• Regular third party monitoring is carried out and emissions found well within permitted norms.</td>
</tr>
<tr>
<td>4.7</td>
<td>The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in condition no. 4.3 and 4.4 as above.</td>
<td>Noted.</td>
</tr>
<tr>
<td>4.8</td>
<td>The applicant shall provide portholes, ladder, platform etc at chimney (s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.</td>
<td>• Complied
• We have provided portholes, ladders and platforms with stack nomenclature in each chimney.</td>
</tr>
<tr>
<td>4.9</td>
<td>The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 dB(A)during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6·a.m.</td>
<td>• Complied
• We are monitoring noise level by NABL and GPCB authorized third party and all are well within norms.</td>
</tr>
</table>

<table>
<tr><td>5.</td><td colspan="2"><u>GENERAL CONDITIONS:</u></td></tr>
<tr><td>5.1</td><td>Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>Noted and will inform board, if any.</td></tr>
<tr><td>5.2</td><td>Applicant shall also comply with the general condition given in annexure – I</td><td>Complied.</td></tr>
<tr><td>6.0</td><td colspan="2">Authorisation For The Management & Transboundary Movement Of Hazardous Wastes Form-2 (See rule 6(2)) for grant of authorization for occupier or operator handling hazardous waste Rules – 2016.</td></tr>
<tr><td>6.1</td><td>Number of authorization: AWH-84402 date of Issue 22/02/2017.</td><td>--</td></tr>
<tr><td>6.2</td><td>Reference of application No. 115227, dated 01/12/2016.
M/s. COROMANDEL INTERNATIONAL LTD. is hereby granted an authorization to operate facility for following hazardous waste on the premises situated at plot No: 2402, GIDC industrial Area, Sarigam, Dist. Valsad.
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Waste</th><th colspan="2">Category of Hazardous waste as per the Schedules I, II and III of these Rules</th><th rowspan="2">Authorized mode of disposal or recycling or utilization or co-processing etc.</th><th rowspan="2">Quantity</th></tr>
<tr><th>Sch.</th><th>Category</th></tr>
<tr><td>1</td><td>ETP Sludge</td><td>I</td><td>35.3</td><td>Collection, storage, transportation, disposal at common incineration facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli</td><td>2640 MT/Year</td></tr>
<tr><td>2</td><td>Discarded Container/ bags</td><td>I</td><td>33.3</td><td>Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners disposed through</td><td>24000 Nos./year</td></tr>
</table>
</td><td>• Complied.
• Hazardous Waste disposed quantity in FY 2018-19 are well within given permission.</td></tr>
</table>

				common GPCB approved decontaminati on facility.	
3	Oil & Grease skimming residue	I	36. 4	Collection, storage, transportation , disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	32.40 MT/Year
4	Chemical Sludge containing residue pesticides	I	29. 2	Collection, storage, transportation , disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
5	Used Oil	I	5.1	Collection, storage, transportation , disposal by selling to registered reprocessors.	0.3 MT/Year
6	Spent carbon	I	38. 2	Collection, storage, transportation , disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	257.4 MT/Year
7	Ash from incinerator	I	37. 2	Collection, storage, transportation	4755 MT/Year

				, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	
8	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	0.240 MT/year
9	Spent HCl 30% Acetic Acid 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	24588 MT/year 7000 MT/year
10	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	2032 MT/Year
11	Salts from MEE	I	37.3	Collection, storage, transportation	4570.44 MT/Year

					, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.		
	12	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	1995 MT/Year	
	13	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation, disposal through incineration SEPPL, Kutch. GISPL-Palsana.	50 MT/Year	
6.3	The authorization shall be valid up for a period of 30/08/2021						Noted.
6.4	The authorization is subject to the following general and specific conditions.						Noted.
A.	**General Conditions under hazardous and other Wastes (Management & Transboundary Movement) Rules – 2016.**						
1.	The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 & the rules made there under.						Complied.
2.	The authorisation or its renewal shall he produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.						Noted.
3.	The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.						Complied.
4.	Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.						Noted.
5.	The person authorised shall implement Emergency Response Procedure (FRP) for which this authorisation is being granted						Complied.

	considering all site specific. Possible scenarios such as spillages, leakages, tire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.	
6.	The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities For Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"	Complied.
7.	It is the duty of the authorised person to take prior permission of the Pollution Control Board to close down the facility	Noted.
8.	The imported hazardous and other wastes shall he fully insured for transit as well as for any accidental occurrence and its clean - up operation.	Complied.
9.	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	Not applicable.
10.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre - processing or utilisation of imported hazardous or other wastes shall he treated and disposed of as per specific conditions of authorisation.	Noted.
11.	The importer or exporter shall bear the cost of import or export and mitigation of damages if, any	Noted.
12.	An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules - 2016.	Noted.
13.	Any other conditions for compliance as per the Guidelines issued by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time	Noted.
14.	Annual return shall be filed by June 30th for the period ensuring 31st March of the year.	Complied.
B.	**Specific Condition (Whichever is applicable)**	
1.	The authorized actual user of hazardous waste shall maintain records of hazardous and other wastes purchased in passbook issued by state pollution control board along with authorization.	Complied.
2.	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in passbook of the actual user.	Complied
3.	In case of renewal of authorization, a self certified compliance report in respect of effluent emission standard and the conditions specified in the authorization for hazardous and other waste shall be submitted to SPCB	Complied
4.	The occupier of the facility shall comply standard operating procedure/guidelines published by MoEF & CC or CPCB or GPCB from time to time.	Complied
5.	Unit shall comply provisions of E-waste management Rules - 2016	Complied

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

July 18, 2019,

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents of revocation conditions.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,

This has reference to the above. We are hereby submitting following additional document for revocation compliance.

Point no. 7: Report of Ambient air quality monitoring for CS2 and H2S along with all the parameters specified in National Ambient Air Quality Standards-2009 at four locations @ 90 degree.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

CORMANDEL INTERNATIONAL LIMITED SARIGAM

Himanshu Kumar Shukla
(AVP and Unit Head)

CC:
Mr. H. M. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

RECEIVED
Sign.
Date : 22.07.2019
G.P.C. BOARD SARIGAM.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.

T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/01(ULR- TC709919000009271P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ01		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 01.07.2019		5.	Sampling Location: Nr.Main Gate	
6.	Sampling time: 10:00 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	72	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	35	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	5.32	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	8.74	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.02	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.32	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	965	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin | **Designation : Lab Incharge**

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----------END OF REPORT----------

Certificate No.: TC-7099

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/02(ULR- TC709919000009272P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited, Plot No. 2102, Sarigam Ind. Estate, Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ02		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 01.07.2019		5.	Sampling Location: Nr.ETP	
6.	Sampling time: 10:30 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	Environment Condition:	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	69	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	32	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	4.21	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	9.32	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.78	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.69	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	874	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin | **Designation : Lab Incharge**

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----------END OF REPORT----------

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/03(ULR- TC709919000009273P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ03		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 02.07.2019		5.	Sampling Location: Nr.Raw water tank	
6.	Sampling time: 11:00 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper:	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	50	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	28	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	3.44	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	6.73	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.47	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.34	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	865	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

Certificate No.: TC-7098

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/04(ULR- TC709919000009274P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ04		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 02.07.2019		5.	Sampling Location: Nr.Canteen	
6.	Sampling time: 11:30 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	57	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	26	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	3.78	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	6.54	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.25	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	0.98	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	748	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/05(ULR- TC709919000009275P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ05		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 04.07.2019		5.	Sampling Location: Nr.Main Gate	
6.	Sampling time: 10:15 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	67	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	32	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	2.85	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	8.65	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.25	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.69	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	965	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/06(ULR- TC709919000009276P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate, Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ06		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 04.07.2019		5.	Sampling Location: Nr.ETP	
6.	Sampling time: 10:45 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Low	Humidity : High	Wind speed: Low	Cloud cover: High
	Rain: Medium	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m^3	:	64	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m^3	:	30	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m^3	:	4.96	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m^3	:	9.48	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m^3	:	1.36	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m^3	:	1.58	200	Mercuric Nitrate Method
7.*	CO	µg /m^3	:	874	5000	Gas Chromatography
8.	H_2S	µg /m^3	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m^3	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m^3	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m^3	:	N.D.	160	Gas Chromatography
12.	HF	µg /m^3	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin | **Designation : Lab Incharge**

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/07(ULR- TC709919000009277P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ07		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 05.07.2019		5.	Sampling Location: Nr.Raw water tank	
6.	Sampling time: 09:30 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper:	Bladder: Clamped √
15.	Environment Condition:	Temp: Normal	Humidity : Medium	Wind speed: Low	Cloud cover: Medium
	Rain: No Rain	Wind Direction: Downwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	44	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	25	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	3.78	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	7.58	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.47	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.87	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	910	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/08(ULR- TC709919000009278P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ08		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 05.07.2019		5.	Sampling Location: Nr.Canteen	
6.	Sampling time: 09:45 hr		7.	Sampling Duration: 8 Hrs	
8.	Analysis commenced on: 04.07.2019		9.	Analysis Completed on: 04.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed	Bladder: Clamped √
15.	Environment Condition:	Temp: Normal	Humidity : Medium	Wind speed: Low	Cloud cover: Medium
	Rain: No Rain	Wind Direction: Downwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	48	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	24	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	2.69	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	6.58	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.69	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.02	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	968	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/01(ULR- TC709919000009279P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ01		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 08.07.2019		5.	Sampling Location: Nr.Main Gate	
6.	Sampling time: 12:30 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 11.07.2019		9.	Analysis Completed on: 11.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: Low	Cloud cover: Medium
	Rain: No Rain	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	74	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	34	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	5.63	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	9.65	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.69	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.96	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	1025	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected **" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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Certificate No.: TC-7099

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/02(ULR- TC709919000009280P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate, Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ02		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 08.07.2019		5.	Sampling Location: Nr.Canteen	
6.	Sampling time: 12:45 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 11.07.2019		9.	Analysis Completed on: 11.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: Low	Cloud cover: Medium
	Rain: No Rain	Wind Direction: Upwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	70	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	33	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	6.58	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	10.25	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	2.01	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	2.87	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	974	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/03(ULR- TC709919000009281P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 1731978246 – 009JL19AQ03	3.	Client Representative:Mr. Mitesh Thacker
4.	Sampling Date: 09.07.2019	5.	Sampling Location: Nr.Raw water tank
6.	Sampling time: 11:30 hr	7.	Sampling Duration: 24 Hrs
8.	Analysis commenced on: 11.07.2019	9.	Analysis Completed on: 11.07.2019
10.	Reporting Date: 17.07.2019	11.	Sample Collected By:Mr. Mithun Mandal
12.	Test Requirement: Ambient Air Quality Monitoring	13.	Sampling Procedure: IS Method

14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper:	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: low	Cloud cover: Medium
	Rain: Light	Wind Direction: Downwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	59	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	28	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	5.74	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	8.96	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	2.41	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.81	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	1069	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/04(ULR- TC709919000009282P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ04		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 09.07.2019		5.	Sampling Location: Nr.ETP Plant	
6.	Sampling time: 11:50 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 11.07.2019		9.	Analysis Completed on: 11.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: low	Cloud cover: Medium
	Rain: Light	Wind Direction: Crosswind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	62	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	27	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	6.89	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	10.78	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.98	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.69	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	985	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

Certificate No.: TC-7099

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/05(ULR- TC709919000009283P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ05		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 11.07.2019		5.	Sampling Location: Nr.Main Gate	
6.	Sampling time: 11:30 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 15.07.2019		9.	Analysis Completed on: 15.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	Environment Condition:	Temp: Normal	Humidity : Medium	Wind speed: low	Cloud cover: Medium
	Rain: Light	Wind Direction: Downwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	70	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	32	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	6.85	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	9.65	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.63	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	2.74	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	1069	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

Certificate No.: TC-7099

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/06(ULR- TC709919000009284P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate, Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ06		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 11.07.2019		5.	Sampling Location: Nr.Canteen	
6.	Sampling time: 11:50 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 15.07.2019		9.	Analysis Completed on: 15.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed √	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: low	Cloud cover: Medium
	Rain: Light	Wind Direction: Downwind		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	66	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	30	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	5.78	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg /m³	:	8.69	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.47	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.85	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	963	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By

Name : Sapana Amin **Designation : Lab Incharge**

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----------END OF REPORT----------

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/07(ULR- TC709919000009285P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 1731978246 – 009JL19AQ07	3.	Client Representative:Mr. Mitesh Thacker
4.	Sampling Date: 12.07.2019	5.	Sampling Location: Nr.Raw water tank
6.	Sampling time: 11:00 hr	7.	Sampling Duration: 24 Hrs
8.	Analysis commenced on: 15.07.2019	9.	Analysis Completed on: 15.07.2019
10.	Reporting Date: 17.07.2019	11.	Sample Collected By:Mr. Mithun Mandal
12.	Test Requirement: Ambient Air Quality Monitoring	13.	Sampling Procedure: IS Method

14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper:	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity ; Medium	Wind speed: Moderate	Cloud cover: Medium
	Rain: Light	Wind Direction: Corearea		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	62	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	33	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	7.98	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	10.63	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	2.01	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.85	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	874	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By : **Designation : Lab Incharge**

Name : Sapana Amin

NOTE : 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

Certificate No.: TC-7099

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 00
Effective Date:. 01-01-2015	Issue Date: 01-01-2015	Revision Date: 01-01-2015

REPORT NO.: JUL19/009/08(ULR- TC709919000009286P)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 1731978246 – 009JL19AQ08		3.	Client Representative:Mr. Mitesh Thacker	
4.	Sampling Date: 12.07.2019		5.	Sampling Location: Nr.ETP Plant	
6.	Sampling time: 11:20 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 15.07.2019		9.	Analysis Completed on: 15.07.2019	
10.	Reporting Date: 17.07.2019		11.	Sample Collected By:Mr. Mithun Mandal	
12.	Test Requirement: Ambient Air Quality Monitoring		13.	Sampling Procedure: IS Method	
14.	Description of Sample:	Sampling Bottles: Sealed √		Filter Paper: Packed	Bladder: Clamped √
15.	**Environment Condition:**	Temp: Normal	Humidity : Medium	Wind speed: Moderate	Cloud cover: Low
	Rain: No Rain	Wind Direction: Crosswimd		Wind blowing from: SW	Station category: Industrial

TEST RESULTS

S.No	Parameters	Unit (SI)		Results	Specification/ SPCB Norms	Method Used
1.	PM_{10}	µg /m³	:	68	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg /m³	:	31	60	Guideline by SPCB
3.	Sulphur Dioxide (SO_2)	µg /m³	:	7.96	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_X)	µg /m³	:	9.84	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg /m³	:	1.87	100	IS : 5182(Part XIX) : 1982
6.*	HCL	µg /m³	:	1.58	200	Mercuric Nitrate Method
7.*	CO	µg /m³	:	918	5000	Gas Chromatography
8.	H_2S	µg /m³	:	N.D.	500	IS : 11255(Part - 4):1985
9.	NH_3	µg /m³	:	N.D.	400	Guidelines BY CPCB
10.	CS_2	µg /m³	:	N.D.	2000	IS : 11255 (Part - 4):1985
11.*	Hydrocarbon (HC)	µg /m³	:	N.D.	160	Gas Chromatography
12.	HF	µg /m³	:	N.D.	60	SPANDS Method

Remark : N.D :- Not Detected, "*" Parameters are not Covered under the scope of NABL.

Authorized By -

Name : Sapana Amin **Designation : Lab Incharge**

NOTE:
1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Ref: ID: 24285

Date : 19.06.2019

To,

Mr.S.H.Vegda,
(Unit Head , Sarigam Region)
Gujarat Pollution Control Board
Paryavaran Bhavan,Sector 10-A,
Gandhinagar - 382 010, GUJARAT

Sub : Submission of 3 months Production plan & Bank Guarantee of Rs.15 lakh

Ref:
1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir

With reference to above we are hereby submitting following documents against the point no. 8 & 9 of the order:-

1) Production plan of 3 months (July-19, Aug-19 & Sept-19)

2) Bank Guarantee No. 16340100011399 dated 18.06.2019 for Rs.15,00,000/-(Rupees Fifteen Lakhs only) issued by Axis Bank Limited, Hyderabad valid upto 30.06.2020 in your favour.

Thanking you,

Yours faithfully,
For COROMANDEL INTERNATIONAL LIMITED

Himanshu Kumar Shukla
Assoc.Vice President & Unit Head

Encl:-
i) 3 Months Production plan
ii) Bank Guarantee No.16340100011399 dt.18.06.2019 for Rs 15.00 Lakh

20/06/19
Gujarat Pollution Control Board
Sector No. 10 A,
Gandhinagar - 382 010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:

Sr. No.1042628

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD
HYDERABAD [AP]
6-3-879/B FIRST FLOOR,G PULLA REDDY BL
GREENLANDS, BEGUMPET ROAD
HYDERABAD-500016

Ref. No :16340100011399
Date:18-06-2019

To,

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN,SECTOR-10A,
GANDHINAGAR-382010,GUJARAT.

Dear Sirs,

BG No.	: 16340100011399
Date of Issue	: 18-06-2019
Amount of BG	: Rs. 15,00,000.00 (RUPEES FIFTEEN LAKHS ONLY)
Expiry Date	: 30-06-2020
Claim Expiry Date	: 30-06-2020
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED : COROMANDEL HOUSE : 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

2. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

3. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

4. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: JIGAR JARDOSH
SS No. SS-11058

AXIS BANK LTD. VASHI BRANCH

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: RANJIT KUMAR BARNWAL
SS No. DVP & BRANCH HEAD SS. No. 10349

Encl: Bank Guarantee Number 16340100011399



ગુજરાત गुजरात GUJARAT

BS 929348

અ.નં. ૧૨૦૧ તા. ૦૮/૦૪/૧૯ રૂ. ૧૦૦/-

અંકે રૂ. એક સો પુરા

ની સ્ટેમ્પ પેપર ખરીદનાર રાખી રૂ. -

અંકે રૂ. ..... હે આજ રોજ

શ્રી કિરિ શંકુલ ઇન્ડસ્ટ્રીયલ લિમિટેડ

રહે. સાણંદ તા.સાણંદ ..... ને વેચાણ આપ્યો

કરતાક ..... લેનારની સારી

ભારતી ડી. પટેલ
સ્ટેમ્પ વેન્ડર, લા.નં.3/૯૫
૧૨૨, સી.બી.દેસાઇ ચેમ્બર્સ
જી.આઇ.ડી.સી., વાપી

BANK GUARANTEE NO.16340100011399 DATED 18.06.2019

TO
GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN,SECTOR-10A,
GANDHINAGAR-382010,GUJARAT.

For AXIS BANK LTD

For AXIS BANK LTD

BANK GUARANTEE NO.16340100011399 DATED 18.06.2019

1. In consideration of the Chairman, Gujarat Pollution Control Board, Gandhinagar (hereinafter referred to as 'The Board') having agreed to grant M/s Coromandel International Limited for their unit located at Plot No. 2102, GIDC, Sarigam of the Gujarat State (hereinafter referred to as 'Company/Unit') time for the due compliance of consent conditions/directions for providing adequate and satisfactory pollution control devices as suggested/stipulated vide letter bearing no. **GPCB/CCA-SRG-229(30)/ID:24285/Outward No. 509992 dated 14.06.2019,** of the Board and as required under **section 31(A) of The Air (Prevention and Control of Pollution) Act-1981,** on production of a Bank Guarantee for **Rs.15,00,000/- (Rupees Fifteen Lakhs Only).** We **Axis Bank Limited**, a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhakar Marg, Worli, Mumbai- 400 025 and one of its branch office at First Floor, No 6-3-879/B, Green Lands, Begumpet Road, Hyderabad- 500016 (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) at the request of the said **M/s. Coromandel International Limited,** (at whose request the Bank Guarantee is being issued), do hereby undertake to pay to the Board an amount not exceeding **Rs.15,00,000/-(Rupees Fifteen Lakhs Only)** against any non-compliance of consent conditions/directions or damages etc. caused to the environment by reason of any breach of provisions of the said Acts, Notices, letters, instructions, etc. by the said Company/Unit.

2. We **Axis Bank Limited,** do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board that the amount claimed is due for the reason of non-fulfillment of undertaking, non-compliance of directions/ notice/ letter/ instruction issued by the Board/ violation of provisions of any of the Bank shall be conclusive as regards the amount due and payment by the Bank under this Guarantee shall be restricted to an amount not exceeding **Rs.15,00,000/-(Rupees Fifteen Lakhs Only).**

3. We undertake to pay to the Board any money on demand not exceeding **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)** notwithstanding any dispute or disputes raised by the said Company/Unit in any suit or proceedings pending before any Court or Tribunal or Board against the Board relating thereto, our liability under this present being absolute and irrevocable.

4. The payment so made by us under this agreement shall be valid discharge of our liability and Company/Unit shall have no claim against us in making such payment.

5. We, **Axis Bank Limited,** further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the undertaking / notice / letter etc. and that it shall continue to be enforceable till all of the dues of Government / Board under or by virtue of said undertaking / notice / letter etc. have been fully paid and its claims satisfied or discharged or till Government / Board certifies that the terms and conditions of the Directions / Undertaking / Notice / Letter / any provisions of relevant law have been fully and properly carried out and complied by the said Company / Unit and accordingly discharges this guarantee. Unless the demand or a claim under this guarantee is made on us in writing on or before **30-JUN-2020.** we shall be discharged from all liability under this guarantee thereafter.

6. We, **Axis Bank Limited,** further agree with the Board that Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said undertaking / notice/letter, etc. or to extend time of compliance by the said Company/Unit from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Company/Unit and to forbear or enforce any of the terms and conditions relating to the said

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

For AXIS BANK LTD

Authorised Signatory
VAPI BRANCH

RANJIT KUMAR BARNWAL
& BRANCH HEAD
10349

undertaking/notice/letter, etc. and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Company/Unit or for any forbearance, action, commission on the part of the Board or any indulgence by the Board to the Company/Unit or by any or such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of not relieving us. However, our liability under this bank guarantee is restricted to **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)** and is valid up to expiry of this bank guarantee date **30-JUN-2020.** Any claim received after this date will be treated as null and void.

7. The Guarantee will not be discharged **during its validity** due to the change in the constitution of the Bank or the Company/Unit.

8. We, **Axis Bank Limited**, undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything mentioned herein before,
   - Our liability under this guarantee shall not exceed **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)**
   - This Bank Guarantee shall be valid up to Dt. **30-JUN-2020** and
   - We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before Dt. **30-JUN-2020**

Executed this 17th day of June, 2019 at Hyderabad

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)**. This Bank Guarantee shall be valid up to 30-JUN-2020 and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before 30-JUN-2020.

All claims under the guarantee will be payable at Hyderabad branch at Bank House, Wholesale Banking Operations,2nd Floor, M.No.6-3-244/A & 246,Road No.1 , Banjara Hills, Hyderabad-500034.

This Guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled

Bank Guarantee confirmation No._____, is an integral part of Bank Guarantee No.16340100011399 DATED: 18.06.2019

DATE: 18.06.2019
PLACE: VAPI, GUJARAT

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

AXIS BANK LTD. VAPI BRANCH

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

RANJIT KUMAR BARNWAL
DVP & BRANCH HEAD
SS. No. 10349

Production Plan - 3 Months

Production - Technical

Product Name	Jul-19	Aug-19	Sep-19
Mancozeb (T)	2500	1500	1500
Maneb (T)	500	100	100
Trimithyle Phosphite	682	682	660
Phosphorus Trichloride	1085	1085	1050
Acephate	465	465	450
Monocrotophos	465	465	450
Propineb *	0	279	270

Production - Formulation

Product Name	Jul-19	Aug-19	Sep-19
Mancozeb 80% WP	2170	2170	2100
Mancozeb 75% WP / WDG	2325	2325	2250
Monocrotophos 36% SL	651	651	651
Acephate 75% WP	700	700	700
Mancozeb (63%) + Carbendazim (12%)	135	135	135
Mancozeb (64%) + Metalyxyl (8%)	135	135	135
Mancozeb (63%) + Cymoxanil (8%)	135	135	135
Monocrotophos 40% SL (W/V)	215	215	215
Acephate 40% SL	135	135	135
Chloropyriphos 480 gm/lit EC	135	135	135
Maneb 80% WP	730	730	730
Propineb 70% WP	750	750	750

* Propineb production will be carried out after prior approval of SPD Change over.



19/6/19.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Ref: ID: 24285

Date : 19.06.2019

To,

Mr.S.H.Vegda,
(Unit Head , Sarigam Region)
Gujarat Pollution Control Board
Paryavaran Bhavan,Sector 10-A,
Gandhinagar - 382 010, GUJARAT

Sub : Submission of 3 months Production plan & Bank Guarantee of Rs.15 lakh

Ref:
1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir

With reference to above we are hereby submitting following documents against the point no. 8 & 9 of the order:-

1) Production plan of 3 months (July-19, Aug-19 & Sept-19)

2) Bank Guarantee No. 16340100011399 dated 18.06.2019 for Rs.15,00,000/-(Rupees Fifteen Lakhs only) issued by Axis Bank Limited, Hyderabad valid upto 30.06.2020 in your favour.

Thanking you,

Yours faithfully,
For COROMANDEL INTERNATIONAL LIMITED

Himanshu Kumar Shukla
Assoc.Vice President & Unit Head

Encl:-
i) 3 Months Production plan
ii) Bank Guarantee No.16340100011399 dt.18.06.2019 for Rs 15.00 Lakh

20/06/19
Gujarat Pollution Control Board
Sector No. 10 A,
Gandhinagar - 382 010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.

T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:

Sr. No.1042628

AXIS BANK LIMITED

AXIS BANK LIMITED
Credit Management Centre-HYDERABAD
HYDERABAD [AP]
6-3-879/B FIRST FLOOR,G PULLA REDDY BL
GREENLANDS, BEGUMPET ROAD
HYDERABAD-500016

Ref. No :16340100011399
Date:18-06-2019

To,

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN,SECTOR-10A,
GANDHINAGAR-382010,GUJARAT.

Dear Sirs,

BG No.	: 16340100011399
Date of Issue	: 18-06-2019
Amount of BG	: Rs. 15,00,000.00 (RUPEES FIFTEEN LAKHS ONLY)
Expiry Date	: 30-06-2020
Claim Expiry Date	: 30-06-2020
Name and Address of the Applicant	: MS. COROMANDEL INTERNATIONAL LTD (FRMLY COROMANDEL FERTILISERS LIMITED : COROMANDEL HOUSE : 1-2-10, SARDAR PATEL ROAD, SECUNDERABAD SECUNDERABAD

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

2. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

3. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

4. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: JIGAR JARDOSH
SS No. SS-11058

AXIS BANK LTD. VBPI BRANCH

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: RANJIT KUMAR BARNWAL
SS No. DVP & BRANCH HEAD SS. No. 10349

Encl: Bank Guarantee Number 16340100011399



ગુજરાત ગુજરાત GUJARAT

BS 929348

ભારતી ડી. પટેલ
સ્ટેમ્પ વેન્ડર, લા.નં.3/94
૧૨૨, સી.બી.દેસાઇ ચેમ્બર્સ
જી.આઈ.ડી.સી., વાપી

અ.નં. ૧૨૦૧ તા. 07/06/2019 રૂ. ૧૦૦/-

અંકે રૂ. એક સો રૂપિયા

નો સ્ટેમ્પ જે કાંઈપણ લાગે રૂ. -

અંકે રૂ. ..... કે આજ રોજ

શ્રી હીરા કોકુલ ઇન્ડસ્ટ્રીયલ લિમિટેડ

રહે. સરીગામ તા.ઉમરગામ ..... ને વેચાણ આપ્યો

કરતા ..... લેનારની સહી.

BANK GUARANTEE NO.16340100011399 DATED 18.06.2019

TO
GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN,SECTOR-10A,
GANDHINAGAR-382010,GUJARAT.

For AXIS BANK LTD

For AXIS BANK LTD

BANK GUARANTEE NO.16340100011399 DATED 18.06.2019

1. In consideration of the Chairman, Gujarat Pollution Control Board, Gandhinagar (hereinafter referred to as 'The Board') having agreed to grant M/s Coromandel International Limited for their unit located at Plot No. 2102, GIDC, Sarigam of the Gujarat State (hereinafter referred to as 'Company/Unit') time for the due compliance of consent conditions/directions for providing adequate and satisfactory pollution control devices as suggested/stipulated vide letter bearing no. **GPCB/CCA-SRG-229(30)/ID:24285/Outward No. 509992 dated 14.06.2019**, of the Board and as required under **section 31(A) of The Air (Prevention and Control of Pollution) Act-1981**, on production of a Bank Guarantee for **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)**. We **Axis Bank Limited**, a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhakar Marg, Worli, Mumbai- 400 025 and one of its branch office at First Floor, No 6-3-879/B, Green Lands, Begumpet Road, Hyderabad- 500016 (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) at the request of the said **M/s. Coromandel International Limited**, (at whose request the Bank Guarantee is being issued), do hereby undertake to pay to the Board an amount not exceeding **Rs.15,00,000/-(Rupees Fifteen Lakhs Only)** against any non-compliance of consent conditions/directions or damages etc. caused to the environment by reason of any breach of provisions of the said Acts, Notices, letters, instructions, etc. by the said Company/Unit.

2. We **Axis Bank Limited**, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board that the amount claimed is due for the reason of non-fulfillment of undertaking, non-compliance of directions/ notice/ letter/ instruction issued by the Board/ violation of provisions of any of the Bank shall be conclusive as regards the amount due and payment by the Bank under this Guarantee shall be restricted to an amount not exceeding **Rs.15,00,000/-(Rupees Fifteen Lakhs Only)**.

3. We undertake to pay to the Board any money on demand not exceeding **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)** notwithstanding any dispute or disputes raised by the said Company/Unit in any suit or proceedings pending before any Court or Tribunal or Board against the Board relating thereto, our liability under this present being absolute and irrevocable.

4. The payment so made by us under this agreement shall be valid discharge of our liability and Company/Unit shall have no claim against us in making such payment.

5. We, **Axis Bank Limited**, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the undertaking / notice / letter etc. and that it shall continue to be enforceable till all of the dues of Government / Board under or by virtue of said undertaking / notice / letter etc. have been fully paid and its claims satisfied or discharged or till Government / Board certifies that the terms and conditions of the Directions / Undertaking / Notice / Letter / any provisions of relevant law have been fully and properly carried out and complied by the said Company / Unit and accordingly discharges this guarantee. Unless the demand or a claim under this guarantee is made on us in writing on or before **30-JUN-2020**. we shall be discharged from all liability under this guarantee thereafter.

6. We, **Axis Bank Limited**, further agree with the Board that Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said undertaking / notice/letter, etc. or to extend time of compliance by the said Company/Unit from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Company/Unit and to forbear or enforce any of the terms and conditions relating to the said

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

For AXIS BANK LTD

Authorised Signatory
VAPI BRANCH

RANJIT KUMAR BARNWAL
& BRANCH HEAD
10349

undertaking/notice/letter, etc. and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Company/Unit or for any forbearance, action, commission on the part of the Board or any indulgence by the Board to the Company/Unit or by any or such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of not relieving us. However, our liability under this bank guarantee is restricted to **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)** and is valid up to expiry of this bank guarantee date **30-JUN-2020.** Any claim received after this date will be treated as null and void.

7. The Guarantee will not be discharged **during its validity** due to the change in the constitution of the Bank or the Company/Unit.

8. We, **Axis Bank Limited**, undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything mentioned herein before,
   - Our liability under this guarantee shall not exceed **Rs.15,00,000/- (Rupees Fifteen Lakhs Only)**
   - This Bank Guarantee shall be valid up to Dt. **30-JUN-2020** and
   - We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before Dt. **30-JUN-2020**

Executed this 17th day of June, 2019 at Hyderabad

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee shall not exceed to **Rs.15,00,000/- (Rupees Fifteen Lakhs Only).** This Bank Guarantee shall be valid up to 30-JUN-2020 and we are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before 30-JUN-2020.

All claims under the guarantee will be payable at Hyderabad branch at Bank House, Wholesale Banking Operations,2nd Floor, M.No.6-3-244/A & 246,Road No.1 , Banjara Hills, Hyderabad-500034.

This Guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled

Bank Guarantee confirmation No._____, is an integral part of Bank Guarantee No.16340100011399 DATED: 18.06.2019

DATE: 18.06.2019
PLACE: VAPI, GUJARAT

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

AXIS BANK LTD. VAPI BRANCH

For AXIS BANK LTD.

Authorised Signatory
VAPI BRANCH

RANJIT KUMAR BARNWAL
DVP & BRANCH HEAD
SS. No. 10349

Production Plan - 3 Months

Production - Technical

Product Name	Jul-19	Aug-19	Sep-19
Mancozeb (T)	2500	1500	1500
Maneb (T)	500	100	100
Trimithyle Phosphite	682	682	660
Phosphorus Trichloride	1085	1085	1050
Acephate	465	465	450
Monocrotophos	465	465	450
Propineb *	0	279	270

Production - Formulation

Product Name	Jul-19	Aug-19	Sep-19
Mancozeb 80% WP	2170	2170	2100
Mancozeb 75% WP / WDG	2325	2325	2250
Monocrotophos 36% SL	651	651	651
Acephate 75% WP	700	700	700
Mancozeb (63%) + Carbendazim (12%)	135	135	135
Mancozeb (64%) + Metalyxyl (8%)	135	135	135
Mancozeb (63%) + Cymoxanil (8%)	135	135	135
Monocrotophos 40% SL (W/V)	215	215	215
Acephate 40% SL	135	135	135
Chloropyriphos 480 gm/lit EC	135	135	135
Maneb 80% WP	730	730	730
Propineb 70% WP	750	750	750

* Propineb production will be carried out after prior approval of SPD Change over.



19/6/19.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

July 5, 2019,

GPCB ID: 24285

To,
Mr. S. H. Vegda
(Unit Head - Sarigam)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A,
Gandhinagar – 382 010, Gujarat.

Subject : Submission of additional documents of revocation conditions.

Reference: 1) Closure Direction No. GPCB/CCA-SRG-229(26)/ID:24285/outward no.492844 dated 29.01.2019
2) Revocation of closure direction No. GPCB/CCA-SRG-229(30)/ID:24285/509992 dated 14.06.2019

Dear Sir,

This has reference to the above. We are hereby submitting following additional documents for revocation compliance.

- Point no. 6: Warehouse plan capacity (material wise) and safety system for storage of finished goods and raw material in our facility.
- Point No. 10: CCA Compliance Report.

Kindly acknowledge the same and oblige.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

CORROMANDEL INTERNATIONAL LIMITED SARIGAM

Himanshu Kumar Shukla
(AVP and Unit Head)

CC:
Mr. H. V. Ganvit
(Regional Officer - Sarigam)
Gujarat Pollution Control Board
Sarigam, Dist. Valsad, Gujarat.

RECEIVED
Sign.
Date . 09-07-2019
G.P.C. BOARD SARIGAM.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.

T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Annexure: Warehouse Detail

We have three ware houses at site namely

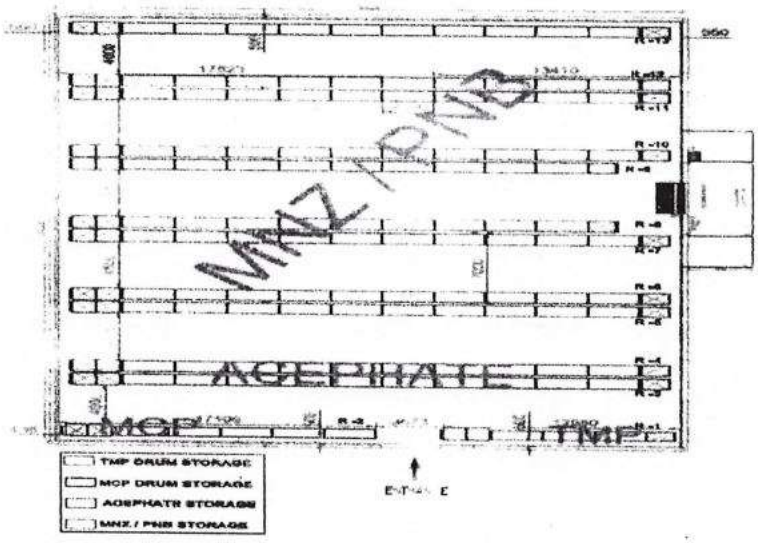
1. Warehouse A (For Finished Good)
2. Warehouse C (For Raw Material & Packaging Material)
3. Warehouse D (For Finished Good)

The detail of warehouse plan, capacity (material wise), and safety system for the at existing facility is as follows

1) Ware house A

Warehouse A with area 15394 Sq. ft.

a. Plan



b. Storage Capacity

Sr. No.	Material	Storage Capacity (MT)
1	Mancozeb/Propineb/Maneb	541
2	Acephate	115
3	Monocrotophos/Other	46
4	TMP/TEP/PYZ/Other	29
Total		731

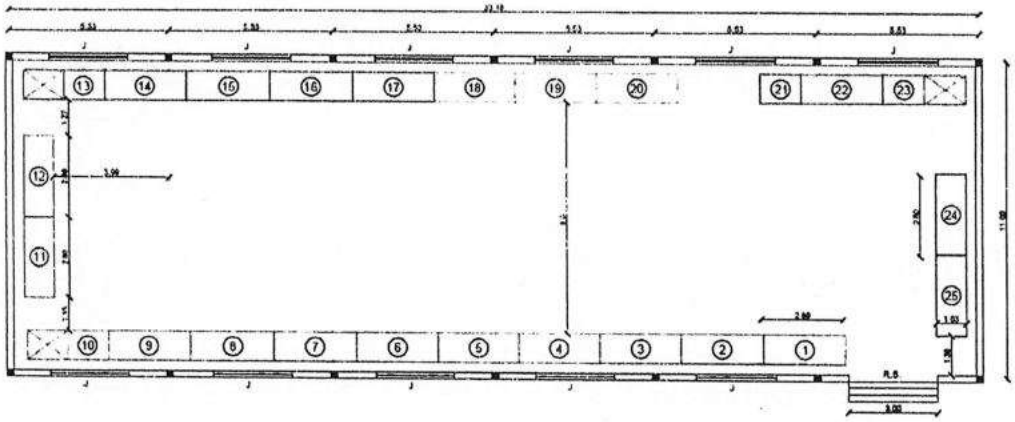
c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse A	Yes	Yes	Yes	Yes	Yes

2) Warehouse – C

Warehouse C with area 3929 Sq. ft.

a. Plan



1- 10 : Raw Material
11-17 : Paper Bags
18-20 : HDPE Liners
21-23 : Jumbo Bags
24-25 : Boxes/Pouches/Stickers

b. Storage Capacity

Sr. No.	Material	Storage Capacity (MT)
1	Raw Material	46
2	Paper bags	16
3	HDPE Liners	7
4	Jumbo Bags	5
5	Boxes/Pouches/Stickers	5
Total		79

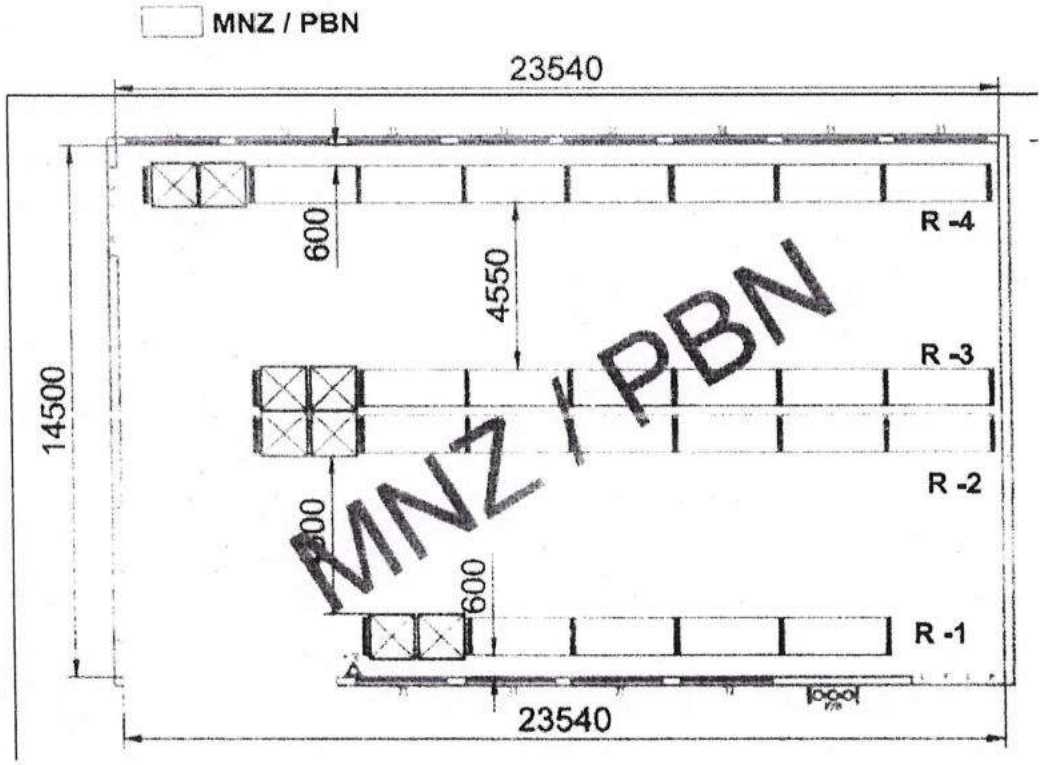
c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse C	Yes	Yes	Yes	Yes	Yes

3) Warehouse – D

Warehouse D with area 3760 Sq. ft.

a. Plan



b. Storage Capacity

Sr. No.	Material	Storage Capacity (Mt)
1	MNZ/PNB/Maneb	152

c. Safety Systems

Description	Fire Hydrant	Fire Extinguisher	CCTV	Beam detector	Fire Suppression
Warehouse D	Yes	Yes	Yes	Yes	Yes

CCA Compliance Report

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Consent Order No. AWH-84402, Date of Issue: 22/02/2017.</td><td></td></tr>
<tr><td>2.</td><td>The consent shall be valid up to 30/09/2021 for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following internal products.
<table>
<tr><th>Sr. No.</th><th>Name of the Products</th><th>Capacity (MT/Annum) (As per CC&A)</th><th>Total Production (MT/Annum)</th></tr>
<tr><td colspan="4">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb (Tech.)</td><td>38000</td><td rowspan="4">20410.73</td></tr>
<tr><td>2</td><td>Mancozeb (Tech.) + Maneb (Tech.)</td><td>38000</td></tr>
<tr><td>3</td><td>Mancozeb (Tech.) + Zineb (Tech.)</td><td>38000</td></tr>
<tr><td>4</td><td>Mancozeb (Tech.) + Propineb (Tech.)</td><td>22116</td></tr>
<tr><td></td><td>Total Production capacity of Group A</td><td>38000</td><td></td></tr>
<tr><td colspan="4">GROUP B</td></tr>
<tr><td>1</td><td>Diethyl Thiophosphoryl Chloride (DETC)</td><td>3600</td><td rowspan="6">0</td></tr>
<tr><td>2</td><td>DMTC</td><td>2160</td></tr>
<tr><td>3</td><td>Diafenthiuron</td><td>1650</td></tr>
<tr><td>4</td><td>Thiamethoxam</td><td>1650</td></tr>
<tr><td>5</td><td>Pymetrozine</td><td>1650</td></tr>
<tr><td>6</td><td>Diflubenzuron</td><td>1650</td></tr>
<tr><td></td><td>Total Production capacity of Group B</td><td>3600</td><td></td></tr>
<tr><td colspan="4">GROUP C</td></tr>
<tr><td>1</td><td>DMTC Amide</td><td>4796</td><td>0</td></tr>
<tr><td></td><td>Total Production capacity of Group C</td><td>4796</td><td></td></tr>
<tr><td colspan="4">GROUP D</td></tr>
<tr><td>1</td><td>Glyphosate (Tech.)</td><td>5000</td><td rowspan="2">212.12</td></tr>
<tr><td>2</td><td>PMIDA</td><td>3300</td></tr>
<tr><td></td><td>Total Production capacity of Group D</td><td>5000</td><td></td></tr>
<tr><td colspan="4">GROUP E</td></tr>
<tr><td>1</td><td>Chlorpyriphos (Tech.)</td><td>5000</td><td>0</td></tr>
<tr><td></td><td>Total Production capacity of Group E</td><td>5000</td><td></td></tr>
</table>
</td><td>• Complied.
• Total Production Quantity in FY-2018-2019 is within permitted Production Capacity.</td></tr>
</table>

GROUP F			
1	Acephate (Tech.)	7000	**2088.30**
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	**1768.56**
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	**2760.65**
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	**4125.66**
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	**3319.62**
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	**0**
	Total Production capacity of Group K	**2000**	
GROUP L			
1	Methamidafos (Tech.)	0	**0**
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	**0**
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic Acid	429	**0**
2	2,3-Difluoro-5-chloro	353	

	pyridine		
3	Clodinafop propargyl (Tech.)	933	
4	Triclopyr Acid (Tech.)	933	
5	Triclopyr Butotyl Ester (Tech.)	933	
6	Picloram (Tech.)	495	
7	Pretilachlor (Tech.)	933	
8	Bispyribac sodium (Tech.)	330	
9	Azoxystrobin	52.8	
10	Boscalid	660	
11	Metalaxyl	933	
12	Proclaraz	933	
	Total Production capacity of Group N	**933**	
	GROUP O		
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	**0**
2	Fipronil (Tech.)	933	
3	Emmamectin Benzoate (Tech.)	495	
4	Difenoconazole (Tech.)	660	
5	Triazophos (Tech.)	933	
6	Glufosinate Ammonium Salt	933	
7	Metribuzin	933	
	Total Production capacity of Group O	**933**	
	GROUP P		
1	Imidacloprid (Tech.)	990	**0**
2	Acetamiprid (Tech.)	990	
	Total Production capacity of Group P	**990**	
	BY PRODUCTS		
1	Ammonium Chloride Powder (NH4Cl)	13398	6685
2	Sodium Chloride (NaCl)	8238	0
3	Sodium Sulphate (Na2SO4)	19779	10201
4	Ammonium Sulphate (NH4)2SO4	8370	270

Total Production capacity of all Groups and By-Product	160277	

LIST OF FORMULATION PRODUCTS

Sr. No.	FORMULATION PRODUCTS	Qty. (MT/Annum) (As per CC&A)	Total Production (MT/Annum)
1	Mancozeb 80% WP	26400	0
2	Mancozeb 75% WP/WDG	28050	0
	LIQUID FORMULATIONS		
1	Glyphosate 41% IPA	34650	753.20
2	Glyphosate 62% IPA	26136	0
3	Monocrotophos 36% SL	7920	0
4	Acephate 75% SP	8514	0
5	Chloropyriphos 20% EC	15840	0
6	Mancozeb SC (420-600 gm/Ltr)	3300	0
7	Mancozeb SE (420-500 gm/lit)	3300	0
8	Mancozeb OS 600 gm/lit	3300	0
9	Mancozeb (63%)+Carbendazim(12%)	1650	0
10	Mancozeb (64%)+Metalyxyl (8%)	1650	0
11	Mancozeb (64%)+ cymoxanil (8%)	1650	0
12	Glyphosate 71% ammonium salt(prills)	4620	0
13	Glyphosate 5% ammonium salt	6600	0
14	Monocrotophos 40% SL (W/V)	2640	0

	15	Diclorovos 76% EC	1980	0
	16	Acephate 40% SL	1650	0
	17	Acephate 75% prills	660	0
	18	Acephate 95% prills	660	0
	19	Chloropyriphos 38.7% EC	1650	0
	20	Chloropyriphos 480 gm/lit EC	1650	0
	21	Chloropyriphos 50% EC	1650	0
	22	Chloropyriphos 50% + Cypermethrine 5% EC	1650	0
	23	Cypermethrin 10% EC	1650	0
	24	Cypermethrin 25% EC	1650	0
	25	Maneb 80% WP	8910	0
	26	Propineb 70% WP	9240	0
	27	Zineb 80% WP	8910	0
	28	Triclopyr Butotyl ester 480 gm/lit	990	0
	29	Methamidophos 600 gm/lit SL	5280	0
	30	Imidaclopyrid 17.8% SL	8580	0
	31	Clodinafop propargyl 15% WP	10230	0
		Total	**243210**	

3.0	**CONDITIONS UNDER WATER ACT:**	
3.1	The source of water supply shall be GIDC Sarigam	Complied
3.2	The quantity of total water consumption shall not exceed 1078 KLPD as per below break up a) Industrial: 1018 KLPD b) Domestic: 60 KLPD	• Complied. • Total average Water consumption in

		FY 2018-2019 is 918.86 KLD including domestic.
3.3	The quantity of total waste water shall not exceed 1073.33 KLPD as per below break up a) Industrial: 1013.33 KLPD b) Domestic: 60 KLPD	• Complied. • Total average Waste water generation in FY 2018-2019 is 445.96 KLD including domestic.
3.4	Out of 1013.33 KL/day the concentrated and toxic effluent stream generated i.e. 93.63 KL/day shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or shall be disposed through common incineration facility SEPPL Kutchh or GSEPL-Palsana. 669.5 KL/Day High TDS Low COD effluent shall be evaporated through Multiple Effective Evaporator (MEEs)/ in case of any breakdown or maintenance of in house MEE, high TDS effluent will be sent to SEPPL for evaporation and drying. 190 KL/day dilutes stream + 60 KL/day domestic i.e. 250 KL/day along with MEE condensate 331 KL/day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharged as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day. The mechanism to monitor of the concentrated stream generated, treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis. In no case, concentrated stream shall be sent with diluted stream for the further treatment. Unit shall affix of Water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act -1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required.	• Complied. • Total Average Waste water discharge quantity in FY 2018-2019 is 445.96 KLD including domestic.
3.5	**TRADE EFFLUENT:**	
3.5.1	The concentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or SEPPL Kutchh or GSEPL-Palsana incineration facility or co-processing facility. The incineration facility shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc. The industry shall operate fully and efficiently incineration system/ air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partially non operational for any reason what so ever (whether for maintenance/repairs/electricity failures or otherwise) They shall not restart such activity unless and until the incineration facility is fully in operation. The pipeline connecting various equipments of sump of incineration	• Complied. • We are disposing off incinerable hazardous waste to SEPPL – Kutch and RSPL – Panoli for incineration. • We are operating incinerator system with CEMS attached to CPCB and GPCB Server.

<table>
<tr><td></td><td>system should be minimum in numbers and shall have permanent connection (no losses or flexible connection)
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for consumption & temperature measuring devices within incinerator at different points & scrubber outside the incinerator shall be provided. These all data shall be recovered every day.
The applicant shall have to register under the provisions of factories act – 1948 and shall be obtained necessary factory provisions.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store and handle solid waste in accordance with provisions of the effluent rules in behalf
The printed logbook shall be maintained for:
a. Energy Consumption
b. Waste water flow at inlet and outlet of incineration system
c. Quantity of sludge generated
d. Laboratory analysis reports for each of the specified parameters of liquid effluent, gaseous discharge & sludge samples.

The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production through such figure shall be supplied on monthly basis. The unit shall supply separate figure for consumption of electricity for running the incinerator by having separate measuring meters for such incinerator.</td><td></td></tr>
<tr><td>3.5.2</td><td>The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards.
<table>
<tr><th>PARAMETERS</th><th>PERMISSIBLE LIMIT</th></tr>
<tr><td>pH</td><td>5.5-6.5</td></tr>
<tr><td>Temperature</td><td>40◦C</td></tr>
<tr><td>Color (pt-co scale) in units</td><td>100 Units</td></tr>
<tr><td>Suspended solids</td><td>200 mg/l</td></tr>
<tr><td>Oil and grease</td><td>10 mg/l</td></tr>
<tr><td>Phenolic Compound</td><td>1.0 mg/l</td></tr>
<tr><td>Cyanide (as CN)</td><td>0.2 mg/l</td></tr>
<tr><td>Fluoride</td><td>2 mg/l</td></tr>
<tr><td>Sulphide</td><td>2 mg/l</td></tr>
<tr><td>Ammonical Nitrogen</td><td>100 mg/l</td></tr>
<tr><td>Arsenic (As)</td><td>0.2 mg/l</td></tr>
<tr><td>Total Chromium</td><td>2.0 mg/l</td></tr>
<tr><td>Hexavalent Chromium</td><td>0.1 mg/l</td></tr>
<tr><td>Copper (Cu)</td><td>3.0 mg/l</td></tr>
<tr><td>Lead (Pb)</td><td>0.1 mg/l</td></tr>
<tr><td>Mercury (hg)</td><td>0.01 mg/l</td></tr>
<tr><td>Nickel(Ni)</td><td>3.0 mg/l</td></tr>
<tr><td>Zinc(Zn)</td><td>5.0 mg/l</td></tr>
<tr><td>Cadmium (Cd)</td><td>1.0 mg/l</td></tr>
<tr><td>Iron</td><td>3 mg/l</td></tr>
<tr><td>BOD (5 Days at 20C)</td><td>300 mg/l</td></tr>
<tr><td>COD</td><td>750 mg/l</td></tr>
<tr><td>Chlorides</td><td>600 mg/l</td></tr>
<tr><td>Sulphates</td><td>1000 mg/l</td></tr>
</table></td><td>• Complied.
• We are operating ETP with primary, secondary and tertiary system and installed Continuous effluent monitoring system with GPCB and CPCB server connectivity.
• Treated waste water quality is well within permitted limit.
• Analysis Report of the same attached as Annexure-1.</td></tr>
</table>

	Total Dissolved solids: 2100 mg/l Insecticides/Pesticides: Absent Sodium absorption ratio: 26 Sodium percent: 60 Bio – essay test: 90% survival of fish after 98 hrs in 100% effluent. • All efforts shall be made to remove color & unpleasant odor as far as predictable.	
3.5.3	The final treated effluent conforming the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being, managed by Sarigam Waste Effluent Management Co. Ltd.	• Complied. • Final treated effluent discharged into CETP through GIDC underground drainage system.
3.5.4	Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.	Complied.
4.0	**CONDITIONS UNDER THE AIR ACT:**	
4.1	The following shall be used as fuel in dryers, boiler, incinerator & DG sets respectively.	• Complied. • Average natural Gas consumption is 1451 SCM / Hr, Furnace Oil is 0.0 KL/Hr and HSD is 0.130 KL/Day in FY 2018-19.
4.2	The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.	Complied.
4.3	The flue gas emission through stack attached to stack shall conform to the following standards:	• Complied. • Emission are well within permitted norms. • In incinerator CEMS installed with GPCB and CPCB server connectivity. • Regular third party monitoring is carried out and emissions found well within

Sr. No	Fuel	Existing	UTILITY
1.	Natural gas	Approx. 2500 SCM/Hr	Boiler / Incinerator / MEE
2.	Furnace Oil	2 KL/Hr	Boiler
3.	Natural Gas	1000 SCM/Hr	Hot Air Generator
4.	HSD	6 KL/day	DG

Sr. No.	Stack Attached to	Height meter	APCM	Parameter	Permissible Limit
1.	Boiler-3 Nos.	50	--	PM SO_x NO_x	150 mg/Nm^3 100 ppm 50 ppm
2.	D G Set – 01 Nos.(1000 KVA)	12	--		
3.	D G Set – 2 Nos.(500 KVA)	12	--		
4.	D G Set– 01 Nos.(200 KVA)	12	--		
5.	Liquid and Gas Incinerator 01	52	Ventury Alkali scrubber	PM SO_2 NO_x HCL CO	50 200 400 50 100
6.	Solid Incinerator Incinerator 03				

				scrubber			
GROUP F							
16	Acephate(Tech.)	Ammonia solution preparation reactor- 01 Nos. – 4 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH_3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
GROUP G							
17	Monocrotophos (T) **OR** Dicrotophos	Chlorination Reactor and Neutralizer	20	Two scrubbers in series water scrubber &alkali scrubber	HCl Cl_2	209	Either or combination of theproducts
GROUP H							
18	DDVP	Gas to Incinerator			CH_3Cl		
GROUP I							
19	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor& Storage tank	11	Alkali Scrubber	HCl Cl_2 PCl_3	209 9	
GROUP J							
20	Trimethyl Phosphite (TMP) **OR** Triethyl Phosphite (TEP)	TMP plant reactor andstorage tank	20	Acid Scrubber	NH_3 Odor	30 Nil	Either of the product
		TMP/DETC products storage tanks	11	Acid Scrubber			
GROUP K							
21	Phosphorous Sulphochloride ($PSCl_3$)	PSCl3 plant reactor and storage tank	22	Alkali Scrubber	HCL PCl_3	209	
GROUP L							
22	Methamidafos	NO process gas emission					
GROUP M							
23	Phosphorous Acid	phosphorous acid Reactor	20	Water Scrubber	HCl	20	
GROUP N							
24	2-(4-Hydroxy phenoxy) Propionic acid	--	No process stack				Either of the product will be manufacture
25	2,3-Difluoro-5-chloro pyridine	--	No process stack				
26	Triclopyr Acid / TriclopyrButotyl Ester	--	No process stack				
27	Clodinafop Propargyl						
28	Picloram	Picloram&pretilachlorreactors	20	Alkali Scrubber	HCl	20	
29	Pretilachlor		No process stack				

30	Bispyribac Sodium	--	No process stack				
31	Azoxystrobin		No process stack				
32	Boscalid	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
33	Metalaxyl	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
GROUP O							
34	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	--	No process stack				Either of the product will be manufacture
35	Fipronil	Fipronil reactor	20	Alkali Scrubber	HCl	20	
36	Emmamectin Benzoate	--	No process stack				
37	Difenoconazole	--	No process stack				
38	Triazophos	--	No process stack				
39	Glufosinate Ammonium Salt	--	No process stack				
40	Metribuzin	--	No process stack				
41	NH4Cl	NH4Cl Storage Tank	11	Acid Scrubber			
42	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
OTHERS							
43	HCl Storage Tank	HCl Storage Tank	11	Alkali Scrubber	HCl Cl_2	20 9	
44	Chlorine Shed	Chlorine Shed	13.5	Alkali Scrubber	Cl_2	9	
45	Drum Filling Station	Drum Filling Station	11	Alkali Scrubber	Odor		
46	Sodium Sulphate Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
47	Ammonium Chloride Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
48	Qurippo (1.364 MW)	Stack Attached to Power plant	45	--	PM SO_2 NOx	150 100 50	
49	Incinerators – 03 Nos. – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO_2 NOx	50 200 400	

<table>
<tr>
<td>4.5</td>
<td>Ambient air quality within the premises of the industry shall conform to the following standards:
<table>
<tr><th>PARAMETERS</th><th>PERMISSIBLE LIMIT</th></tr>
<tr><td>Particulate Matter(PM_{10})</td><td>100 microgram /M^3</td></tr>
<tr><td>RSPM ($PM_{2.5}$)</td><td>60 microgram /M^3</td></tr>
<tr><td>Oxides of Sulphur (SO_X)</td><td>80microgram /M^3</td></tr>
<tr><td>Oxides of Nitrogen (NO_X)</td><td>80 microgram /M^3</td></tr>
<tr><td>HCl</td><td>200 microgram /M^3</td></tr>
<tr><td>Cl_2</td><td>100 microgram /M^3</td></tr>
<tr><td>H_2S</td><td>500 microgram /M^3</td></tr>
<tr><td>HC</td><td>100 microgram /M^3</td></tr>
<tr><td>Ammonia</td><td>400 microgram /M^3</td></tr>
<tr><td>HF</td><td>80 microgram /M^3</td></tr>
<tr><td>CS_2</td><td>2000 microgram /M^3</td></tr>
<tr><td>CO</td><td>5000 microgram /M^3</td></tr>
</table>
• 4 Hourly or 08 Hourly or 01 Hourly monitored values as applicable shall be complied the 98% of the limit in a year, 2% of the time. They may exceed the limits out not one two consecutive days of monitoring.</td>
<td>• Complied.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis report of the same attached as Annexure-4.</td>
</tr>
<tr>
<td>4.6</td>
<td>The applicant shall operate industrial plant/ air pollution control equipment very efficiently and continuously so that the gaseous emission always conform to the standards specified in condition no. 4.3 and 4.4 as above.</td>
<td>• Complied.
• We operate APCM efficiently.
• Regular third party monitoring is carried out and emissions found well within permitted norms.</td>
</tr>
<tr>
<td>4.7</td>
<td>The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in condition no. 4.3 and 4.4 as above.</td>
<td>Noted.</td>
</tr>
<tr>
<td>4.8</td>
<td>The applicant shall provide portholes, ladder, platform etc at chimney (s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.</td>
<td>• Complied
• We have provided portholes, ladders and platforms with stack nomenclature in each chimney.</td>
</tr>
<tr>
<td>4.9</td>
<td>The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 dB(A)during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6·a.m.</td>
<td>• Complied
• We are monitoring noise level by NABL and GPCB authorized third party and all are well within norms.</td>
</tr>
</table>

<table>
<tr><td>5.</td><td colspan="3"><u>GENERAL CONDITIONS:</u></td></tr>
<tr><td>5.1</td><td colspan="2">Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>Noted and will inform board, if any.</td></tr>
<tr><td>5.2</td><td colspan="2">Applicant shall also comply with the general condition given in annexure – I</td><td>Complied.</td></tr>
<tr><td>6.0</td><td colspan="3">Authorisation For The Management & Transboundary Movement Of Hazardous Wastes Form-2 (See rule 6(2)) for grant of authorization for occupier or operator handling hazardous waste Rules – 2016.</td></tr>
<tr><td>6.1</td><td colspan="2">Number of authorization: AWH-84402 date of Issue 22/02/2017.</td><td>--</td></tr>
<tr><td>6.2</td><td colspan="2">Reference of application No. 115227, dated 01/12/2016.
M/s. COROMANDEL INTERNATIONAL LTD. is hereby granted an authorization to operate facility for following hazardous waste on the premises situated at plot No: 2402, GIDC industrial Area, Sarigam, Dist. Valsad.
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Waste</th><th colspan="2">Category of Hazardous waste as per the Schedules I, II and III of these Rules</th><th rowspan="2">Authorized mode of disposal or recycling or utilization or co-processing etc.</th><th rowspan="2">Quantity</th></tr>
<tr><th>Sch.</th><th>Category</th></tr>
<tr><td>1</td><td>ETP Sludge</td><td>I</td><td>35.3</td><td>Collection, storage, transportation, disposal at common incineration facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli</td><td>2640 MT/Year</td></tr>
<tr><td>2</td><td>Discarded Container/ bags</td><td>I</td><td>33.3</td><td>Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners disposed through</td><td>24000 Nos./year</td></tr>
</table></td><td>• Complied.
• Hazardous Waste disposed quantity in FY 2018-19 are well within given permission.</td></tr>
</table>

				common GPCB approved decontaminati on facility.	
3	Oil & Grease skimming residue	I	36. 4	Collection, storage, transportation , disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	32.40 MT/Year
4	Chemical Sludge containing residue pesticides	I	29. 2	Collection, storage, transportation , disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
5	Used Oil	I	5.1	Collection, storage, transportation , disposal by selling to registered reprocessors.	0.3 MT/Year
6	Spent carbon	I	38. 2	Collection, storage, transportation , disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	257.4 MT/Year
7	Ash from incinerator	I	37. 2	Collection, storage, transportation	4755 MT/Year

				, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.		
	8	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	0.240 MT/year
	9	Spent HCl 30% Acetic Acid 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	24588 MT/year 7000 MT/year
	10	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.	2032 MT/Year
	11	Salts from MEE	I	37.3	Collection, storage, transportation	4570.44 MT/Year

					, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana & for co-processing RSPL-Panoli.		
	12	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	1995 MT/Year	
	13	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation, disposal through incineration SEPPL, Kutch. GISPL-Palsana.	50 MT/Year	
6.3	The authorization shall be valid up for a period of 30/08/2021						Noted.
6.4	The authorization is subject to the following general and specific conditions.						Noted.
A.	**General Conditions under hazardous and other Wastes (Management & Transboundary Movement) Rules – 2016.**						
1.	The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 & the rules made there under.						Complied.
2.	The authorisation or its renewal shall he produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.						Noted.
3.	The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.						Complied.
4.	Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.						Noted.
5.	The person authorised shall implement Emergency Response Procedure (FRP) for which this authorisation is being granted						Complied.

	considering all site specific. Possible scenarios such as spillages, leakages, tire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.	
6.	The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities For Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"	Complied.
7.	It is the duty of the authorised person to take prior permission of the Pollution Control Board to close down the facility	Noted.
8.	The imported hazardous and other wastes shall he fully insured for transit as well as for any accidental occurrence and its clean - up operation.	Complied.
9.	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	Not applicable.
10.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre - processing or utilisation of imported hazardous or other wastes shall he treated and disposed of as per specific conditions of authorisation.	Noted.
11.	The importer or exporter shall bear the cost of import or export and mitigation of damages if, any	Noted.
12.	An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules - 2016.	Noted.
13.	Any other conditions for compliance as per the Guidelines issued by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time	Noted.
14.	Annual return shall be filed by June 30th for the period ensuring 31st March of the year.	Complied.
B.	**Specific Condition (Whichever is applicable)**	
1.	The authorized actual user of hazardous waste shall maintain records of hazardous and other wastes purchased in passbook issued by state pollution control board along with authorization.	Complied.
2.	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in passbook of the actual user.	Complied
3.	In case of renewal of authorization, a self certified compliance report in respect of effluent emission standard and the conditions specified in the authorization for hazardous and other waste shall be submitted to SPCB	Complied
4.	The occupier of the facility shall comply standard operating procedure/guidelines published by MoEF & CC or CPCB or GPCB from time to time.	Complied
5.	Unit shall comply provisions of E-waste management Rules - 2016	Complied

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

BY RPAD

REVOCATION OF CLOSURE DIRECTION ISSUED UNDER SECTION-31(A) OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT -1981 (HEREINAFTER REFERRED TO AS THE 'AIR ACT') AS AMENDED FROM TIME TO TIME

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155.

AND WHEREAS Board has issued Consolidated Consent & Authorization (CC&A), AWH – 84402, dated 22/02/2017 valid upto 30/09/2021 with certain conditions.

AND WHEREAS closure direction was issued under Section-31(A) Of the Air (Prevention and Control of Pollution) Act-1981, as amended from time to time vide letter No. GPCB/CCA-SRG-229(26)/ID : 24285/492844 dated 29/01/2019.

AND WHEREAS revocation of the closure direction dated 29/01/2019 for three months was issued vide letter no. GPCB/CCA-SRG-229(30)/ID : 24285/509992 dated 14/06/2019.

AND WHEREAS from the inspection of your industrial plant on 23/09/2019 by the authorized officers of the Board, and observed that:

1. You have submitted detailed action report of cleaning and inspection for various plant equipments.
2. You have submitted the M/s Dupont report dated 27/08/2019 of Hazop study with recommendation and its status of implementation.
3. You have submitted the compliances report of the Fire protection system adequacy report by M/s Chola Ms Risk Services Ltd.
4. You have submitted safety report carried out in month of July 2019 by Naik and Associated with compliance status.
5. You have submitted Electrical installation check report by Assistant Electrical Inspector .
6. You have submitted warehouses A, C & D plan , capacity and safety system for the storage of finished goods/raw material in existing facility.
7. You have carried ambient monitoring for CS2 and H2S along with all the parameter of NAAQS -2009. Which are within permissible limit.

AND WHEREAS the analysis results of the stack attached to the PCL3 reactor, MCP Plant, ACP Plant , Mancozed Plant-B and Incinerator shows parameters results within permissible limit.

AND WHERE the analysis results of the final treated effluent sample shows COD – 118 mg/l and BOD – 29 mg/l. which are within permissible limit.

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

AND WHEREAS you have submitted undertaking of Rs. 15,00,000/- valid upto 30/06/2020.

ORDER

Under the circumstances, I, **Sushil Vegda, Senior Environment Engineer,** Gujarat Pollution Control board is directed to permanently revoke the closure direction from the date of issue of order with following conditions:

1) Unit shall periodically carry out safety audit and shall comply their recommendations/suggestions
2) Unit shall periodically get verify the fire control system and electrical installation from the competent authority
3) You shall comply conditions of CCA.

This order is issued after approval from competent authority.

For and on behalf of
Gujarat Pollution Control Board,

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-SRG-229(30)/ID:24285/ dated :

Issued to:

M/S. Coromandel International Limited
Plot No. 2102,2104/1,735& 2112/2113,
GIDC Estate, Sarigam,
Tal : Umbergaon, Dist : Valsad – 396 155.

COPY TO: -

1. **The Deputy Engineer, (O & M),**
   Dakshin Gujarat Vij Company Ltd
   GIDC Sarigam, Dist : Valsad.

With a request not to dis-connect and continue the supply of electricity with immediate effect from the date of issue of this order of **M/S. Coromandel International Limited**, Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist : Valsad – 396 155., and intimate to us accordingly.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

2. **The Deputy Engineer**
Gujarat Industrial Development Corporation
Sarigam, Dist : Valsad.

With a request not to dis-connect and continue the water supply with immediate effect from the date of issue of this order of **M/S. Coromandel International Limited,** Plot No. 2102,2104/1,735& 2112/2113, GIDC Estate, Sarigam, Tal : Umbergaon, Dist ; Valsad – 396 155., and intimate to us accordingly.

For and on behalf of

Gujarat Pollution Control Board.

(Sushil Vegda)
Senior Environmental Engineer



Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

ANNEXURE-R-23

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

RPAD

NOTICE OF DIRECTION UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974 (HERE IN AFTER REFERRED TO AS THE 'WATER ACT') AS AMENDED FROM TIME TO TIME

WHEREAS M/s Coromandel International Limited is having an industrial plant at Plot No: 2102, 2104/1,735, & 2112/2113, GIDC Sarigam, Tal: Umbergaon, Dist: Valsad 396 155 for the manufacturing of technical Pesticides & formulation.

ANDWHERES the Gujarat Pollution Control Board has issued Consolidated Consent and Authorization (CCA) vide order no. AWH- 84402 dated 25/07/2017 for the manufacturing of above said products.

ANDWHERES, during the inspection of your industrial plant on 02/08/2021 & 23/08/2021 under The Water (Prevention and Control of Pollution) Act-1974, by authorized officer of the Board, following was observed:

1. During inspection grayish water was observed coming out from outlet of storm water drain of the unit and it flows in open drain of GIDC towards tokarkhadi & AR shows TDS-13288 mg/l, Ammonical Nitrogen -491.4 (mg/l), SS 354 mg/l, Chloride 3604 (mg/l), Sulphate 3914 (mg/l), COD -883 (mg/l) and BOD-193 (mg/l) which is higher than norms.
2. Leachate was being generated from hazardous waste storage area & getting mixed with rainy water and its runoff mixed in storm water drain of premises, finally leads outside GIDC open drain through hole.
3. Excavated pit having size of 3 x 5 x 4 ft, which was observed filled approximately ¼ part with black colored wastewater and AR shows TDS-8342 mg/l, Ammonical Nitrogen – 201.6 (mg/l), SS 544 mg/l, Sulphate 2492 (mg/l), COD -974 (mg/l) and BOD-218 (mg/l) which is higher than norms.
4. During inspection on 23/08/2021, strong odour felt near tank farm area in between incinerator and MCP plant.

UNDER THESE CIRCUMSTANCES, Gujarat Pollution Control Board proposes to issue directions under 33 (A) of The Water (Prevention and Control of Pollution) Act-1974 as under:

1. Why not to issue direction under section 33(A) of the Water (Prevention and control of pollution) Act, 1974 to prohibit you from manufacturing activity?
2. Why not to direct to concerned authority for disconnection of Power Supply & Water Supply of your industrial plant?

Outward No: 6410/1/11/08/2021

3. Industry shall provide adequate effluent conveyance pipe line to avoid mixing of effluent in storm water drain. In no circumstances storm water shall be mixed with the industrial effluent.
4. Industry shall provide adequate leachate collection system in hazardous waste storage area.
5. Industry shall take adequate measure to control odour near tank farm area in between incinerator and MCP plant.
6. Industry shall comply with CCA conditions

YOU ARE HEREBY directed to reply within 15 days on receipt of this notice, failing which, directions as proposed above will be deemed to be passed without further reference to you.

For and on behalf
Gujarat Pollution Control Board

(M. V. Patel)
Environment Engineer

NO: GPCB/SRG-CCA-229(37)/ID-24285/ **Date:**

ISSUED TO:
M/s. Coromandel International Limited.
Plot No: 2102, 2104/1,735, & 2112/2113,
GIDC Sarigam,
Tal: Umbergaon,
Dist: Valsad-396 155

Copy to:
1. **The Regional Officer,**
   Regional Office, Sarigam..... For monitoring and send compliance verification report.

Outward No:604031,21/10/2021

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

October 28th, 2021

PCB ID: 24285

To,
Mr. M. V. Patel
Unit Head –Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382010, Gujarat.

Subject : **Submission of COROMANDEL International Limited (CIL) responses and actions taken against each of the clauses mentioned in Notice of Direction issued on 21/10/2021 by GPCB, Gandhinagar.**

Ref. : **1. GPCB Letter No. GPCB/SRG-CCA-229(37)/ID–24285/604031 dated 21.10.2021**
2. GPCB Visit dated 02/08/2021 & 23/08/2021

Dear Sir,

As per aforementioned subject, we are in line with the directions addressed by board, and we hereby furnish our actions incorporated against each of the clauses.

S No.	Observation /Instruction	CIL's- Justification and Recurrence Prevention Actions taken
1.	During inspection grayish water was observed coming out from outlet of storm water drain of the unit and it flows in open drain of GIDC towards to karkhadi & AR shows TDS - 13288 mg/l, Ammonical Nitrogen - 491.4 (mg/l), SS 354 mg/l, Chloride 3604 (mg/l), Sulphate 3914 (mg/l), COD - 883 (mg/l) and BOD - 193 (mg/l) which is higher than norms.	• We would like to inform you that on and around days of inspection by GPCB Officials dated 02.08.2021, there were heavy intermittent rains inside plant premises. During the course, MEE Salt laying on the floor entered the nearest storm water drain. This spill of MEE salts is due to some of the damaged bags which were left unattended. Prima facie, entering of these salts into storm water drains led the parameters to exceed boards' permissible levels. • Immediate actions which we've taken are: We have replaced damaged bags with new bags for storage of MEE Salt to ensure no further spillage occurs on floors leading to storm water drain • We have collected all the untoward effluents drained from storm water drain and sent it to ETP for further treatment & disposal. Photograph of the cleaned/dried storm water drain is enclosed as **Annexure – 1** • Further, we have provided fixed pump near

20/10/21
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		storm water drain outlet and collection tank to immediately collect any untoward entry of effluents in storm water drain. This will be collected immediately and transfer it to ETP for treatment & disposal. Photographs of the provided fixed pump and collection tank are enclosed as **Annexure-2** • As a recurrence prevention measure and to overcome any such kind of abnormal condition, we have installed **Hume pipe** with **gate valve** at storm water drain outlet which is fixed & will prevent outflow of storm water. We've even developed intermediate bunts inside storm drains as a primary halt of untoward effluents flowing towards gate valve. Pictures of the installed gate valve and intermediate concrete bunts at storm water outlet are enclosed as **Annexure –3** • To ensure boards' recommendations, we've installed calibrated pH meter at storm water drain outlet which is integrated with our DCS. This is for continuous monitoring and focal area would be zero effluents inside storm water main outlet. Photograph of the provided pH meter is enclosed as **Annexure -4**
2.	Leachate was being generated from hazardous waste storage area & getting mixed with rainy water and its runoff mixed in storm water drain of premises, finally leads outside GIDC open drain through hole.	• We would like to inform you that on inspection day by GPCB Officials dated 02.08.2021, there were heavy ongoing intermittent rains inside the premises. Due to this leachate was found in spilled condition. • We already have facility for leachate collection which is taken into the pit through underground drain which flows to ETP inlet tank for further treatment & disposal • However, to ensure no re-occurrence of such kind of incident, we have made bund adjacent to hazardous waste storage area to avoid any possibilities of mixing the leachate with rainwater within premises. Photograph of the same is enclosed as **Annexure – 5** • Further, we would like to inform you that we have already planned to expand the hazardous waste storage area with leachate collection system and the work will be completed in next few Months.
3.	Excavated pit having size of 3 x 5 x 4	• We would like to inform you that, as a part

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	ft, which was observed filled approximately 1/4 part with black colored wastewater and AR shows TDS-8342 mg/l, Ammonical Nitrogen — 201.6 (mg/l), SS 544 mg/l, Sulphate 2492 (mg/l), COD -974 (mg/l) and BOD-218 (mg/l) which is higher than norms.	of our structural strengthening works, one excavated portion was found in open condition during your visit. Due to ongoing downpour, this excavated pit was found with full of water. Very near to this excavated pit, one of our processes (Mancozeb) drain exists. During your sample condition this excavated pit was full of water which includes process residues and rainwater. This is the actual cause for the collected sample to exceed boards' permissible levels • As an immediate action, we have collected all the treatment residual water which got filled in the excavated pit and sent it to ETP for treatment & disposal. • Additionally, as on date, we have completed the structure strengthening works, we have backfilled the pit with concrete material and as part of structural strengthening works, additional metal was borne in this area. Photograph of the same is enclosed as an **Annexure – 6**
4.	During inspection on 23/08/2021 strong odour felt near tank farm area in between incinerator and MCP plant.	• We would like to inform you that we have our entire process in closed loop and vent attached to their respective scrubber to prevent any gaseous emissions. Our monthly APCM monitoring details which are briefed in XGN are self-explanatory. No hazardous gases are coming out from any of our APCM's which board can monitor at any point of time • Coming to strong odor observation during your visit, couple of our products- TEP & TMP have strong odor properties which we are trying to minimize through involvement of our technical team and evaluating the possible means to minimize the odor generation, permanently • To ensure stringent controls in our odor generated processes, currently we are using deodorant spraying system which can be witnessed around our boundary facilities. • Details of the deodorant system installed in premises are enclosed as an **Annexure-7**

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CIN : L24120TG1961PLC000892

We would like to let you know that Coromandel International Limited has always prioritized liquidation of environmental concerns raised by board and are in the verge of continuous improvement to sustain its operations in ecofriendly manner.

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

COROMANDEL INTERNATIONAL LIMITED
Plot No.2102, G.I.D.C. Estate,
SARIGAM-396 155, Dist.Valsad, Gujarat

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

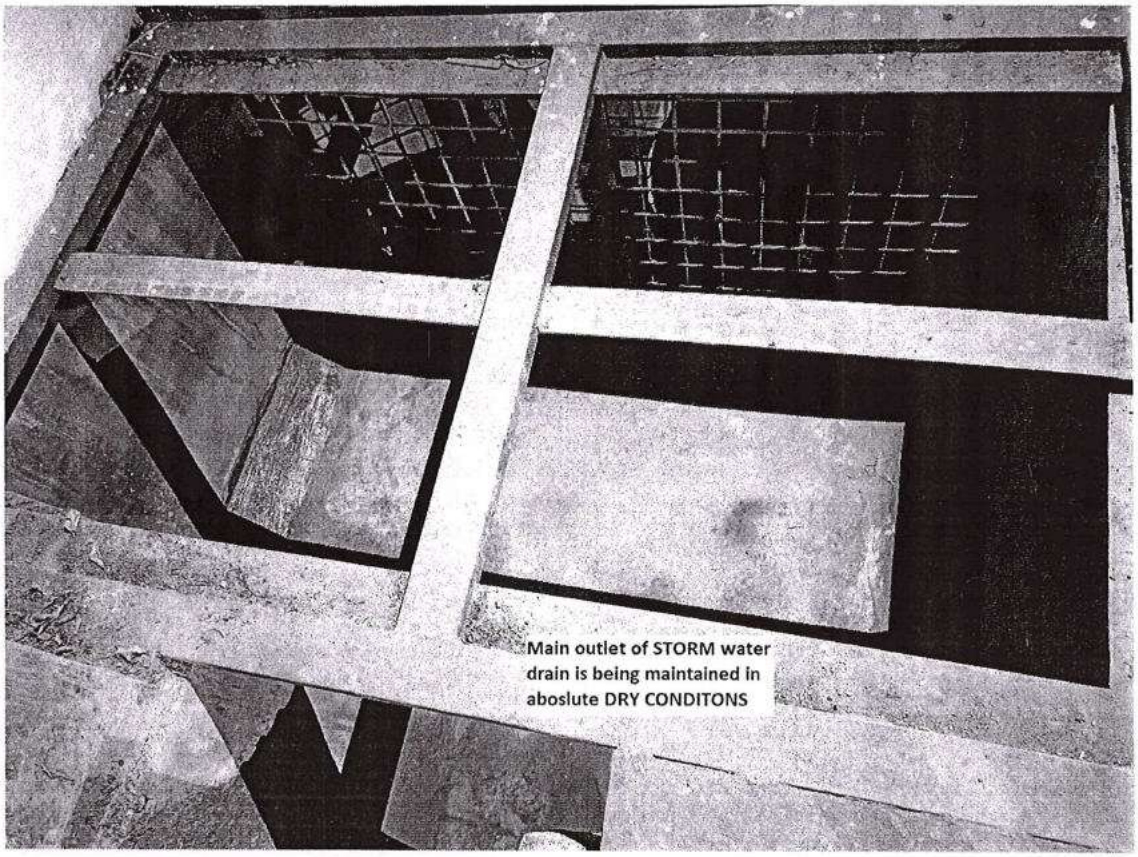
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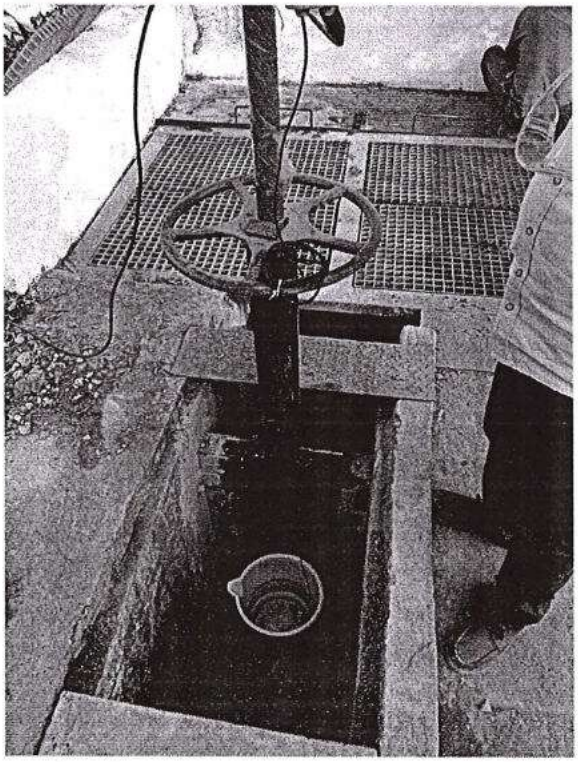
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Point No.1: Grayish water coming out

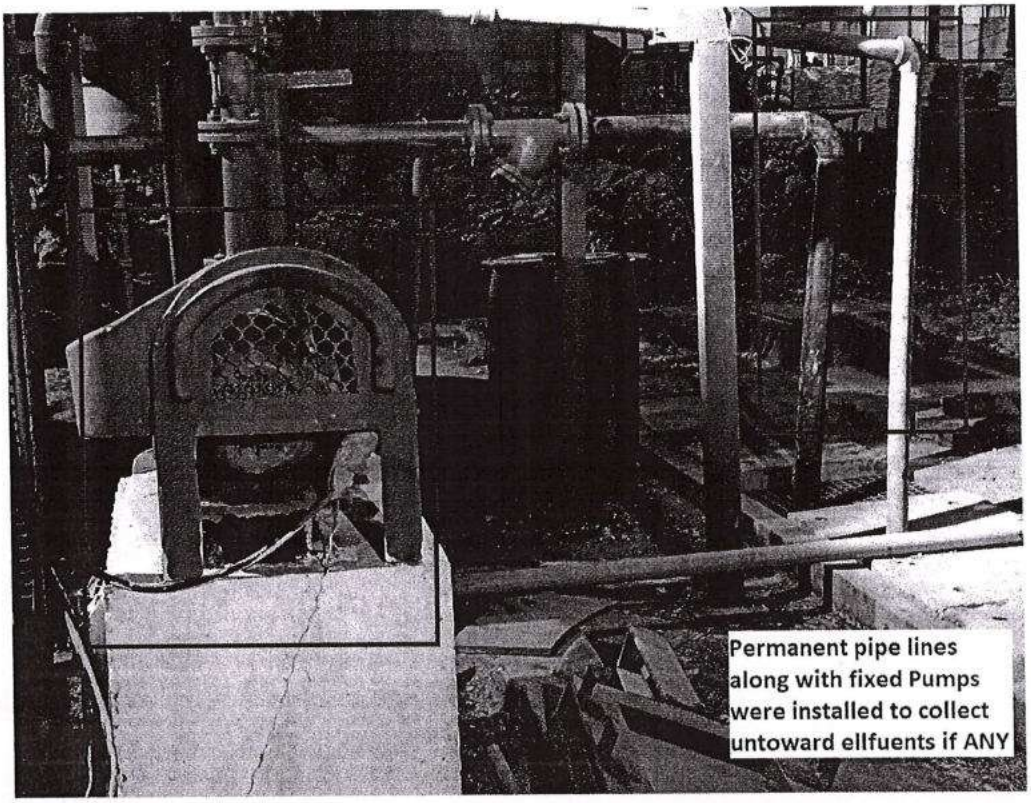
ANNEXURE-1: Dry conditions being ensured at main outlet of storm drain





Point No.1: Grayish water coming out

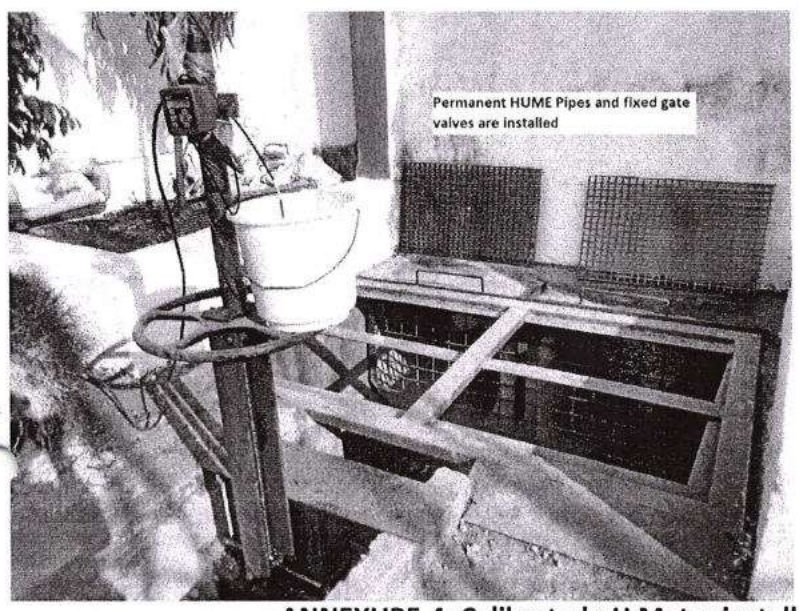
ANNEXURE-2: Permanent pipelines along with fixed pumps installed

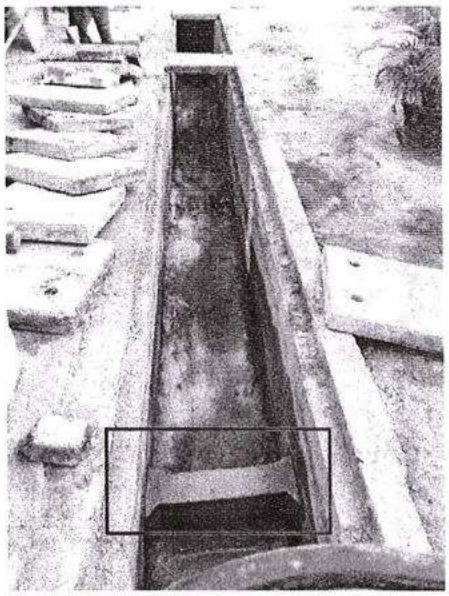




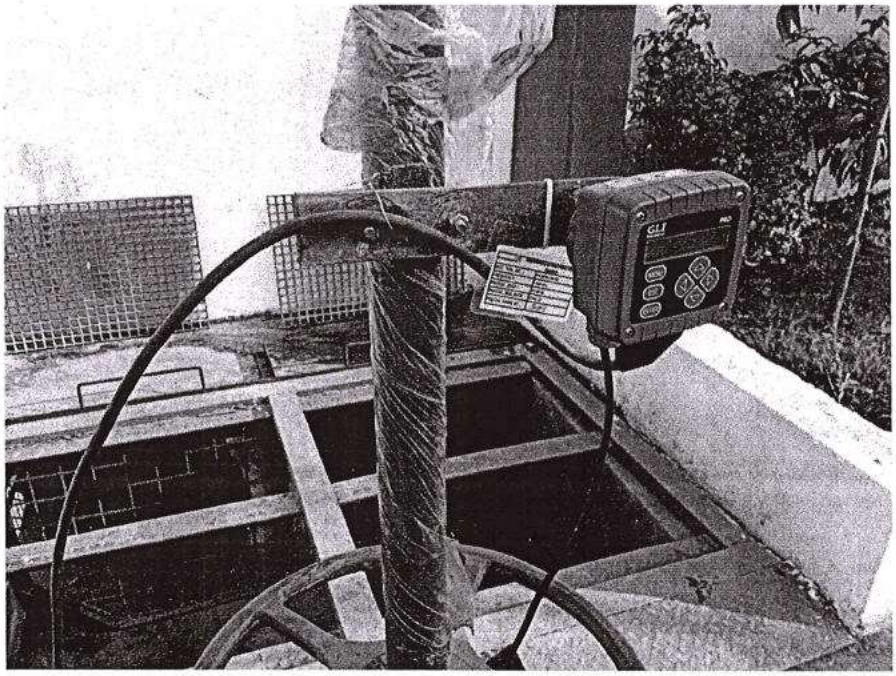
Point No.1: Grayish water coming out

ANNEXURE-3: Permanent Hume pipes and fixed gate valve installed



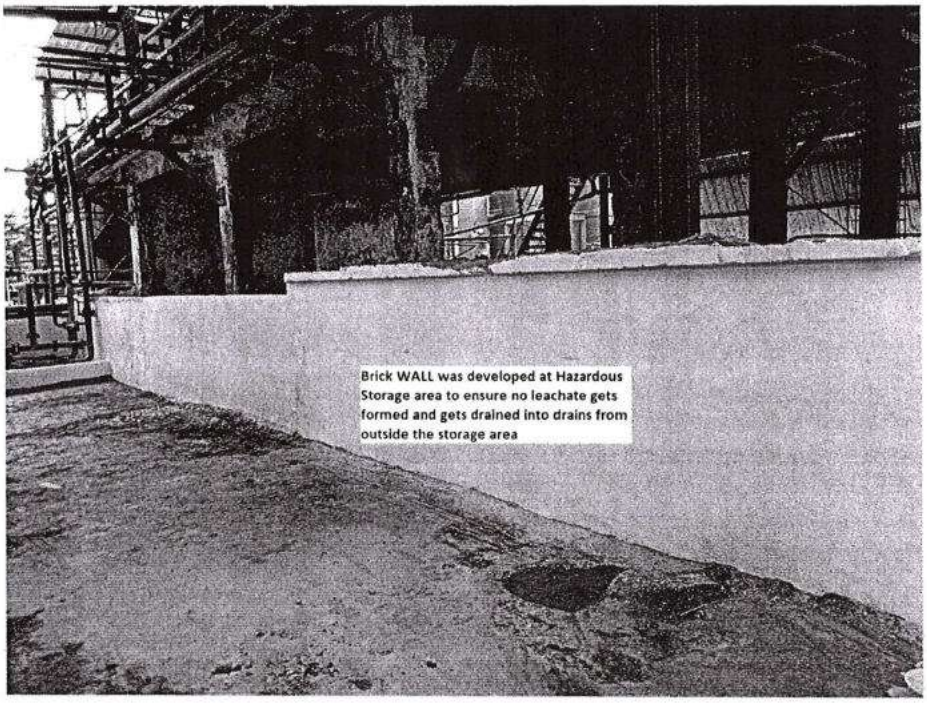


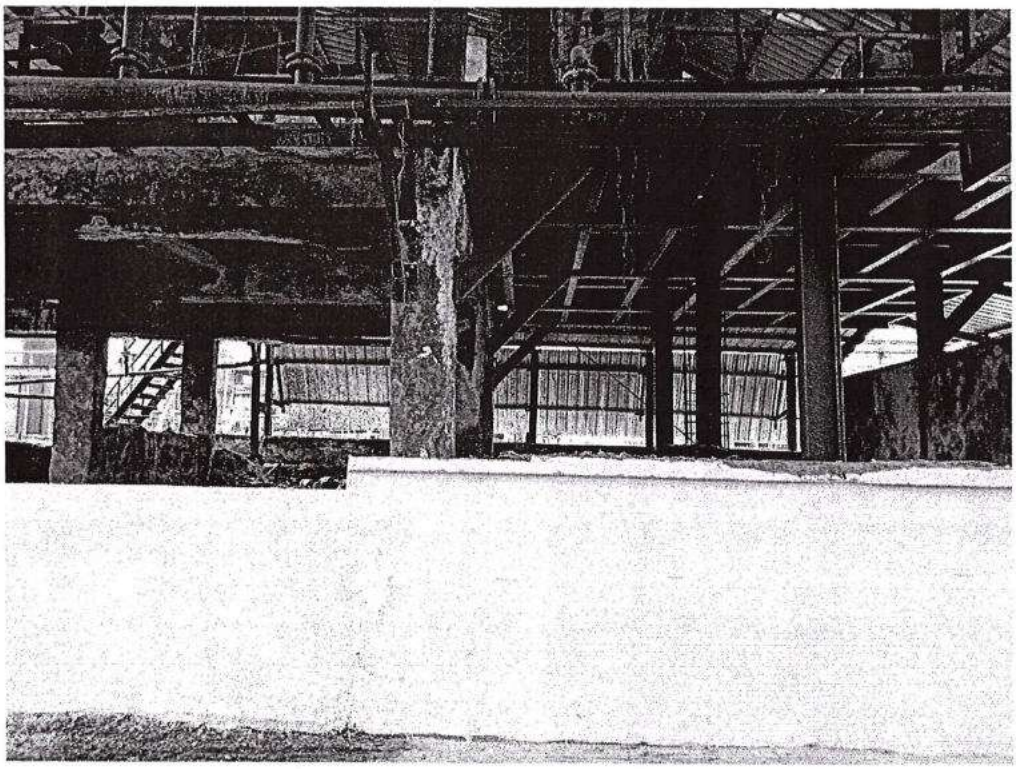
ANNEXURE-4: Calibrated pH Meter installed permanently



Point No.2: Leachate from hazardous storage area

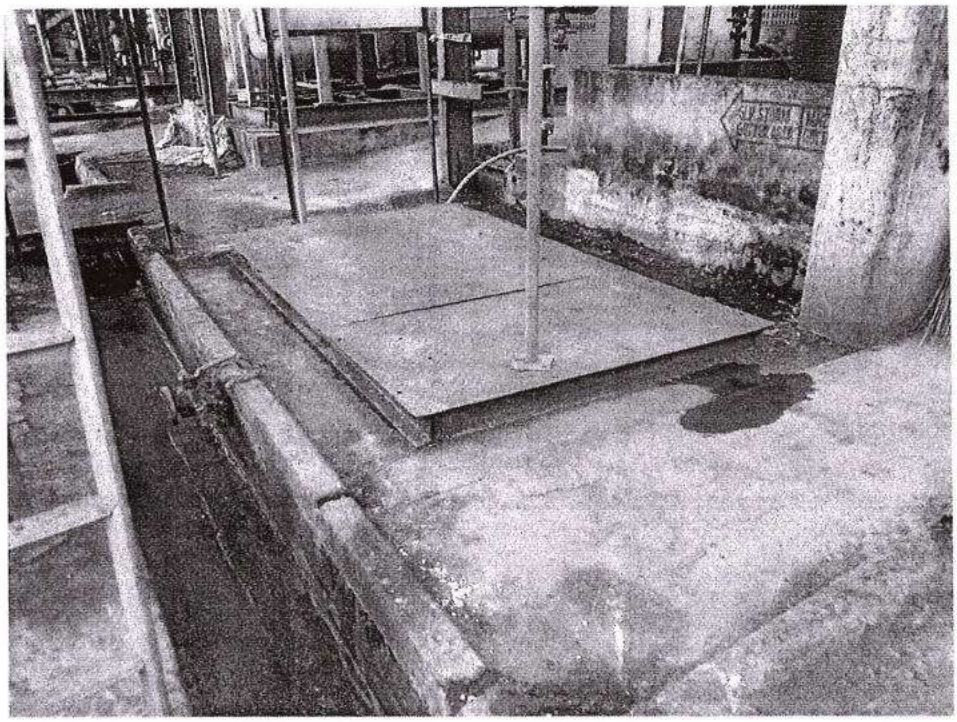
ANNEXURE-5: Brick wall developed firmly to prevent runaway of hazardous waste

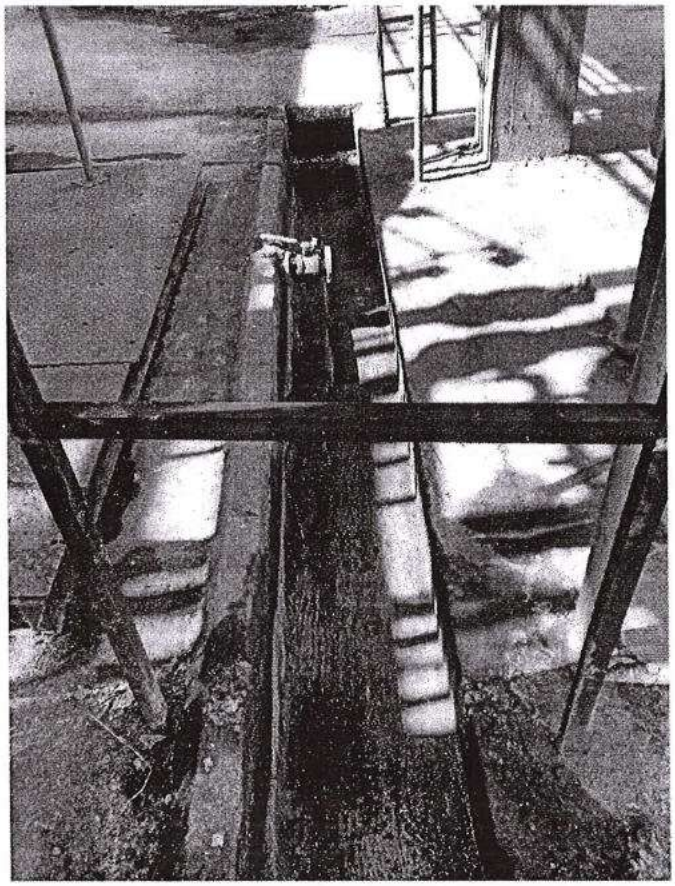




Point No.3: Blackish water in excavated pit and storm drain

ANNEXURE-6: Excavated portion was backfilled, and drain is being maintained in Dry conditions





Point No.4: Odor was observed

ANNEXURE-7: Deodorant spray is continuous to overcome Odor



GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

RPAD

NOTICE OF DIRECTION UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974 (HERE IN AFTER REFERRED TO AS THE 'WATER ACT') AS AMENDED FROM TIME TO TIME

WHEREAS M/s Coromandel International Limited is having an industrial plant at Plot No: 2102, 2104/1,735, & 2112/2113, GIDC Sarigam, Tal: Umbergaon, Dist: Valsad 396 155 for the manufacturing of technical Pesticides & formulation.

ANDWHERES the Gujarat Pollution Control Board has issued Consolidated Consent and Authorization (CCA) vide order no. AWH- 84402 dated 25/07/2017 for the manufacturing of above said products.

ANDWHERES, during the inspection of your industrial plant on 02/08/2021 & 23/08/2021 under The Water (Prevention and Control of Pollution) Act-1974, by authorized officer of the Board, following was observed:

1. During inspection grayish water was observed coming out from outlet of storm water drain of the unit and it flows in open drain of GIDC towards tokarkhadi & AR shows TDS-13288 mg/l, Ammonical Nitrogen -491.4 (mg/l), SS 354 mg/l, Chloride 3604 (mg/l), Sulphate 3914 (mg/l), COD -883 (mg/l) and BOD-193 (mg/l) which is higher than norms.
2. Leachate was being generated from hazardous waste storage area & getting mixed with rainy water and its runoff mixed in storm water drain of premises, finally leads outside GIDC open drain through hole.
3. Excavated pit having size of 3 x 5 x 4 ft, which was observed filled approximately ¼ part with black colored wastewater and AR shows TDS-8342 mg/l, Ammonical Nitrogen – 201.6 (mg/l), SS 544 mg/l, Sulphate 2492 (mg/l), COD -974 (mg/l) and BOD-218 (mg/l) which is higher than norms.
4. During inspection on 23/08/2021, strong odour felt near tank farm area in between incinerator and MCP plant.

UNDER THESE CIRCUMSTANCES, Gujarat Pollution Control Board proposes to issue directions under 33 (A) of The Water (Prevention and Control of Pollution) Act-1974 as under:

1. Why not to issue direction under section 33(A) of the Water (Prevention and control of pollution) Act, 1974 to prohibit you from manufacturing activity?
2. Why not to direct to concerned authority for disconnection of Power Supply & Water Supply of your industrial plant?

Outward No: 66461 / 11/07/2021

3. Industry shall provide adequate effluent conveyance pipe line to avoid mixing of effluent in storm water drain. In no circumstances storm water shall be mixed with the industrial effluent.
4. Industry shall provide adequate leachate collection system in hazardous waste storage area.
5. Industry shall take adequate measure to control odour near tank farm area in between incinerator and MCP plant.
6. Industry shall comply with CCA conditions

YOU ARE HEREBY directed to reply within 15 days on receipt of this notice, failing which, directions as proposed above will be deemed to be passed without further reference to you.

For and on behalf
Gujarat Pollution Control Board

(M. V. Patel)
Environment Engineer

NO: GPCB/SRG-CCA-229(37)/ID-24285/ **Date:**

ISSUED TO:
M/s. Coromandel International Limited.
Plot No: 2102, 2104/1,735, & 2112/2113,
GIDC Sarigam,
Tal: Umbergaon,
Dist: Valsad-396 155

Copy to:
1. **The Regional Officer,**
   Regional Office, Sarigam..... For monitoring and send compliance verification report.

Outward No:604031, 21/10/2021



ANNEXURE-R-24

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 1, 2022

PCB ID: 24285

To,
Unit Head – Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382010, Gujarat.

Subject : **Submission of Justification/Compliance/Action already taken/Action to be taken to Notice of Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.**

Ref. :
- **Notice of Direction under section 31 (A) of the Air (Prevention and Control of Pollution) ACT-1981 as amended from time to time issued vide Order No. GPCB/SRG-CCA-229(38)/ID-24285/679471 dated 30/07/2022.**
- **GPCB Visit dated 08/02/2022 & 08/03/2022**

Dear Sir/Madam,
This has reference to the above. We are hereby submitting Justification/Compliance/Action already taken/Action to be taken to Notice of Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.

Sr. No.	Observation	Justification/ Compliance / Action already taken/Action to be taken
1.	Unit has installed new scrubber attached to MCP + Acephate + DDVP packing plant without prior CTE/CCA of the Board.	As per obtained in CC&A Order No. AWH – 84402 dated 22/02/2017, in condition no. 4.4 of 4 under The Air Act, (Refer page No. 9 of 15, Sr. No. 6 & 11 of 15, Sr. No. 18) (Enclosed as an **Annexure-I** (Marked with yellow colour)) and as per CC&A Renewal + Amendment re-applied Application; Dedicated **alkali scrubber system to Drum Filling Station i.e. for MCP and DDVP packing area** (Refer page No. 11 of 15, Sr. No.18) & **water scrubber to Acephate i.e. for Acephate packing area** (Refer page No. 9 of 15, Sr. No. 6, Group-F) **are already installed and under operation**. We have not installed any new scrubber to MCP + Acephate + DDVP packing plant.
2.	It is observed that deodorant system of the unit is also not in operational condition so there is possibility of spreading of odour in surrounding area and odour felt in production area of the unit.	• During GPCB official inspection dated 08/02/2022, due to some leakages, deodorant system was not found in operation. But as an immediate action, all of the leakages are got repaired and it is now under functional. • Additionally, now deodorant system are covered all of the surrounding/periphery area and other area of existing unit and it is supervised by shift

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		operational team on regular basis. • Photographs of deodorant system covering entire periphery of unit and other area are enclosed as **Annexure II.**
3.	During inspection incinerator is found maintenance during which extreme foul odour felt near incinerator.	During GPCB official inspection dated 08/03/2022, in-house incinerator was taken into shut down mode since 25/02/2022 for regular schedule maintenance work but before taking maintenance work, decontamination of the equipments need to perform so due to this, foul odour felt near incinerator during visit. We have also informed to GPCB through letter submitted dated 25/02/2022 at RO, GPCB, Sarigam (Ref-No. EMS-GPCB/COR/45-2022/ID: 24285) regarding said shutdown and maintenance activity of incinerator. Acknowledgment copy for the same is enclosed as an **Annexure-III.** So as an immediate action, we have increased dispersion rate of deodorant system to prevent foul odour. We further assure you that, we will take necessary action, if any required more, to prevent foul odour during maintenance activity of in-house incinerator.
4.	Unit has not shown flue gas vent of NG Fired Hot Air generator in existing CC&A.	As soon as possible, we will apply and obtain necessary permission from the Board for flue gas stack of NG Fired Hot Air generator.
5.	Unit is observed that unit has provided fogging system which is not provided all round the unit.	Fogging system are now covered all of the surrounding/periphery area and other area of existing unit and it is supervised by shift operational team on regular basis. Photographs of the same are enclosed as **Annexure-II.**

Thanking You.
Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)
CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
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GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

COROMANDEL, SARIGAM
RECEIVED
Sign. 1079/P
Date : 5/4/17

BY: RPAD

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 3(c) & 5(5) of the Hazardous Waste (Management Handling and Transboundary Movement) Rules'2008, framed under the EP Act-1986.

And whereas Board has received CC&A application **Inward ID No: 115227, dated 01/12/2016** for the Renewal of consolidated consent and authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:
(Under the provisions / rules of the aforesaid environmental acts)

To,
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

1. **Consent Order No: AWH – 84402, Date of issue: 22/02/2017.**
2. The consents shall be valid up to **30/09/2021** for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following items / products:

Sr. No.	Name of the Products	Quantity (MT/Annum)	Remarks
GROUP A			
1	Mancozeb (Tech.)	38000	Either or combination of the products
2	Mancozeb (Tech.) + Maneb (Tech.)	38000	
3	Mancozeb (Tech.) + Zineb (Tech.)	38000	
4	Mancozeb (Tech.) + Propineb (Tech.)	22116	
	Total Production capacity of Group A	**38000**	
GROUP B			
1	Diethyl Thiophosphoryl Chloride (DETC)	3600	Either or combination of the products
2	DMTC	2160	
3	Diafenthiuron	1650	
4	Thiamethoxam	1650	
5	Pymetrozine	1650	
6	Diflubenzuron	1650	
	Total Production capacity of Group B	**3600**	

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Clean Gujarat Green Gujarat

GROUP C			
1	DMTC Amide	4796	
	Total Production capacity of Group C	**4796**	
GROUP D			
1	Glyphosate (Tech.)	5000	Either or combination of the products
2	PMIDA	3300	
	Total Production capacity of Group D	**5000**	
GROUP E			
1	Chlorpyriphos (Tech.)	5000	
	Total Production capacity of Group E	**5000**	
GROUP F			
1	Acephate (Tech.)	7000	
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	Either or combination of the products
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	Either or combination of the products
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	
	Total Production capacity of Group K	**2000**	

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GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

GROUP L			
1	Methamidafos (Tech.)	0	
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic Acid	429	Either or combination of the products
2	2,3-Difluoro-5-chloro pyridine	353	
3	Clodinafop propargyl (Tech.)	933	
4	Triclopyr Acid (Tech.)	933	
5	Triclopyr Butotyl Ester (Tech.)	933	
6	Picloram (Tech.)	495	
7	Pretilachlor (Tech.)	933	
8	Bispyribac sodium (Tech.)	330	
9	Azoxystrobin	52.8	
10	Boscalid	660	
11	Metalaxyl	933	
12	Proclaraz	933	
	Total Production capacity of Group N	**933**	
GROUP O			
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	Either or combination of the products
2	Fipronil (Tech.)	933	
3	Emmamectin Benzoate (Tech.)	495	
4	Difenoconazole (Tech.)	660	
5	Triazophos (Tech.)	933	
6	Glufosinate Ammonium Salt	933	
7	Metribuzin	933	
	Total Production capacity of Group O	**933**	
GROUP P			All of the products

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1	Imidacloprid (Tech.)	510	
2	Acetamiprid (Tech.)	480	
	Total Production capacity of Group P	**990**	
BY PRODUCTS			
1	Ammonium Chloride Powder (NH4Cl)	13398	-
2	Sodium Chloride (NaCl) Powder	8238	-
3	Sodium Sulphate (Na2SO2) Powder	19779	-
4	Ammonium Sulphate (NH4)2SO4 (Powder)	8370	-
Total Production capacity of all Groupsand By-Product		**160277**	

LIST OF FORMULATION PRODUCT

Sr. No.	FORMULATION PRODUCTS	Qty. MT/Annum
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
	LIQUID FORMULATIONS	
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+ Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650

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20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% + Cypermethrine 5% EC	1650
23	Cypermethrin 10% EC	1650
24	Cypermethrin 25% EC	1650
25	Maneb 80% WP	8910
26	Propineb 70% WP	9240
27	Zineb 80% WP	8910
28	Triclopyr Butotyl ester 480 gm/lit	990
29	Methamidophos 600 gm/lit SL	5280
30	Imidaclopyrid 17.8% SL	8580
31	Clodinafop propargyl 15% WP	10230
	Total	243210

3.0 **CONDITIONS UNDER THE WATER ACT:**

3.1 The source of water supply shall be GIDC Sarigam.

3.2 The quantity of total water consumption shall not exceed **1078 KLPD** as per below break up
a) Industrial: **1018 KLPD.**
b) Domestic: **60 KLPD.**

3.3 The quantity of total of waste water shall not exceed **1073.33 KLPD** as per below break up
a) Industrial: **1013.33 KLPD**
b) Domestic: **60 KLPD.**

3.4 Out of 10133.33 KLPD the concentrated and toxic effluent stream generated i.e. 93.83 KL/day shall be segregated and completely incinerated in a well-designed in house Liquid waste incinerator or shall be disposed through common incineration facility SEPPL-Kutchh or GSEPL-Palsana, 669.5 KLPD High TDS low COD effluent shall be evaporated through Multiple Effective Evaporators (MEEs)/ In case of any breakdown or maintenance of in house MEEs, high TDS effluent will be sent to SEPPL for evaporation and drying, 190 KL/day dilutes stream + 60 KL/Day domestic = i.e. 250 KL/Day along with MEE condensate 331 kl/Day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharges as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day.
The mechanism to monitor of the concentrated stream and diluted stream to be developed and the submit the board for verification.
The record of concentrated stream generated treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis.
In no case, concentrated stream shall be sent with diluted stream for the further treatment.
The unit shall affix of water meter as per section 4 (1) of the water (prevention and control of pollution) cess Act-1977 for the purpose of measuring and recording the quantity of water consumed of such places as may be required.

3.5 **TRADE EFFLUENT:**

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3.5.1 The concentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well designed incinerator - in-house incinerator or SEPPL-Kutchh or GSEPL-Palsana incineration facility or co-processing facility.
The incineration system shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc.
The industry shall operate fully & efficiently incineration system / air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partly non operational for any reason what so ever (whether for maintenance/repairs/electricity failure or otherwise). They shall not restart such activity unless & until the incineration system is fully in operation.
The pipeline connecting various equipments of sump of incineration system should be minimum in number & shall have permanent connection (no loose or flexible connection).
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for combustion & temperature, measuring devices within incinerator at different points & scrubber outside the incinerator shall be provide. There all data shall be recovered every day.
The applicant shall have to register the unit under the provisions of the factories act- 1948 & shall be obtained necessary factory license.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store & handle solid waste in accordance with provisions of the relevant rules in this behalf.
The printed Log Book shall be maintained for :

a. Energy consumption.
b. Waste water flow at inlet & outlet of incineration system.
c. Quantity of sludge generated.
d. Laboratory analysis reports for each of the specified parameters of liquid Effluent, gaseous discharge & soil sludge samples.

The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production, though such figures shall be supplied on monthly basis. The unit shall supply separate figures for consumption of electricity for running the incinerator by having separate meter /sub meters for such incinerator.

3.5.2 The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards:

PARAMETERS	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C.
Colour (pt.co.scale) in units	100 units
Suspended solids	200 mg/l
Oil and grease	10 mg/l
Phenolic compounds (as C_6H_5OH)	1.0 mg/l
Cyanide (as CN)	0.2 mg/l
Fluoride	2 mg/l
Sulfides	2 mg/l
Ammonical Nitrogen (As N)	10S0 mg/l
Arsenic (As)	0.2 mg/l
Total Chromium	2 mg/l
Chromium – Hexavalent	0.1 mg/l
Copper (Cu)	3.0 mg/l
Lead (Pb)	0.1 mg/l

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Mercury (as Hg)	0.01 mg/l
Nickel (Ni)	3.0 mg/l
Zinc (as Zn)	5 mg/l
Cadmium (Cd)	2.0 mg/l
Iron	3 mg/l
BOD (5 days at 20°C.	300 mg/l
COD	750 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/l
Insecticides / Pesticides	Absent
Sodium Absorption Ratio	26
Sodium Percent	60
Bio-assay test	90 % survival of fish after 96 hrs in 100 % effluent

- All efforts shall be made to remove color & unpleasant odor as far as practicable.

3.5.3 The final treated effluent conforming to the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being managed by Sarigam Waste Effluent Management Co. Ltd.

3.5.4 Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.

4.0 CONDITIONS UNDER THE AIR ACT:

4.1 The following shall be used as fuel in dryers, boiler, incinerator & DG Sets respectively.

SR NO.	FUEL	CONSUMPTION	Utility
1	Natural Gas	Approx. 2500 SCM/Hr	Boiler /Incineration / MEE
2	Furnace Oil	2 KL/Hr	Boiler
3	Natural Gas	1000 SCM/Hr	Hot air generator
4	HSD	6 KL/day	DG

4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.

4.3 The flue gas emission through Boiler stack attached to stack shall conform to the following standards:

Stack No.	Stack Attached to	Stack Height in Meter	Control Measures provided	Parameter	Permissible Limits
1	Boiler – 3 Nos	50	—	PM SO_2 NO_x	150 mg/NM^3 100 ppm 50 ppm
3	DG set – 01 No (1000 KVA)	12	—		
4	DG set-2 Nos (500 KVA)	12	—		
5	DG set-1 No (200 KVA)	12	—		
6	Liquid & Gas Incinerator Incinerator 01	52	Ventury Alkali Scrubber	PM SO2 NOx HCL CO Total Organic Carbon Total Dioxine and Furans Sb+AS+Pb+Cu+Mn+Ni+V	50 200 400 50 100 20 0.2 ng TEQ 1.5
7	Solid Incinerator Incinerator 03				
8	Liquid Incinerator Incinerator 04	50	Ventury Alkali Scrubber		

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4.4 The process emission through various stacks/vent of rectors, process, vessel shall conform to the following standards.

Sr. NO.	Plant	Stack attached to	Stack height Mtr.	Air Pollution Control Measures	Parameter to be Monitored	Permissible limit, Mg/nm3	Remarks
1	GROUP A						
	Mancozeb or	1) Mancozeb reactor – 01 Nos- 20 KL or	30	Air Blower/ Air Ventury	CS2 PM SO2	180 50 40	Either or combination of the products
	Mancozeb + Maneb or	2) Maneb reactor 01 Nos- 20 KL or					
	Mancozeb + Zineb or	3) Zineb reactor Nos- 20 KL					
	Mancozeb + Propineb	4) Propineb Reactor – 01 Nos – 14 KL					
		5) Spray Dryer – 3000 Kgs/Hr. – 2 Nos	30	Bag filter / Water Scrubber			
2	GROUP B						
	Diethyl Thiophosphoryl Chloride (DETC) or DMTC	Reactor – 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	Either or combination of the products
	Diafenthiuron(Tech.)	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Thiamethoxam	Reactor 01 Nos – 6.3 KL		No stack			
	Pymetrozine	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
	Diflubenzuron	Reactor – 01 Nos – 6.3 KL	20	Alkali scrubber	HCl	20	
3	GROUP C						
	DMTC Amide	Reactor 01 Nos – 10 KL	20	Acidic scrubber	NH3	30	
4	GROUP D						
	Glyphosate (Tech.)	Slurry Preparation – 2 nos of reactor each 10 KL capacity and connected to common stack –01Nos	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	Either or combination of the products

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	PMIDA	Reactor 01 Nos – 10 KL	20	Alkali scrubber	HCl	20	
5	GROUP E						
	Chlorpyriphos (Tech.)	HTCP Reactor – 01 Nos – 6.0 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl	20	
6	GROUP F						
	Acephate (Tech.)	Ammonia solution preparation reactor – 01 Nos – 04 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
7	GROUP G						
	Monocrotophos (Tech) OR Dicrotophos(Tech.)	Chlorination Reactor – 01 Nos – 6.3 KL and Neutralizer Reactor – 01 KL – 12 KL	20	Two scrubber in series-water scrubber & alkali scrubber	HCl Cl2	20 9	Either or combination of the products
	GROUP H						
	DDVP	Gas to Incinerator – 01			CH3Cl		
8	GROUP I						
	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor – 2 Nos- 12 KL, connected to common scrubber & Storage tank – 03 Nos – 20 KL connected to common scrubber	11	Alkali Scrubber	HCl Cl2 PCl3	20 9 9	
9	GROUP J						
	Trimethyl Phosphite (TMP) OR	1) TMP/TEP plant reactor – 01 Nos – 3 KL	20 11	1st Scrubber Water scrubber 2nd with Acid	NH3 Odor	30 Nil	Either or combination of the products

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	Triethyl Phosphite (TEP)	2) TMP/TEP products storage tanks – 02 Nos -40 KL		Media Acid scrubber/Carbon tower			
10	GROUP K						
	Phosphorous Sulphochloride ($PSCl_3$)	$PSCl_3$ plant reactor – 01 Nos – 6.3 KL and storage tank – 01 Nos – 10 KL	22	Alkali Scrubber	HCL PCl_3	20 9	
	GROUP L						
	Methamidafos	No process stack					
11	GROUP M						
	Phosphorous Acid	phosphorous acid Reactor – 01 Nos – 5 KL	20	Water Scrubber	HCl	20	
12	GROUP N						
	2-(4-Hydroxy phenoxy) Propionic acid	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products
	2,3-Difluoro-5-chloro pyridine	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triclopyr Acid / Triclopyr Butotyl Ester	Reactor – 01 Nos – 6.3 KL	No process stack				
	Clodinafop Propargyl	Reactor – 01 Nos – 6.3 KL	No process stack				
	Picloram	Picloram& pretilachlor Reactors – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Pretilachlor		No process stack				
	Bispyribac Sodium	Reactor – 01 Nos – 6.3 KL	No process stack				
	Azoxystrobin	Reactor – 01 Nos – 6.3 KL	No process stack				
	Boscalid	Reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Metalaxyl	Metalaxyl Reactor – 01 Nos – 6 KL	20	Alkali Scrubber	HCl	20	
13	GROUP O						
	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	Reactor – 01 Nos – 6.3 KL	No process stack				Either or combination of the products

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	Fipronil	Fipronil reactor – 01 Nos – 6.3 KL	20	Alkali Scrubber	HCl	20	
	Emmamectin Benzoate	Reactor – 01 Nos – 6.3 KL	No process stack				
	Difenoconazole	Reactor – 01 Nos – 6.3 KL	No process stack				
	Triazophos	Reactor – 01 Nos – 6.3 KL	No process stack				
	Glufosinate Ammonium Salt	Reactor – 01 Nos – 6.3 KL	No process stack				
	Metribuzin	Reactor – 01 Nos – 6.3 KL	No process stack				
14	NH4Cl	NH4Cl Storage Tank	11	Acid Scrubber			
15	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
16	HCl Storage Tank	HCl Storage Tank – 01 Nos – 20 KL	11	Alkali Scrubber	HCl Cl2	20 9	
17	Chlorine Shed	Chlorine Shed – 01 Nos	13.5	Alkali Scrubber	Cl2	9	
18	Drum Filling Station	Drum Filling Station – 01 Nos	11	Alkali Scrubber	Odor		
19	Sodium Sulphate recovery	Stack attached to Dryer	20	Bag filter	PM	150	
20	Ammonium Chloride recovery	Stack attached to Dryer	20	Bag filter	PM	150	
21	Quippo (1.364 MW)	Stack attached to Power plant	45	---	PM SO2 NOX	150 100 50	
22	Incinerators – 03 Nos – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO2 NOX	50 200 400	

4.5 Ambient air quality within the premises of the industry shall conform to the following standards:-

Parameters	Permissible limit
Suspended Particulate Matter (size less than 10 um) PM 10 ug/M3 **	100 Microgram/M^3
Suspended Particulate Matter (size less than 2.5 um) PM 2.5 ug/M3 **	60 Microgram/M^3
Oxides of Sulphur **	80 Microgram/M^3
Oxides Of Nitrogen **	80 Microgram/M^3
HCL	200 Microgram/M^3

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CL2	100 Microgram/M^3
H2S	500 Microgram/M^3
HC	160 Microgram/M^3
Ammonia	400 Microgram/M^3
HF	60 Microgram/M^3
CS2	2000 Microgram/M^3
CO	5000 Microgram/M^3

- 4 Hourly or 08 Hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not one two consecutive days of monitoring

4.6 The applicant shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no.4.3 and 4.4 as above.

4.7 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no.4.2 and 4.4 as above.

4.8 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification.

4.9 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

5. **GENERAL CONDITIONS:-**

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board

5.2 Applicant shall also comply with the general condition give in annexure I

6. **Authorization for the [Management & Transboundry Movement of Hazardous Waste Form-2 (See rule 6 (2) for grant of Authorization for occupier or Operator handling Hazardous Waste Rules – 2016.**

6.1 Number of authorization: **AWH-84402, Date of Issue: 22/02/2017**

6.2 Reference of application **No. 115227, dated 01/12/2016.**

M/s. COROMANDEL INTERNATIONAL LTD., is hereby granted an authorization to operate facility for following Hazardous wastes on the premises situated at Plot No. 2102, GIDC Industrial Area, Sarigam, Dist. Valsad.

Sr. No.	Waste	Category of Hazardous Waste as per the Schedules I, II and III of these rules		Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity
		Schedule	Category		
1.	ETP Sludge	I	35.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2640 MT/Year
2.	Discarded Container/bags	I	33.3	Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners/ disposed through common GPCB approved decontamination facility.	24000 Nos./Year

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3.	Oil & Grease skimming residue	I	35.4	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	32.40 MT/year
4.	Chemical Sludge containing residue pesticides	I	29.2	Collection, storage, transportation, disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
5.	Used Oil	I	5.1	Collection, storage, transportation, disposal by selling to registered reprocessors.	0.3 MT/Year
6.	Spent carbon	I	36.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	257.4 MT/Year
7.	Ash from incinerator	I	37.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4755 MT/Year
8.	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	0.240 MT/Year
9.	Spent HCl 30% Acetic acid – 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	24588 MT/Year 7000 MT/Year
10.	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	2032 MT/Year
11.	Salts from MEE	I	37.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli.	4570.44 MT/Year

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12.	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who heve valid permission under rule-9of hazardous waste and other waste(M) and (TMB) rule- 2016	1995 MT/Year
13.	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation , disposal through – house incineration or SEPPL, Kutch, GISPL-Palsana	50 MT/Year

6.3 The Authorization shall be valid for a period of **30/09/2021.**

6.4 The Authorization is subject to the following general and specific conditions:

A. General Conditions under Hazardous and other Wastes (MANAGEMENT & TRANSBOUNDARY MOVEMENT) Rules-2016.

1. The Authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The Authorization or its renewal shall be produced for inspection at the request of an officer Authorized by the State Pollution Control Board.
3. The person Authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific Conditions (whichever is applicable)

1. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
2. Handing over of the hazardous and other wastes to the authorized actual user shall be only after making the entry into the passbook of the actual user

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3. In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.
4. The occupier of the facility shall comply Standard operating procedure/ guidelines published by MoEF&CC or CPCB or GPCB form time to time.
5. Unit shall comply provisions of E-Waste (Management) Rules, 2016.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Mrs. D.P. Shah)
ENVIRONMENTAL ENGINEER

NO: GPCB/SRG-CCA-229(25)/ID:24285/408584 Date:- 31/3/2017

ISSUED TO:
M/s. Coromandel International Limited (Old name: Sabero Organics Guj Ltd.)
Plot No: 2102, 2104/1, 735 & 2112/2113,
GIDC Estate Sarigam,
Ta: Umbergaon,
Dist: Valsad – 396 155.

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Annexure- II

Photographs of deodorant system covering entire periphery of unit



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O/C 1039

EG576528480IN IVR:6971576528480
SP SARIGAM SO <396155>
Counter No:2,25/02/2022,12:48
To:UNIT HEAD,GPCB
PIN:382010, Gandhinagar Gujarat HO
From:COROMANDEL INT LTD,GIDC
Wt:25gms
Amt:41.30(Cash)Tax:6.30
<Track on www.indiapost.gov.in>

Lett Ref-No- EMS-GPCB/COR/45-2022/ID-24285

25th Feb'2022

To,

Mr. A. G. Patel,

Regional Officer, Sarigam

Gujarat Pollution Control Board.

Subject: Intimation for Incinerator – 01 plant Shut down activity

GPCB ID:24285

Dear Sir,

This has reference to above mentioned subject; we hereby want to inform you that our Incinerator-01 plant is under maintenance work for 20 days. Online continuous monitoring data of Incinerator 01 stack (**Equipment Serial No:5000401**) will not be uploaded on GPCB/CPCB portal during the period of shut down activity.

We will update the status once the shutdown activity gets completed. This is for your kind information.

Kindly acknowledge the same.

Thanking You,

Yours Faithfully

For Coromandel International Limited

Dinesh Chandra Patil

RECEIVED
G P C Board Sarigam
Sign Dt. 25/02/2022

Assoc. Vice President and Unit Head.

C.C.: Unit Head, Head Office, GPCB Gandhinagar.

TRUE COPY
ADVOCATE

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office: Coromandel House
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27841034
F : +91 40 27844117
E: info@coromandel.murugappa.com
W: www.coromandel.biz

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ANNEXURE-R-25

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 1, 2022

PCB ID: 24285

To,
Unit Head - Sarigam
Gujarat Pollution control Board
Paryavaran Bhavan, Sector 10-A, Gandhinagar, Gujarat.

Subject : **Submission of compliance to show cause notice issued by HO, GPCB, Gandhinagar dated 30/07/2022.**
Ref. : **Show Cause Notice No. GPCB/SRG-CCA-229(38)/ID: 24285/679472 dated 30/07/2022.**

Dear Sir/Madam,
This has reference to the above. We are submitting hereby compliance to show cause notice issued by HO, GPCB, Gandhinagar dated 30/07/2022.

Sr. No.	Specific Reason	Compliance
1.	During inspection it is observed that unit is using flexible pipeline at many locations in their ETP for conveyance of effluent and unit is not operating primary ETP units.	• **Regarding observed flexible pipeline at ETP;** Observed flexible pipeline are removed at ETP area and Fixed pipeline are provided. Photograph for the same is enclosed as **Annexure-I.** • **Regarding not operating primary ETP units;** During inspection dated 08/02/2022 by GPCB officials, primary clarifier was under routine/regular maintenance work. And due to that, operation of primary clarifier was stopped and it found not in operation during said inspection. But now, at present, ETP is now operating regularly and Photographs for the same are enclosed as **Annexure-II.**
2.	During inspection leakages observed in the quenching system of incinerator. This may result into odour.	As an immediate action, old quenching system has been replaced with new quenching system. Photographs of the same are attached in **Annexure-III.**
3.	Presently unit is not in compliance.	Compliance Report is attached as **Annexure-IV.**
4.	You have not complied CCA-Amendment rejection order dated 20/10/2021.	
5.	Proposal for by-product which is not acceptable as per provisions of HWM Rule, 2016.	

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
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Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
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W: www.coromandel.biz

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

Thank You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

Copy:
Regional Officer – Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

Registered Office : Coromandel House:
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Annexure-I

Photograph for Fixed pipelines provided at ETP



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Annexure-2

Photographs for ETP Units

Primary Clarifier



Secondary Clarifier



Bio-Reactor-I



Bio-Reactor-II



Sand and Carbon Filter



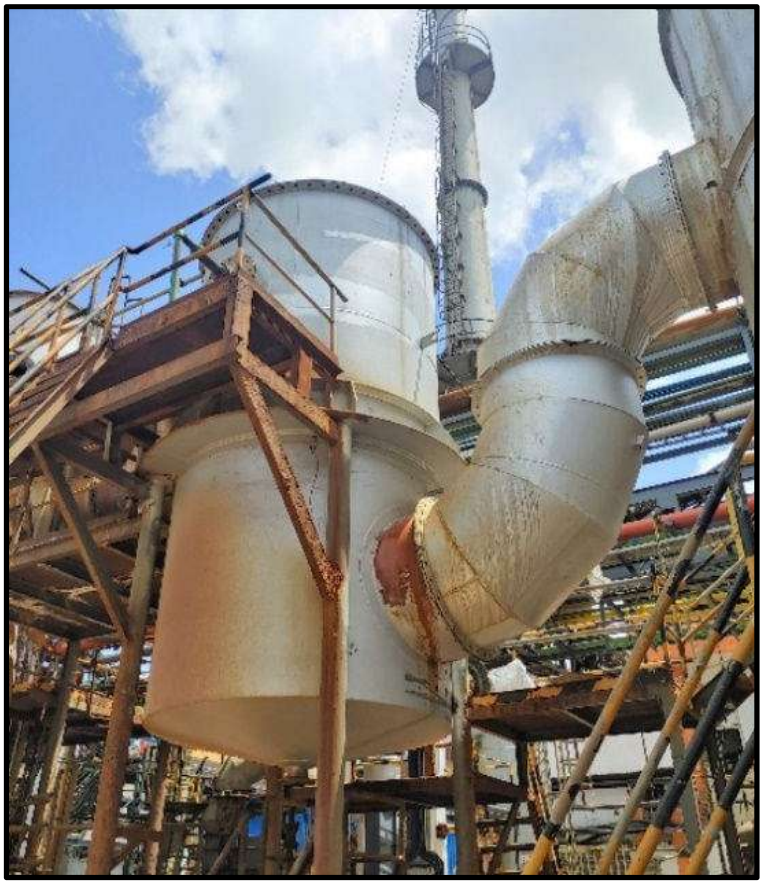
Final Discharge Sump



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Annexure-III

Photographs for new quenching system of incinerator



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Annexure-IV

Compliance Report for CC&A Renewal Rejection Order

<table>
<tr><th>Sr. No.</th><th>Specific Reason</th><th>Compliance</th></tr>
<tr><td>1</td><td>Presently Unit is not in compliance.</td><td>• Compliance report for each and every conditions given in
○ CC&A Order No. AWH-84402, date of issue 22/02/2017,
○ CCA Amendment Order No. AWH 105201, dated 06/12/2019 &
○ CCA Amendment Order No. AH – 110281 dated 24/11/2020
are enclosed as an Annexure -1, 2 & 3 respectively.
• And Compliance report for specific instructions/conditions given in Notice of Direction issued on 30/07/2022 by GPCB, Gandhinagar is enclosed as an Annexure-4.
• And Compliance Report to reasons of show cause notice no. GPCB/SRG-CCA-229(38)/ID-24285/679472 dated 30/072022 is enclosed as Annexure-5.
• During last/previous 2 visits (dated 08.02.22 & 08.03.22), Air, water, and process stack samples withdrawn, and all are meeting prescribe limits as mentioned in above said our CCA. The analysis results are enclosed as Annexure-6.</td></tr>
<tr><td>2</td><td>You have not complied CCA-Amendment rejection order dated 20/10/2021.</td><td>• Compliance to reasons given in CCA-Amendment rejection order dated 20/10/2021is enclosed as Annexure-7.</td></tr>
<tr><td>3</td><td>Proposal for by-product which is not acceptable as per provisions of HWM Rule, 2016.</td><td>• Purity of By-products generated (obtained as a By-Products in CC&A Order No. AWH-48951 dated 13/09/2012 And CC&A order no. AWH-84402 dated 31/03/2017 and its subsequent amendments) is given below;
<table><tr><th>By-Products</th><th>Purity</th><th>Characteristics report</th></tr><tr><td>Ammonium Chloride Powder (NH_4Cl)</td><td>98 to 99.5 %</td><td>enclosed as an Annexure – A</td></tr><tr><td>Sodium Sulphate Powder (Na_2SO_4)</td><td>98 to 99 %</td><td>enclosed as an Annexure – B</td></tr><tr><td>Ammonium Sulphate Powder ($(NH_4)_2 SO_4$)</td><td>96 to 99 %</td><td>enclosed as an Annexure – C</td></tr></table>• Additionally, in line with above-said purity of by-products as well as characteristics and analysis reports of each by-product (including said purity), we have applied for consideration of said by-products as by-products to Hazardous Waste Cell under Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amended time to time. Acknowledgment copy of the submitted application is enclosed as an Annexure – D & application with required supporting documents is uploaded in XGN tag 000.pdf dated 29.11.2021.
• The proposal of by-products is under active consideration of technical committee of GPCB and in this regard technical</td></tr>
</table>

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		presentations have been done twice dated 29.01.2022 and 25.03.2022 through VC. We have also replied all the queries raised during technical discussion to the Board. • After second meeting we have withdrawn proposal for consideration of material generated from Industrial processes as by-Product i.e. **Sodium Chloride Powder (NaCl)** from this application. • Response for theMOM of second committee meeting was submitted on 30.04.2022. • In our EC it is clearly mentioned ammonium chloride as a byproduct. Once EC is granted as byproduct it is acceptable as per CPCB's " Framework on Identification of Materials Generated from Industrial Processes as Wastes or By-products" document (September 2019) • Kindly we hereby request you to consider Ammonium chloride, Ammonium sulphate and Sodium sulphate and maintain the status-quo of the current CCA subject to the final decision of the committee binding on us. • All these materials are dispatched in solid form and not as liquid form.



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ANNEXURE-R-26

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

August 4, 2022 PCB ID: 24285

To,
Unit Head –Sarigam
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382010, Gujarat.

Subject	:	**Submission of Compliance and Action taken/Action to be takento Direction issued on 30/07/2022by HO, GPCB, Gandhinagar.**
Ref.	:	• **Direction under section 5 of the Environment (Prevention) ACT-1986for violation of the Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time issued vide Order No. GPCB/SRG-CCA-229(38)/ID-24285/679542 dated 30/07/2022.** • **GPCB Visit dated 08/02/2022&08/03/2022.**

Dear Sir/Madam,
This has reference to the above. We are hereby submitting Compliance / Action taken/Action to be taken to Direction issued on 30/07/2022 by HO, GPCB, Gandhinagar.

Sr. No.	Observation	Compliance and Action taken/Action to be taken
1	During inspection on entry of the unit one tractor along with contaminated debrisalmost seems to be hazardous waste contaminated debris observed coming out of theunit and driver informed that they are taking the same to another plot No. 731/2 of theunit. On inspection it is found that maintenance (reconstruction) of storm water drain isgoing on and its generated contaminated debris and other scrap material approximately1.5 MT is dumped on Plot No. 731/2 of the unit.	• At a time of GPCB official visit dated 08/03/2022, storm water drain cleaning work & renovation work was going on at site and due to these said works, around 1.075 MT(Not 1.5 MT)debris was generated and stored at our near-by Plot No. 731/2 only for drying purpose for the safe disposal at Common TSDF for land-filing, it was not dumped at the said plot. BUT as instructed by GPCB officials, all debris was collectedand disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
2	Unit is not having NOC/CCA of the Board for this Plot Looking to the situation at PlotNo. 731/2, it can be said that unit has deliberately dumped this type of waste at the saidplot.	• At a time of GPCB official visit dated 08/03/2022, storm water drain cleaning work & renovation work was going on at site and due to these said work, around 1.075 MT(Not 1.5 MT) debris was generated and stored at our near-by Plot No. 731/2 **only for drying purpose for the safe disposal at Common TSDF for land-filing**, it was not dumped at the said plot.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

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Secunderabad - 500 003, Telangana, India.
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F : +91 40 27844117
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G P C Board Sarigam
Sign Patel Dt. 04/08/2022

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		BUT as instructed by GPCB officials, all debris was collected and disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
3	Unit has stored generated hazardous waste at various locations within plant of the unit.	During inspection dated 08/02/2022 by GPCB officials, primary clarifier of ETP was under routine/regular maintenance work and sludge of the same was stored at nearby area of primary clarifier. BUT as instructed by GPCB officials and as an immediate action, entire sludge was transferred to dedicated hazardous waste storage area and area got cleaned.Photographs for Cleaned area are enclosed as **Annexure-3.**
4	Industry shall collect all dumped waste approx. 1.5 MT at Plot No. 731/2 & dispose thesame as per the provisions of HWM Rules, 2016	• Observed Entire quantity of debris i.e. 1.075 MT (Not 1.5 MT) dried at Plot No. 731/2was collected and disposed through online generated manifest no. 1576411 dated 10/03/2022. Manifest copy for the same is enclosed as an **Annexuure-1.** • Photographs for Cleaned area of Plot No. 731/2 are enclosed as **Annexure-2.**
5	Industry shall carry out remediation of above site and submit remediation report from reputed institute, like NEERI, NPC, IIT, Schedule-I auditor etc.	As such no contamination observed at Plot No. 731/2 as evident from the soil samples collected and analized by RO, GPCB, Sarigam. Analysis Report issued by GPCB is enclosed as an **Annexure-4.** However, as directed to carry out remediation study for Plot No. 731/2 has been allotted to M/s. Sardar Vallabhbhai National Institute of Technologies (SVNIT), Surat. Work Order for the same is enclosed as an **Annexure-4.1**. So remediation activity for Plot No. 731/2 has been started. So once it is done, we will submit report for the same to GPCB as soon as possible.
6	Unit shall comply with CCA conditions.	Compliance report for each and every conditions given in ○ **CC&A Order No. AWH-84402, date of issue 22/02/2017,** ○ **CCA Amendment Order No. AWH 105201, dated 06/12/2019 &** ○ **CCA Amendment Order No. AH – 110281 dated 24/11/2020**

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 7573005726/27/28

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Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

		are enclosed as an **Annexure-5, 6&7** respectively.
7	Industry shall pay Rs. 67,500/- (Sixty Seven Thousand Five hundred) as an InterimEnvironmental Compensation (Interim EDC).	Interim Environment damage compensation (Rs. 67,500/-) is paid dated 02/08/2022. Transaction No. N214222061837983. Print Screen for payment done details is enclosed as **Annexure-8.**

Thanking You.

Yours Faithfully,
For **Coromandel International Limited**

(Authorized Signatory)

CC:
Regional Officer - Sarigam
Gujarat Pollution Control Board
Sarigam Bhandarwad - 396155, Tal: Umbergaon, Dist: Valsad

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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: Manifest Copy dated 10/03/2022 1050

Safe Enviro Private Limited [53681]

Manifest No: 1576411 10/03/2022 — **Copy 6**

To be forwarded by To be returned by the Operator of the facility to the Occupier after treatment and disposal of hazardous material waste.

Sender's Details			
Sender Name	Coromandel International Limited [24285]		
Address	SARIGAM GIDC ESTATE, SARIGAM ,- Taluka :UMR District:SAR Pin no:396155		
Contact Details	9909994157 pollID@coromandel.murugappa.com	GPS Coordinates	Lat :20.3011 Long :72.8834

Receiver's Details			
State	Gujarat	Type of Facility	Common TSDF
Facility Details	Safe Enviro Private Limited [53681]		
Contact Details	9510660178 eso@desaindia.com	GPS Coordinates	Lat :22.2453 Long :72.5141
Address	966 to 970, 1040 , 1045 to 1049, - Taluka :DHA District:BHA Pin no:382150		

Waste Details					
Waste Details	1~35~35.3~Chemical sludge from waste water treatment				
Waste Intended for	Landfill	Total Qty	1.075MT	Consistency	Solid

Transporter Details			
Name	Gujarat Safe Logistic	Contact Details	9879624949 gujaratsafelogistic@gmail.com
Address	B/204,PEACE AVENUE NEAR FELLOWSHIP SCHOOL District :Valsad Taluka :Pardi		

Vehicle Details					
Vehicle no	GJ10Z9697	GPS Enabled	Yes	Type of Vehicle	Truck
Driver name	Akbar Sama	Driver Contact No	9316835928		

Waste Transportation Details					
Vehicle Depart.	10/03/2022 3:24PM	Number of Drums	0	Loose Waste	1.075
Remarks	Contaminated debris material sent for landfill.		No of bags	0	

Sender's Declaration :

1. I hereby declare that contents of the consignment are fully and accurate described above by proper shipping name and are categorized , packed, marked and labeled , and are all in all respects in proper condition for transport by road according to applicable national government regulations.
2. I hereby declare that we have obtained membership of common facility / carried out agreement with actual user for disposal/ actual use of hazardous waste.

Name and Stamp of Sender: COROMANDEL INTERNATIONAL LIMITED Plot No.2102, G.I.D.C Estate SARIGAM-396 155, Dist Valsad, Gujarat

Date: 10/3/22

Signature: 10/03/2022

Transporter's Acknowledgement of Receipt of waste

Stamp:

Date: 10/3/22

Signature:

Receiver's Certification of Receipt of Hazardous waste

RECEIVED

Stamp: SAFE ENVIRO PRIVATE LIMITED IMAGINADI

Date: 11 MAR 2022

Signature:

DATE: 11/03/22

CONTRACT No: 13

TOKEN No: 18520

Print by 24285 @ 10/03/2022 04:40:26 PM I (Through XGN)

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- Note: IP of machine is captured by the browser of client machine.IP is depends upon the Internet Service Provider.

Annexure-2

Photographs for Cleaned area at Plot No. 731/2





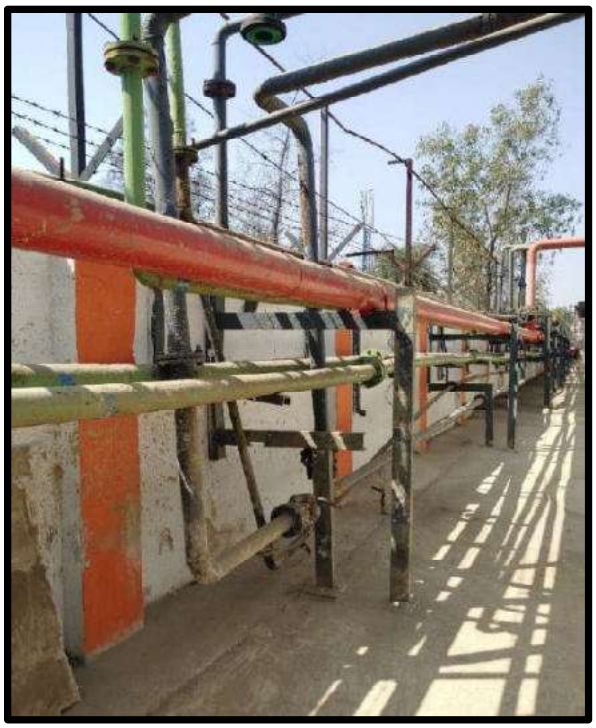




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Annexure-3

Photographs for Cleaned area within premises





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Annexure-4

ANALYSIS REPORT FOR Hazardous 1053
WATSE TYPE : SOL

Sample ID:325889 - Analysis Completion 25/03/2022

Pesticides (technical) (excluding formulation) / LAB Inward : 57779

Gujarat Pollution Control Board
Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

1. Name & : **Coromandel International Limited - 24285**
2. Address of the Unit : **2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM „- SARIGAM - 396155 , Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam**
3. Nature of Sample : **REP-Representative/Grab , (Insp Type : HOR-H.O.Reference)**
4. Sample Collected By : **Rana Jaimin C**
5. Date & Time of Collection & Receipt : **08-Mar-2022, (1125 to 1125)**
6. Date of Start & Completion of Analysis : **10/03/2022 13:13:33 & 25/03/2022**
7. Sampling Point : **Contaminated soil/debris waste sample collected which is dumped at North west side of plc**
8. Physical State : **Solid**
9. Disposal Mode : **--**
10. Waste Category : **--**
11. Temperature on Collection : **& Color & Appearance : Grayish**
12. Hazardous Sampled (SPM-M3) : **-- & Carboys Marks : Barcode**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	Unit	4500 B APHA Std.Methods 22nd edi.-2012	1 – 14	7.48
2	Total Acidity as Caco3 *	gm/kg	Titration Method. (2310 B APHA Standard Methods	1 – 1000 mg/l	BDL
3	Total Alkalinity as Caco3 *	gm/kg	Titration method. (2320 B APHA Standard Methods	1 – 5000 mg/l	0.04
4	Total Inorganic Solids (TIS)	gm/kg	2540 G APHA Standard Methods 22nd edi-2012	1-1000 gm/kg	950
5	Ammonical Nitrogen	gm/kg	1).Titrimetric method 2).Nesslerization method. (45	. 0.5 - 5000 mg/l.	0.364
6	Chemical Oxygen Demand	gm/kg	APHA (23rd Edition)- 5220 B Open Reflux Method-	5.0- 50000 &	0.75
7	Oil & oil emulsions *	gm/kg	Liquid – Liquid Partition Gravimetric method. (5520	01 – 1000	BDL

Laboratory Remarks : Freeze By:335-vig_335 Dt.: 28/03/2022

H. M. Ganvit,SSO

Field Observation :
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ANALYSIS REPORT FOR Hazardous 1054
WATSE TYPE : SOL

Sample ID:325890 - Analysis Completion 25/03/2022

Pesticides (technical) (excluding formulation) / LAB Inward : 57780

Gujarat Pollution Control Board
Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

1. Name & : **Coromandel International Limited - 24285**
2. Address of the Unit : **2102, 2104/1,735,&2112/2113,SARIGAM GIDC ESTATE, SARIGAM „- SARIGAM - 396155 , Taluka : Umbergaon, District : Valsad-Sarigam, GIDC : Sarigam**
3. Nature of Sample : **REP-Representative/Grab , (Insp Type : HOR-H.O.Reference)**
4. Sample Collected By : **Rana Jaimin C**
5. Date & Time of Collection & Receipt : **08-Mar-2022, (1130 to 1130)**
6. Date of Start & Completion of Analysis : **10/03/2022 13:13:49 & 25/03/2022**
7. Sampling Point : **Contaminated soil/debris waste sample collected which is dumped at North East side of plo**
8. Physical State : **Solid**
9. Disposal Mode : **--**
10. Waste Category : **--**
11. Temperature on Collection : **& Color & Appearance : Yellowish**
12. Hazardous Sampled (SPM-M3) : **-- & Carboys Marks : Barcode**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	Unit	4500 B APHA Std.Methods 22nd edi.-2012	1 – 14	6.52
2	Total Acidity as Caco3 *	gm/kg	Titration Method. (2310 B APHA Standard Methods	1 – 1000 mg/l	0.04
3	Total Alkalinity as Caco3 *	gm/kg	Titration method. (2320 B APHA Standard Methods	1 – 5000 mg/l	BDL
4	Total Inorganic Solids (TIS)	gm/kg	2540 G APHA Standard Methods 22nd edi-2012	1-1000 gm/kg	872
5	Ammonical Nitrogen	gm/kg	1).Titrimetric method 2).Nesslerization method. (45	. 0.5 - 5000 mg/l.	0.196
6	Chemical Oxygen Demand	gm/kg	APHA (23rd Edition)- 5220 B Open Reflux Method-	5.0- 50000 &	3.16
7	Oil & oil emulsions *	gm/kg	Liquid – Liquid Partition Gravimetric method. (5520	01 – 1000	0.004

Laboratory Remarks : Freeze By:335-vig_335 Dt.: 28/03/2022



H. M. Ganvit,SSO

Field Observation :
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सरदार वल्लभभाई राष्ट्रीय प्रौद्योगिकी संस्थान, सूरत
सरदार वल्लभभाई राष्ट्रीय प्रौद्योगिकी संस्थान, सूरत
SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY, SURAT
(An Institute of National Importance, Established under NITSER Act by Ministry of Education, Govt. of India)
SVNIT
60 ANNIVERSARY

Ref No: SVNIT/DCE/ENV/Coromandel/C-1437 02-08-2022

To,
Mr Dinesh Chandra Patil
Assoc. Vice President & Unit Head
Coromandel-Sarigam
Valsad, Gujarat

Subject: To conduct remediation study of CIL Plot no-731/2 regarding

Your Ref Letter No: EMS-SVNIT/COR/01-2022-23/ID-24285 dated 02-08-2022

Dear Sir,

We are pleased to inform you that SVNIT, Surat is ready to carry out the ~~MEE Facilities Efficiency Tests~~ Remediation study at Sarigam- Valsad, Gujarat with following term and conditions:

Kindly follow the terms and conditions

- Consultancy charge is Rs 3,54,000/- (Rs 3,00,000/ + 54,000/-18% GST)
- Laboratory analysis charge as per parameters list which will be decided during the execution of work
- During the visits all the logistic arrangements should be borne by the, Coromandel-Sarigam
- To complete the work, Coromandel-Sarigam has to provide all the necessary documents (soft and hard copy) as required by SVNIT, Surat.

- This is for your information that work will be only started after acceptance of terms & conditions, and deposition of 100% payment for consultancy, charges etc.
- If this offer is acceptable to you, kindly send the work order and release the payment

This amount has to be paid through online or DD drawn in favour of Research and Consulting A/C SVNIT Surat payable at Surat. A/C No: 35373382053 IFSC Code: SBIN0003320, MICR Code: 395002012. GSTIN: 24AAJS1184P1ZP

Please feel free for any query.
Thanking You

Yadav 02/8/22

Dr K. D. Yadav
Associate Professor
Department of Civil Engineering
SVNIT, Surat
Email: kdjhansi@yahoo.com
Contact: +91 -9428398266

S. V. NATIONAL INSTITUTE OF TECHNOLOGY * SURAT * DCE

2.11.22

Forwarded through,
Head, Department of Civil Engineering

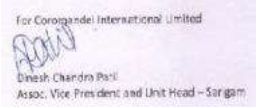
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Annexure–5

Compliance of Consent Order No. AWH-84402

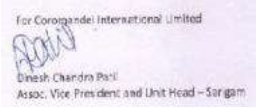
<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Consent Order No. AWH-84402, Date of Issue: 22/02/2017.</td><td></td></tr>
<tr><td>2.</td><td>The consent shall be valid up to 30/09/2021 for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following internal products.
<table>
<tr><th>Sr. No.</th><th>Name of the Products</th><th>Capacity (MT/Annum) (As per CC&A)</th><th>Remarks</th></tr>
<tr><td colspan="4">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb (Tech.)</td><td>38000</td><td rowspan="4">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb (Tech.) + Maneb (Tech.)</td><td>38000</td></tr>
<tr><td>3</td><td>Mancozeb (Tech.) + Zineb (Tech.)</td><td>38000</td></tr>
<tr><td>4</td><td>Mancozeb (Tech.) + Propineb (Tech.)</td><td>22116</td></tr>
<tr><td></td><td>Total Production capacity of Group A</td><td>38000</td><td></td></tr>
<tr><td colspan="4">GROUP B</td></tr>
<tr><td>1</td><td>Diethyl Thiophosphoryl Chloride (DETC)</td><td>3600</td><td rowspan="6">Either or combination of the products</td></tr>
<tr><td>2</td><td>DMTC</td><td>2160</td></tr>
<tr><td>3</td><td>Diafenthiuron</td><td>1650</td></tr>
<tr><td>4</td><td>Thiamethoxam</td><td>1650</td></tr>
<tr><td>5</td><td>Pymetrozine</td><td>1650</td></tr>
<tr><td>6</td><td>Diflubenzuron</td><td>1650</td></tr>
<tr><td></td><td>Total Production capacity of Group B</td><td>3600</td><td></td></tr>
<tr><td colspan="4">GROUP C</td></tr>
<tr><td>1</td><td>DMTC Amide</td><td>4796</td><td>-</td></tr>
<tr><td></td><td>Total Production capacity of Group C</td><td>4796</td><td>-</td></tr>
<tr><td colspan="4">GROUP D</td></tr>
<tr><td>1</td><td>Glyphosate (Tech.)</td><td>5000</td><td rowspan="2">Either or combination of the products</td></tr>
<tr><td>2</td><td>PMIDA</td><td>3300</td></tr>
<tr><td></td><td>Total Production capacity of Group D</td><td>5000</td><td>-</td></tr>
<tr><td colspan="4">GROUP E</td></tr>
<tr><td>1</td><td>Chlorpyriphos (Tech.)</td><td>5000</td><td>-</td></tr>
</table></td><td>• Complied.
• Total Production Quantity is within permitted Production Capacity.</td></tr>
</table>

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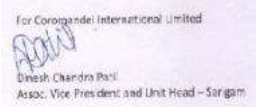
	Total Production capacity of Group E	**5000**	
GROUP F			
1	Acephate (Tech.)	7000	-
	Total Production capacity of Group F	**7000**	
GROUP G			
1	Monocrotophos (Tech.)	7000	**Either or combination of the products**
2	Dicrotophos (Tech)	1485	
	Total Production capacity of Group G	**7000**	
GROUP H			
1	DDVP (Tech.)	6000	-
	Total Production capacity of Group H	**6000**	
GROUP I			
1	Phosphorous Trichloride (PCl3)	13000	-
	Total Production capacity of Group I	**13000**	
GROUP J			
1	Trimethyl Phosphite (TMP)	9240	**Either or combination of the products**
2	Triethyl Phosphite (TEP)	5940	
	Total Production capacity of Group J	**9240**	
GROUP K			
1	Phosphorous Sulphochloride (PSCl3)	2000	-
	Total Production capacity of Group K	**2000**	
GROUP L			
1	Methamidafos (Tech.)	0	-
	Total Production capacity of Group L	**0**	
GROUP M			
1	Phosphorous Acid	0	-
	Total Production capacity of Group M	**0**	
GROUP N			
1	2-(4-Hydroxy phenoxy) Propionic	429	**Either or combination of**

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	Acid		**the products**	
2	2,3-Difluoro-5-chloro pyridine	353		
3	Clodinafoppropargyl (Tech.)	933		
4	Triclopyr Acid (Tech.)	933		
5	TriclopyrButotyl Ester (Tech.)	933		
6	Picloram (Tech.)	495		
7	Pretilachlor (Tech.)	933		
8	Bispyribac sodium (Tech.)	330		
9	Azoxystrobin	52.8		
10	Boscalid	660		
11	Metalaxyl	933		
12	Proclaraz	933		
	Total Production capacity of Group N	**933**		
GROUP O				
1	5-Amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) Pyrazole	861	**Either or combination of the products**	
2	Fipronil (Tech.)	933		
3	Emmamectin Benzoate (Tech.)	495		
4	Difenoconazole (Tech.)	660		
5	Triazophos (Tech.)	933		
6	Glufosinate Ammonium Salt	933		
7	Metribuzin	933		
	Total Production capacity of Group O	**933**		
GROUP P				
1	Imidacloprid (Tech.)	990	**All of the Products**	
2	Acetamiprid (Tech.)	990		
	Total Production capacity of Group P	**990**		
BY PRODUCTS				
1	Ammonium Chloride Powder (NH4Cl)	13398	-	
2	Sodium Chloride (NaCl)	8238	-	
3	Sodium Sulphate (Na2SO4)	19779	-	

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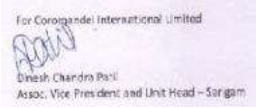


4	Ammonium Sulphate (NH4)2SO4	8370	-
Total Production capacity of all Groups and By-Product		**160277**	-

LIST OF FORMULATION PRODUCTS

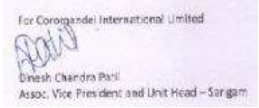
Sr. No.	FORMULATION PRODUCTS	Qty. (MT/Annum) (As per CC&A)
1	Mancozeb 80% WP	26400
2	Mancozeb 75% WP/WDG	28050
1	Glyphosate 41% IPA	34650
2	Glyphosate 62% IPA	26136
3	Monocrotophos 36% SL	7920
4	Acephate 75% SP	8514
5	Chloropyriphos 20% EC	15840
6	Mancozeb SC (420-600 gm/Ltr)	3300
7	Mancozeb SE (420-500 gm/lit)	3300
8	Mancozeb OS 600 gm/lit	3300
9	Mancozeb (63%)+Carbendazim(12%)	1650
10	Mancozeb (64%)+Metalyxyl (8%)	1650
11	Mancozeb (64%)+ cymoxanil (8%)	1650
12	Glyphosate 71% ammonium salt(prills)	4620
13	Glyphosate 5% ammonium salt	6600
14	Monocrotophos 40% SL (W/V)	2640
15	Diclorovos 76% EC	1980
16	Acephate 40% SL	1650
17	Acephate 75% prills	660
18	Acephate 95% prills	660
19	Chloropyriphos 38.7% EC	1650
20	Chloropyriphos 480 gm/lit EC	1650
21	Chloropyriphos 50% EC	1650
22	Chloropyriphos 50% +	1650

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		Cypermethrine 5% EC		
	23	Cypermethrin 10% EC	1650	
	24	Cypermethrin 25% EC	1650	
	25	Maneb 80% WP	8910	
	26	Propineb 70% WP	9240	
	27	Zineb 80% WP	8910	
	28	TriclopyrButotyl ester 480 gm/lit	990	
	29	Methamidophos 600 gm/lit SL	5280	
	30	Imidaclopyrid 17.8% SL	8580	
	31	Clodinafoppropargyl 15% WP	10230	
		Total	**243210**	
3.0	**CONDITIONS UNDER WATER ACT:**			
3.1	The source of water supply shall be GIDC Sarigam			Complied
3.2	The quantity of total water consumption shall not exceed 1078 KLPD as per below break up a) Industrial: 1018 KLPD b) Domestic: 60 KLPD			• Complied. • Total average Water consumption in FY 2021-2022is1068.32 KLDincluding domestic.
3.3	The quantity of total waste water shall not exceed 1073.33 KLPD as per below break up a) Industrial: 1013.33 KLPD b) Domestic: 60 KLPD			• Complied. • Total average Waste water generationin FY 2021-2022 is 545.02 KLD including domestic.
3.4	Out of 1013.33 KL/day the concentrated and toxic effluent stream generated i.e. 93.63 KL/day shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or shall be disposed through common incineration facility SEPPL Kutchh or GSEPL-Palsana. 669.5 KL/Day High TDS Low COD effluent shall be evaporated through Multiple Effective Evaporator (MEEs)/ in case of any breakdown or maintenance of in house MEE, high TDS effluent will be sent to SEPPL for evaporation and drying. 190 KL/day dilutes stream + 60 KL/day domestic i.e. 250 KL/day along with MEE condensate 331 KL/day shall be treated in a well-designed Effluent treatment plant provided within the factory premises and discharged as per standards laid down by the GPCB. The final discharge quantity shall not exceed 581 KL/Day. The mechanism to monitor of the concentrated stream generated, treated and diluted stream generated treated shall be maintained and submit to the board on monthly basis. In no case, concentrated stream shall be sent with diluted stream for			• Complied. • Total Average Waste water discharge quantityin FY 2021-2022 is 545.02 KLD including domestic.

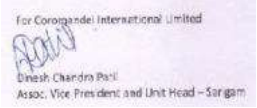
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<table>
<tr><td></td><td>the further treatment.
Unit shall affix of Water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act -1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required.</td><td></td></tr>
<tr><td>3.5</td><td colspan="2">TRADE EFFLUENT:</td></tr>
<tr><td>3.5.1</td><td>Theconcentrated and toxic effluent stream generated shall be segregated and completely incinerated in a well-designed in-house liquid waste incinerator or SEPPL Kutchh or GSEPL-Palsanaincineration facility or co-processing facility.
The incineration facility shall be operated & maintained efficiently so that there shall be no discharge of any concentrated & toxic industrial effluent into an environment including land, river, stream etc.
The industry shall operate fully and efficiently incineration system/ air pollution control equipment for incineration of total quantity (i.e. toxic effluent) of effluent & shall close down all the manufacturing processing activities whereas the incineration system / air pollution control equipments or any thereof are fully or partially non operational for any reason what so ever (whether for maintenance/repairs/electricity failures or otherwise) They shall not restart such activity unless and until the incineration facility is fully in operation.
The pipeline connecting various equipments of sump of incineration system should be minimum in numbers and shall have permanent connection (no losses or flexible connection)
The incineration system shall be equipped with flow measuring devices for mother liquor, effluent, fuel for consumption & temperature measuring devices within incinerator at different points & scrubber outside the incinerator shall be provided. These all data shall be recovered every day.
The applicant shall have to register under the provisions of factories act – 1948 and shall be obtained necessary factory provisions.
The unit shall make all the requisite arrangement for the safe storage & leachate collection & the unit shall store and handle solid waste in accordance with provisions of the effluent rules in behalf
The printed logbook shall be maintained for:
a. Energy Consumption
b. Waste water flow at inlet and outlet of incineration system
c. Quantity of sludge generated
d. Laboratory analysis reports for each of the specified parameters of liquid effluent, gaseous discharge & sludge samples.

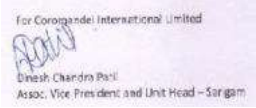
The unit shall supply to the GPCB the figures of production & consumption of electricity & water for each day during the period of production through such figure shall be supplied on monthly basis. The unit shall supply separate figure for consumption of electricity for running the incinerator by having separate measuring meters for such incinerator.</td><td>• Complied.
• We are disposing off incinerable hazardous waste to SEPPL – Kutch/BEIL/ Cement Industry and RSPL – Panoli for incineration.
• We are operating incinerator system with CEMS attached to CPCB and GPCB Server.</td></tr>
<tr><td>3.5.2</td><td>The non concentrated & non toxic effluent from the industrial unit shall conform to the following discharge standards.
<table><tr><th>PARAMETERS</th><th>PERMISSIBLE LIMIT</th></tr></table></td><td>• Complied.
• We are operating</td></tr>
</table>

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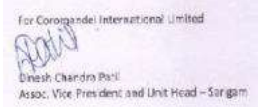
<table>
<tr>
<td></td>
<td>
<table>
<tr><td>pH</td><td>5.5-6.5</td></tr>
<tr><td>Temperature</td><td>40◦C</td></tr>
<tr><td>Color (pt-co scale) in units</td><td>100 Units</td></tr>
<tr><td>Suspended solids</td><td>200 mg/l</td></tr>
<tr><td>Oil and grease</td><td>10 mg/l</td></tr>
<tr><td>Phenolic Compound</td><td>1.0 mg/l</td></tr>
<tr><td>Cyanide (as CN)</td><td>0.2 mg/l</td></tr>
<tr><td>Fluoride</td><td>2 mg/l</td></tr>
<tr><td>Sulphide</td><td>2 mg/l</td></tr>
<tr><td>Ammonical Nitrogen</td><td>100 mg/l</td></tr>
<tr><td>Arsenic (As)</td><td>0.2 mg/l</td></tr>
<tr><td>Total Chromium</td><td>2.0 mg/l</td></tr>
<tr><td>Hexavalent Chromium</td><td>0.1 mg/l</td></tr>
<tr><td>Copper (Cu)</td><td>3.0 mg/l</td></tr>
<tr><td>Lead (Pb)</td><td>0.1 mg/l</td></tr>
<tr><td>Mercury (hg)</td><td>0.01 mg/l</td></tr>
<tr><td>Nickel(Ni)</td><td>3.0 mg/l</td></tr>
<tr><td>Zinc(Zn)</td><td>5.0 mg/l</td></tr>
<tr><td>Cadmium (Cd)</td><td>1.0 mg/l</td></tr>
<tr><td>Iron</td><td>3 mg/l</td></tr>
<tr><td>BOD (5 Days at 20C)</td><td>300 mg/l</td></tr>
<tr><td>COD</td><td>750 mg/l</td></tr>
<tr><td>Chlorides</td><td>600 mg/l</td></tr>
<tr><td>Sulphates</td><td>1000 mg/l</td></tr>
<tr><td>Total Dissolved solids</td><td>2100 mg/l</td></tr>
<tr><td>Insecticides/Pesticides</td><td>Absent</td></tr>
<tr><td>Sodium absorption ratio</td><td>26</td></tr>
<tr><td>Sodium percent</td><td>60</td></tr>
<tr><td>Bio – essay test</td><td>90% survival of fish after 98 hrs in 100% effluent.</td></tr>
</table>
• All efforts shall be made to remove color & unpleasant odor as far as predictable.
</td>
<td>ETP with primary, secondary and tertiary system and installed Continuous effluent monitoring system with GPCB and CPCB server connectivity.
• Treated waste water quality is well within permitted limit.
• Analysis Report of the same attached as Annexure-5.1.</td>
</tr>
<tr>
<td>3.5.3</td>
<td>The final treated effluent conforming the above standards shall be discharged in to GIDC underground drainage system & shall ultimately be conveyed to deep Arabian Sea through closed pipeline being, managed by Sarigam Waste Effluent Management Co. Ltd.</td>
<td>• Complied.
• Final treated effluent discharged into CETP through GIDC underground drainage system.</td>
</tr>
<tr>
<td>3.5.4</td>
<td>Domestic effluent shall be disposed of through septic tank/soak pit system or it shall be treated along with industrial effluent and shall be discharged into GIDC underground drainage system.</td>
<td>Complied.</td>
</tr>
<tr>
<td>4.0</td>
<td>CONDITIONS UNDER THE AIR ACT:</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>The following shall be used as fuel in dryers, boiler, incinerator & DG sets respectively.
<table>
<tr><th>Sr. No</th><th>Fuel</th><th>Existing</th><th>UTILITY</th></tr>
<tr><td>1.</td><td>Natural gas</td><td>Approx. 2500SCM/Hr</td><td>Boiler / Incinerator / MEE</td></tr>
</table>
</td>
<td>• Complied.
• Average natural Gas consumption is 1149.89SCM / Hr against 3500</td>
</tr>
</table>

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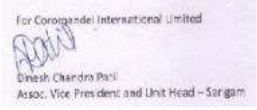
<table>
<tr><td></td><td>
<table>
<tr><td>2.</td><td>Furnace Oil</td><td>2 KL/Hr</td><td>Boiler</td></tr>
<tr><td>3.</td><td>Natural Gas</td><td>1000 SCM/Hr</td><td>Hot Air Generator</td></tr>
<tr><td>4.</td><td>HSD</td><td>6 KL/day</td><td>DG</td></tr>
</table>
</td><td>SCM/Hr, and HSD is 0.253 KL/Day in FY 2021-2022 .</td></tr>
<tr><td>4.2</td><td>The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.</td><td>Complied.</td></tr>
<tr><td>4.3</td><td>The flue gas emission through stack attached to stack shall conform to the following standards:
<table>
<tr><th>Sr. No.</th><th>Stack Attached to</th><th>Height meter</th><th>APCM</th><th>Parameter</th><th>Permissible Limit</th></tr>
<tr><td>1.</td><td>Boiler-3 Nos.</td><td>50</td><td>--</td><td rowspan="4">PM
SO_X
NO_X</td><td rowspan="4">150 mg/Nm^3
100 ppm
50 ppm</td></tr>
<tr><td>2.</td><td>D G Set – 01 Nos.(1000 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>3.</td><td>D G Set – 2 Nos.(500 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>4.</td><td>D G Set– 01 Nos.(200 KVA)</td><td>12</td><td>--</td></tr>
<tr><td>5.</td><td>Liquid and Gas Incinerator 01</td><td rowspan="2">52</td><td rowspan="2">Ventury Alkali scrubber</td><td rowspan="3">PM
SO_2
NO_x
HCL
CO
Total Organic Carbon
Total Dioxins and furans
Sb+As+Pb +Cr+CO+Cu+Mn+Ni+V</td><td rowspan="3">50
200
400
50
100
20
0.2 ng TEQ/Nm^3
1.5</td></tr>
<tr><td>6.</td><td>Solid Incinerator Incinerator 03</td></tr>
<tr><td>7.</td><td>Liquid Incinerator Incinerator 04</td><td>50</td><td>Ventury Alkali scrubber</td></tr>
</table>
</td><td>• Complied.
• Emission are well within permitted norms.
• In incinerator CEMS installed with GPCB and CPCB server connectivity.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis results of the same is attached as Annexure-5.2.</td></tr>
<tr><td>4.4</td><td>The process emission through various stack/vent of reactors, process vessels shall conform to the following standards.
<table>
<tr><th>Sr No</th><th>Plant</th><th>Stack attached to</th><th>Stack height (meter)</th><th>APCM</th><th>Parameter</th><th>Permissible limit, mg/Nm^3</th><th>Remarks</th></tr>
<tr><td colspan="8">GROUP A</td></tr>
<tr><td>1</td><td>Mancozeb</td><td>Mancozeb reactor</td><td rowspan="4">30</td><td rowspan="4">Air Blower/ Ventury scrubber</td><td rowspan="4">CS_2
PM
SO_2</td><td rowspan="4">180
50
40</td><td rowspan="4">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb + Maneb</td><td>maneb reactor</td></tr>
<tr><td>3</td><td>Mancozeb + Zineb</td><td>Zineb reactor</td></tr>
<tr><td>4</td><td>Mancozeb +propineb</td><td>Propineb Reactor</td></tr>
<tr><td>5</td><td></td><td>Spray Dryer(2Nos) 3000 Kgs/Hr.</td><td>30</td><td>Bag Filter / Water Scrubber</td><td></td><td></td><td></td></tr>
<tr><td colspan="8">GROUP B</td></tr>
<tr><td>6</td><td>Diethyl Thiophospho</td><td>Reactor - 01 Nos. – 10 KL</td><td>20</td><td>Alkali scrubber</td><td>HCl</td><td>20</td><td>Either or combinatio</td></tr>
</table>
</td><td>• Complied.
• At 11places online monitoring system installed and emissions are well within permitted norms.
• Regular third party monitoring is carried out and emissions found well within permitted norms.
• Analysis Report of the same attached Annexure-5.3.</td></tr>
</table>

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	rylChloride						n of the products
7	DMTC						
8	Diafenthiuron	Reactor – 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
9	Thiamethoxam	Reactor – 01 Nos. – 6.3 KL	--	--	--	--	
10	Pymetrozine	Reactor – 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
11	Diflubenzuron	Reactor - 01 Nos. – 6.3 KL	20	Alkali scrubber	HCl	20	
GROUP C							
12	DMTC Amide	Reactor - 01 Nos. – 10 KL	20	Acidic scrubber	NH_3	30	
GROUP D							
13	Glyphosate (Tech.)	Slurry Preparation	20	Water Scrubber	NH_3	30	Either or combination of the products
14	PMIDA	Reactor - 01 Nos. – 10 KL	20	Alkali scrubber	HCl	20	
GROUP E							
15	Chlorpyriphos (Tech.)	HTCP Reactor- 01 Nos. – 10 KL	20	Two scrubbers in series-water scrubber &alkali scrubber	HCl	20	
GROUP F							
16	Acephate(Tech.)	Ammonia solution preparation reactor- 01 Nos. – 4 KL	20	1st Scrubber Water scrubber 2nd with Acid Media	NH_3	30	
		Acephate Packing Area	12	Water Scrubber	Odour	Nil	
GROUP G							
17	Monocrotophos (T) **OR** Dicrotophos	Chlorination Reactor and Neutralizer	20	Two scrubbers in series water scrubber &alkali scrubber	HCl Cl_2	209	Either or combination of theproducts
GROUP H							
18	DDVP	Gas to Incinerator			CH_3Cl		
GROUP I							
19	Phosphorous Trichloride (PCl_3)	PCl3 Plant reactor& Storage tank	11	Alkali Scrubber	HCl Cl_2 PCl_3	209 9	
GROUP J							
20	Trimethyl Phosphite (TMP) **OR** Triethyl Phosphite (TEP)	TMP plant reactor andstorage tank	20	Acid Scrubber	NH_3 Odor	30 Nil	Either of the product
		TMP/DETC products storage tanks	11	Acid Scrubber			
GROUP K							

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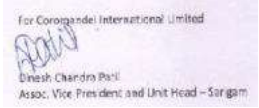
21	Phosphorous Sulphochloride ($PSCl_3$)	PSCl3 plant reactor and storage tank	22	Alkali Scrubber	HCL PCl_3	209	
GROUP L							
22	Methamidafos	NO process gas emission					
GROUP M							
23	Phosphorous Acid	phosphorous acid Reactor	20	Water Scrubber	HCl	20	
GROUP N							
24	2-(4-Hydroxy phenoxy) Propionic acid	--	No process stack				Either of the product will be manufacture
25	2,3-Difluoro-5-chloro pyridine	--	No process stack				
26	Triclopyr Acid / TriclopyrButotyl Ester	--	No process stack				
27	Clodinafop Propargyl						
28	Picloram	Picloram&pretilachlorreactors	20	Alkali Scrubber	HCl	20	
29	Pretilachlor		No process stack				
30	Bispyribac Sodium	--	No process stack				
31	Azoxystrobin		No process stack				
32	Boscalid	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
33	Metalaxyl	Reactor - 01 Nos. – 6 KL	20	Alkali Scrubber	HCl	20	
GROUP O							
34	5- amino-3-cyano-1-(2,6-dichloro-4-trifluoro methyl phenyl) pyrazole	--	No process stack				Either of the product will be manufacture
35	Fipronil	Fipronil reactor	20	Alkali Scrubber	HCl	20	
36	Emmamectin Benzoate	--	No process stack				
37	Difenoconazole	--	No process stack				
38	Triazophos	--	No process stack				
39	Glufosinate Ammonium Salt	--	No process stack				
40	Metribuzin	--	No process stack				
4	NH4Cl	NH4Cl	11	Acid			

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For Coromandel International Limited
Dinesh Chandra Pant
Assoc. Vice President and Unit Head – Sarigam

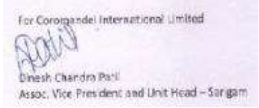
	1		Storage Tank		Scrubber			
	42	Solvent Exhaust	All common vents	26	Carbon Absorption Tower	Solvent		
	OTHERS							
	43	HCl Storage Tank	HCl Storage Tank	11	Alkali Scrubber	HCl Cl_2	20 9	
	44	Chlorine Shed	Chlorine Shed	13.5	Alkali Scrubber	Cl_2	9	
	45	Drum Filling Station	Drum Filling Station	11	Alkali Scrubber	Odor		
	46	Sodium Sulphate Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
	47	Ammonium Chloride Recovery	Stack Attached to Dryer	20	Bag Filter	PM	150	
	48	Qurippo (1.364 MW)	Stack Attached to Power plant	45	--	PM SO_2 NOx	150 100 50	
	49	Incinerators – 03 Nos. – 2 Stacks	1 Gas Waste, 1 Liquid Waste & 1 Solid Waste	52	Ventury Alkali Scrubber	PM SO_2 NOx	50 200 400	
4.5	Ambient air quality within the premises of the industry shall conform to the following standards: **PARAMETERS** / **PERMISSIBLE LIMIT** Particulate Matter(PM_{10}) — 100 microgram /M^3 RSPM ($PM_{2.5}$) — 60 microgram /M^3 Oxides of Sulphur (SO_X) — 80microgram /M^3 Oxides of Nitrogen (NO_X) — 80 microgram /M^3 HCl — 200 microgram /M^3 Cl_2 — 100 microgram /M^3 H_2S — 500 microgram /M^3 HC — 100 microgram /M^3 Ammonia — 400 microgram /M^3 HF — 80 microgram /M^3 CS_2 — 2000 microgram /M^3 CO — 5000 microgram /M^3 • 4 Hourly or 08 Hourly or 01 Hourly monitored values as applicable shall be complied the 98% of the limit in a year, 2% of the time. They may exceed the limits out not one two consecutive days of monitoring.							• Complied. • Regular third party monitoring is carried out and emissions found well within permitted norms. • Analysis report of the same attached as **Annexure-5.4.**
4.6	The applicant shall operate industrial plant/ air pollution control equipment very efficiently and continuously so that the gaseous emission always conform to the standards specified in condition no. 4.3 and 4.4 as above.							• Complied. • We operate APCM efficiently. • Regular third party monitoring is carried out and emissions found well within permitted norms.

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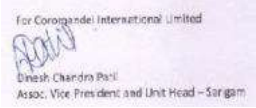
<table>
<tr><td>4.7</td><td>The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in condition no. 4.3 and 4.4 as above.</td><td>Noted.</td></tr>
<tr><td>4.8</td><td>The applicant shall provide portholes, ladder, platform etc at chimney (s)for monitoring the air emissions and the same shall be open for inspection to/and for use of Board’s staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.</td><td>• Complied
• We have provided portholes, ladders and platforms with stack nomenclature in each chimney.</td></tr>
<tr><td>4.9</td><td>The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 dB(A)during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6·a.m.</td><td>• Complied
• We are monitoring noise level by NABL and GPCB authorized third party and all are well within norms.</td></tr>
<tr><td>5.</td><td colspan="2"><u>GENERAL CONDITIONS:</u></td></tr>
<tr><td>5.1</td><td>Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>Noted and will inform board, if any.</td></tr>
<tr><td>5.2</td><td>Applicant shall also comply with the general condition given in annexure – I</td><td>Complied.</td></tr>
<tr><td>6.0</td><td colspan="2">Authorisation For The Management &Transboundary Movement Of Hazardous Wastes Form-2 (See rule 6(2)) for grant of authorization for occupier or operator handling hazardous waste Rules – 2016.</td></tr>
<tr><td>6.1</td><td>Number of authorization: AWH-84402 date of Issue 22/02/2017.</td><td>--</td></tr>
<tr><td>6.2</td><td>Reference of application No. 115227, dated 01/12/2016.
M/s. COROMANDEL INTERNATIONAL LTD. is hereby granted an authorization to operate facility for following hazardous waste on the premises situated at plot No: 2402, GIDC industrial Area, Sarigam, Dist. Valsad.
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Waste</th><th colspan="2">Category of Hazardous waste as per the Schedules I, II and III of these Rules</th><th rowspan="2">Authorized mode of disposal or recycling or utilization or co-processing etc.</th><th rowspan="2">Quantity</th></tr>
<tr><th>Sch.</th><th>Category</th></tr>
<tr><td>1</td><td>ETP Sludge</td><td>I</td><td>35.3</td><td>Collection, storage, transportation, disposal at common incineration facility TSDF</td><td>2640 MT/Year</td></tr>
</table></td><td>• Hazardous Waste disposed in FY-2021-22 as per HWM rules-2016.</td></tr>
</table>

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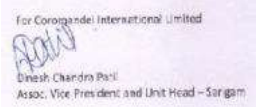
					site SEPPL, Kutch, GISPL-Palsana and for co-processing RSPL-Panoli	
	2	Discarded Container/ bags	I	33.3	Collection, storage, decontamination, storage, disposal by selling to GPCB approved reconditioners disposed through common GPCB approved decontamination facility.	24000 Nos./year
	3	Oil & Grease skimming residue	I	36.4	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	32.40 MT/Year
	4	Chemical Sludge containing residue pesticides	I	29.2	Collection, storage, transportation, disposal at common hazardous waste incinerator facility of SEPPL, GISPL & RSPL co-processing facility.	2145 MT/Year
	5	Used Oil	I	5.1	Collection, storage, transportation, disposal by selling to	0.3 MT/Year

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				registered reprocessors.	
6	Spent carbon	I	38.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	257.4 MT/Year
7	Ash from incinerator	I	37.2	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	4755 MT/Year
8	Sludge from wet scrubber	I	37.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	0.240 MT/year
9	Spent HCl 30% Acetic Acid 30%	I	29.6	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and	24588 MT/year 7000 MT/year

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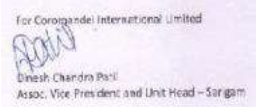
					(TMB) rule-2016		
	10	Organic residue	I	29.1	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	2032 MT/Year	
	11	Salts from MEE	I	37.3	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana& for co-processing RSPL-Panoli.	4570.44 MT/Year	
	12	Spent solvents i.e. MDC, EDC, EA, CPN etc.	I	29.4	Collection, storage, transportation, disposal by selling to actual end user who have valid permission under Rule-9 of hazardous waste and other waste (M) and (TMB) rule-2016	1995 MT/Year	
	13	Date expired and off-specification on residues	I	29.3	Collection, storage, transportation, disposal through incineration SEPPL, Kutch. GISPL-Palsana.	50 MT/Year	
6.3	The authorization shall be valid up for a period of 30/08/2021						Noted.

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For Coromandel International Limited
Dinesh Chandra Pant
Assoc. Vice President and Unit Head – Sarigam

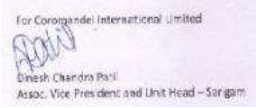
6.4	The authorization is subject to the following general and specific conditions.	Noted.
A.	**General Conditions under hazardous and other Wastes (Management & Transboundary Movement) Rules – 2016.**	
1.	The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 & the rules made there under.	Complied.
2.	The authorisation or its renewal shall he produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.	Noted.
3.	The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.	Complied.
4.	Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.	Noted.
5.	The person authorised shall implement Emergency Response Procedure (FRP) for which this authorisation is being granted considering all site specific. Possible scenarios such as spillages, leakages, tire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.	Complied.
6.	The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities For Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"	Complied.
7.	It is the duty of the authorised person to take prior permission of the Pollution Control Board to close down the facility	Noted.
8.	The imported hazardous and other wastes shall he fully insured for transit as well as for any accidental occurrence and its clean - up operation.	Complied.
9.	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	Not applicable.
10.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre - processing or utilisation of imported hazardous or other wastes shall he treated and disposed of as per specific conditions of authorisation.	Noted.
11.	The importer or exporter shall bear the cost of import or export and mitigation of damages if, any	Noted.
12.	An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules - 2016.	Noted.
13.	Any other conditions for compliance as per the Guidelines issued by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time	Noted.
14.	Annual return shall be filed by June 30th for the period ensuring 31st March of the year.	Complied.
B.	**Specific Condition (Whichever is applicable)**	
1.	The authorized actual user of hazardous waste shall maintain records of hazardous and other wastes purchased in passbook issued by state pollution control board along with authorization.	Complied.
2.	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in passbook of the actual user.	Complied

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3.	In case of renewal of authorization, a self certified compliance report in respect of effluent emission standard and the conditions specified in the authorization for hazardous and other waste shall be submitted to SPCB	Complied
4.	The occupier of the facility shall comply standard operating procedure/guidelines published by MoEF& CC or CPCB or GPCB from time to time.	Complied
5.	Unit shall comply provisions of E-waste management Rules - 2016	Complied

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Certificate No.: TC-7099

KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

Annexure-5.1: Analysis Report for treated wastewater

LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: MAY22/110/30 (ULR- TC709922000010811F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22EF01	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sample Collected By: Mr. Parag Shah
6.	Analysis commenced on: 20.05.2022	7.	Analysis Completed on: 25.05.2022
8.	Reporting Date: 09.06.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed	11.	Group: Pollution and Environment
12.	Sampling Location: **ETP Outlet**	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Recived Date: 20.05.2022

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		:	6.91	6.5 – 8.5	APHA 23rd Edition 4500-H^+ B
2.	Temperature	°C	:	27	40	APHA 23rd Edition 2550- B
3.	Colour	Pt-CO	:	20	100	APHA 23rd Edition 2120 B
4.	Total Dissolved Solids	mg/L	:	1836	2100	APHA 23rd Edition 2540 C
5.	Suspended Solids	mg/L	:	19	200	APHA 23rd Edition 2540 D
6.	COD	mg/L	:	71	750	APHA 23rd Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	:	21	300	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/L	:	<1	10	APHA 23rd Edition 5520 B
9.	Ammonical Nitrogen	mg/L	:	5.12	50	IS 3025 (PP 34): 1988
10.	Chlorides	mg/L	:	504	600	APHA 23rd Edition 4500 Cl^- B
11.	Sulphates	mg/L	:	426	1000	APHA 23rd Edition 4500 SO_4^{2-} E
12.	Phosphate	mg/L	:	4.27	5.0	APHA 23rd Edition 4500 P – C
13.	Bio-Assay Test		:	Pass	90 % survival of fish after 96 hrs. in 100% concentration	IS 6582 Part-2, 2001

Remark :

Authorised By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE :
1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

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Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: MAY22/110/31

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22EF01	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sample Collected By: Mr. Parag Shah
6.	Analysis commenced on: 20.05.2022	7.	Analysis Completed on: 25.05.2022
8.	Reporting Date: 09.06.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed	11.	Group: Pollution and Environment
12.	Sampling Location: **ETP Outlet**	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Recived Date: 20.05.2022

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Insecticide as Lindane	-	:	Absent	Absent	Gas Chromatography

Remark :

Authorised By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE :
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2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

Annexure-5.2: Analysis Result for Air emission

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/02 (ULR- TC709922000010792F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE02	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Incinerator – 1,2,3
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	Incinerator – 1,2,3
2.	Height	m	:	52
3.	Diameter	mm	:	800
4.	Temperature	°c	:	110
5.	Velocity	m/s	:	9.96
6.	Type of fuel used		:	Natural Gas
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	18	50	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	N.D	200	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.50	400	IS 11255 (Part 7) :2005

Remark: N.D: - Not Detected.

Authorized By -

Name : Bhavisha Pandya | **Designation : Sr.Chemist**

NOTE:
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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/01 (ULR- TC709922000010791F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE01	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Boiler
6.	Sampling Time: 11:10 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**IAEC Boiler GT – 3281,5914**
2.	Height	m	:	50
3.	Diameter	mm	:	1500
4.	Temperature	°c	:	128
5.	Velocity	m/s	:	9.38
6.	Type of fuel used		:	Natural Gas
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	8	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	N.D.	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.34	50	IS 11255 (Part 7) :2005

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/07 (ULR- TC709922000010797F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE07	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 1 (200 KVA)
6.	Sampling Time: 11:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed √	Thimble: Packed √	Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 1 (200 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°C	:	122
5.	Velocity	m/s	:	10.11
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	ltr/hr	:	15-18

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm³	:	65	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	10.25	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.02	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/08 (ULR- TC709922000010798F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sangam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE08	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 2 (500 KVA)
6.	Sampling Time: 11:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed √	Thimble: Packed √	Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	D.G.Set- 2 (500 KVA)
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°C	:	140
5.	Velocity	m/s	:	11.86
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	Lit/hr.	:	40-45

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm³	:	60	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	11.95	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.74	50	IS 11255 (Part 7) 2005

Remark:

Authorized By -

Name : Bhavisha Pandya | **Designation : Sr.Chemist**

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3) The results reported above relate to the sample received under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/09 (ULR- TC709922000010799F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE09	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: D.G.Set- 3 (500 KVA)
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 3 (500 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	200
4.	Temperature	°c	:	148
5.	Velocity	m/s	:	12.29
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	Ltr/hr	:	40-45

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	62	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	13.11	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	8.21	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/10 (ULR- TC709922000010800F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22SE10		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sample Date: 18.05.2022		5.	Sampling Location: D.G.Set- 4 (1000 KVA)	
6.	Sampling Time: 12:30 hr		7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed √		Thimble: Packed √	Bladder: Clamped
17.	Sample Received Date: 04.06.2022				

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**D.G.Set- 4 (1000 KVA)**
2.	Height	m	:	12
3.	Diameter	mm	:	500
4.	Temperature	°c	:	220
5.	Velocity	m/s	:	14.70
6.	Type of fuel used		:	Diesel
7.	Quantity of fuel used	ltr/hr	:	80-90

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	64	150	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	10.16	100	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	7.29	50	IS 11255 (Part 7) :2005

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

Annexure-5.3: Analysis Reports for Process Gas Emission

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/03 (ULR- TC709922000010793F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE03	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Mancozeb Reactor
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Mancozeb Reactor**
2.	Height	m	:	45
3.	Diameter	mm	:	1000
4.	Temperature	°C	:	86
5.	Velocity	m/s	:	12.26
6.	Type of fuel used		:	-
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	36	50	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	ppm	:	3.20	40	IS : 11255(Part 2) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/16

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE03	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Mancozeb Reactor
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble: Packed / Bladder: Clamped √
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Mancozeb Reactor**
2.	Height	m	:	45
3.	Diameter	mm	:	1000
4.	Temperature	°C	:	86
5.	Velocity	m/s	:	12.26
6.	Type of fuel used		:	-
7.	Quantity of fuel used		:	-

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	CS_2	mg/Nm^3	:	N.D.	180	IS : 11255 (Part – 4): 2006

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/04 (ULR- TC709922000010794F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE04	3.	Client Representative: Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: PCl3 Reactor & Storage tank
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**PCl3 Reactor & Storage tank**
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Free Chlorine(Cl_2)	mg/Nm^3	:	0.262	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/17

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE04	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: PCl3 Plant Scrubber
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	PCl3 Plant Scrubber
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Phosphorous Trichloride (PCl_3)	mg/Nm³	:	N.D.	9	APHA Method
2.	Hydrogen Chloride(HCl)	mg/Nm³	:	0.39	20	APHA 23rd Edition: 4500 - Cl C

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/05 (ULR- TC709922000010795F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE05	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Sodium Sulphate recovery Plant
6.	Sampling Time: 13:45 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Sodium Sulphate recovery Plant**
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	62
5.	Velocity	m/s	:	10.96
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm^3	:	17	150	IS : 11255(Part 1) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/06 (ULR- TC709922000010796F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE06	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 19.05.2022	5.	Sampling Location: Chlorine Shed Scrubber
6.	Sampling Time: 14:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**Chlorine Shed Scrubber**
2.	Height	m	:	13.5
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Chlorine (Cl_2)	mg/Nm^3	:	0.342	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/11 (ULR- TC709922000010801F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE11	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: TMP Plant Storage tank
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	TMP Plant Storage tank
2.	Height	m	:	11
3.	Diameter	mm	:	100
4.	Temperature	°c	:	30
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Ammonia(NH_3)	mg/Nm^3	:	0.16	30	IS 11255 (Part 6): 1999

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/12 (ULR- TC709922000010802F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE12	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: HCL Storage Tank
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**HCL Storage Tank**
2.	Height	m	:	11
3.	Diameter	mm	:	-
4.	Temperature	°c	:	29
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Chlorine (Cl_2)	mg/Nm^3	:	N.D.	9	LAB-SOP-104

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/18

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE12	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: HCL Storage Tank
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**HCL Storage Tank**
2.	Height	m	:	11
3.	Diameter	mm	:	-
4.	Temperature	°c	:	29
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Hydrogen Chloride(HCl)	mg/Nm^3	:	0.43	20	APHA 23rd Edition: 4500 - Cl C

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/13 (ULR- TC709922000010803F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE13	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 21.05.2022	5.	Sampling Location: Spray Dryer (B-Plant)
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	Spray Dryer (B-Plant)
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	75
5.	Velocity	m/s	:	12.07
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm³	:	18	150	IS : 11255(Part 1) 1985

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/14 (ULR- TC709922000010804F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE14	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant –NH_3 Solution Preparation
6.	Sampling Time: 15:10 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant –NH_3 Solution Preparation**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	31
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Ammonia(NH_3)	mg/Nm^3	:	8.48	30	IS 11255 (Part 6): 1999

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/15 (ULR- TC709922000010805F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE15	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant – Chlorination Reactor
6.	Sampling Time: 15:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant – Chlorination Reactor**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Free Chlorine(Cl_2)	mg/Nm^3	:	0.294	9	LAB-SOP-104

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE:
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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: MAY22/110/19

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 2252418246 – 110MY22SE15	3.	Client Representative:Mr. Sanjay Kumar
4.	Sample Date: 18.05.2022	5.	Sampling Location: MPP Plant – Chlorination Reactor
6.	Sampling Time: 15:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 04.06.2022	9.	Analysis Completed on: 04.06.2022
10.	Reporting Date: 09.06.2022	11.	Discipline : Chemical
12.	Sample Collected By: Mr. Parag Shah	13.	Group : Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped
17.	Sample Received Date: 04.06.2022		

STACK DETAILS

S. No.	Parameters	Unit (SI)		Description
1.	Source		:	**MPP Plant – Chlorination Reactor**
2.	Height	m	:	-
3.	Diameter	mm	:	-
4.	Temperature	°c	:	28
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A.
7.	Quantity of fuel used		:	N.A.

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Hydrogen Chloride(HCl)	mg/Nm^3	:	0.35	20	APHA 23rd Edition: 4500 - Cl C

Remark:

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

Annexure-5.4: Analysis Report Ambient air quality

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/20 (ULR- TC709922000010806F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ01		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 20.05.2022		5.	Sampling Location: NR.Main Gate	
6.	Sampling time: 11:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: WNW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	58	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	22	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.62	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.65	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.22	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	10.87	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

NOTE : 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

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KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/21 (ULR- TC709922000010807F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ02		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 24.05.2022		5.	Sampling Location: NR.Canteen	
6.	Sampling time: 14:30 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: NW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	57	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	23	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.36	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.42	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.66	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	11.71	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/22 (ULR- TC709922000010808F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ03		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 21.05.2022		5.	Sampling Location: NR.ETP Plant	
6.	Sampling time: 11:45 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: WSW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	53	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	25	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	6.44	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.72	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	N.D.	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	13.38	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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3) The results reported above relate to the sample identified under Sample Details.

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/23 (ULR- TC709922000010809F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ04		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 22.05.2022		5.	Sampling Location: RO Water tank	
6.	Sampling time: 13:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: WSW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	54	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	22	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.18	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	8.42	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.44	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	12.55	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – AMBIENT

REPORT NO.: MAY22/110/24 (ULR- TC709922000010810F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate , Sarigam – 396155, Dist: Valsad.				
2.	Sample ID: 2252418246 – 110MY22AQ05		3.	Client Representative:Mr. Sanjay Kumar	
4.	Sampling Date: 23.05.2022		5.	Sampling Location: NR.Incinerator	
6.	Sampling time: 14:00 hr		7.	Sampling Duration: 24 Hrs	
8.	Analysis commenced on: 04.06.2022		9.	Analysis Completed on: 04.06.2022	
10.	Reporting Date: 09.06.2022		11.	Discipline : Chemical	
12.	Sample Collected By: Mr. Parag Shah		13.	Group : Atmospheric Pollution	
14.	Sampling Procedure: IS Method		15.	Product: Ambient Air	
16.	Description of Sample:	Sampling Bottles: Sealed √	Filter Paper: Packed √		Bladder: Clamped √
17.	**Environment Condition:**	Temp: Normal	Humidity: Medium	Wind speed: Moderate	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: NW	Station category: Industrial	
18.	Sampling Received Date: 04.06.2022				

TEST RESULTS

S. No.	Parameters	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM_{10}	µg/Nm³	:	50	100	IS 5182 (Part 23) : 2006
2.	$PM_{2.5}$	µg/Nm³	:	25	60	Guideline by CPCB(Vol-1)
3.	Sulphur Dioxide (SO_2)	µg/Nm³	:	7.63	80	IS : 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO_x)	µg/Nm³	:	9.02	80	IS : 5182 (Part 6) : 2006
5.	CL_2	µg/Nm³	:	0.33	100	IS 5182(Part 19): 1982
6.	H_2S	µg/Nm³	:	N.D.	500	IS 5182 (Part 7): 1973
7.	NH_3	µg/Nm³	:	N.D.	400	Guideline by CPCB(Vol-1)
8.	CS_2	µg/Nm³	:	14.22	2000	IS 5182 (Part 20): 1982
9.	HF	µg/Nm³	:	N.D.	60	IS 5182 (Part 13): 1991

Remark : N.D : - Not Detected.

Authorized By -

Name : Bhavisha Pandya **Designation : Sr.Chemist**

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1099

Hazardous waste Storage area



Spent solvent storage area



Used oil storage area

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1100



E-Waste storage area

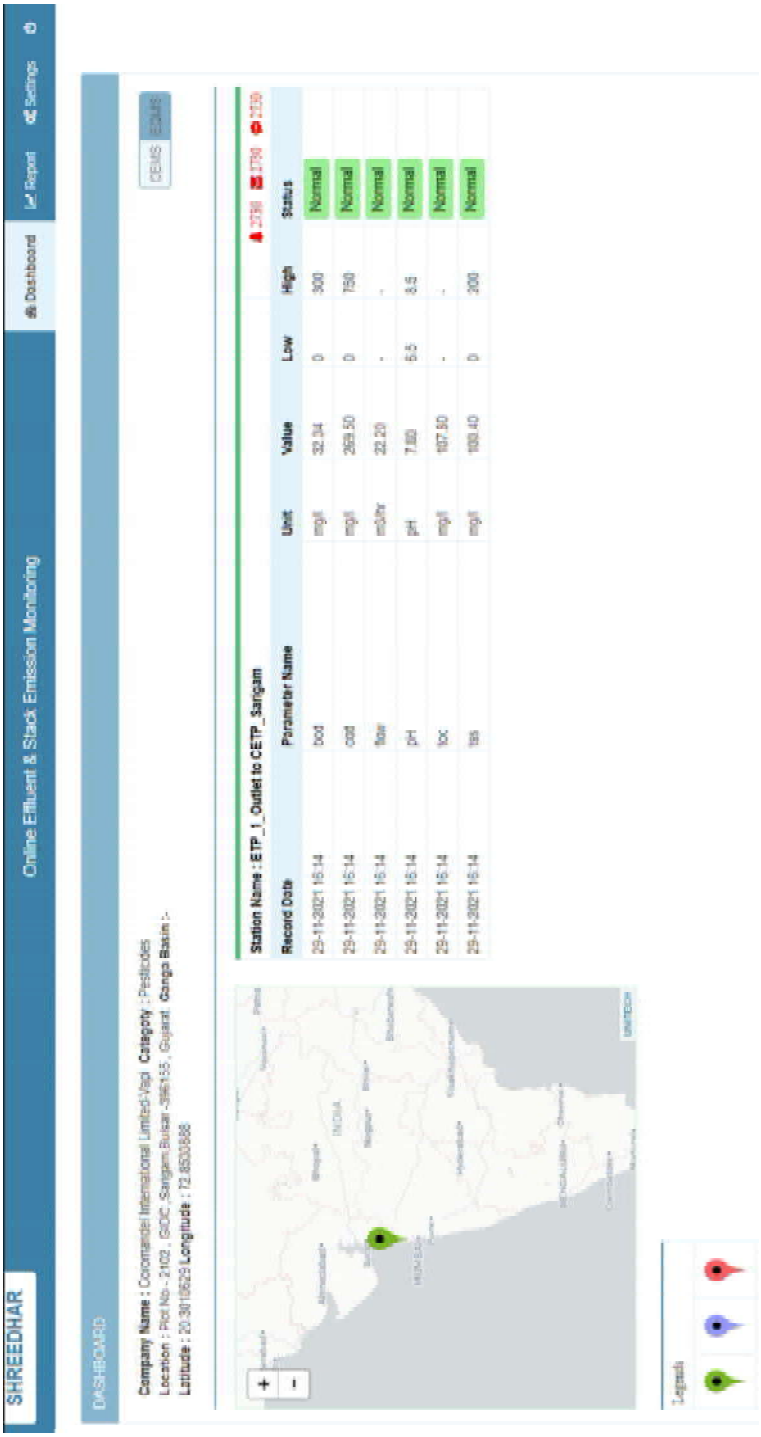


ETP Storage area

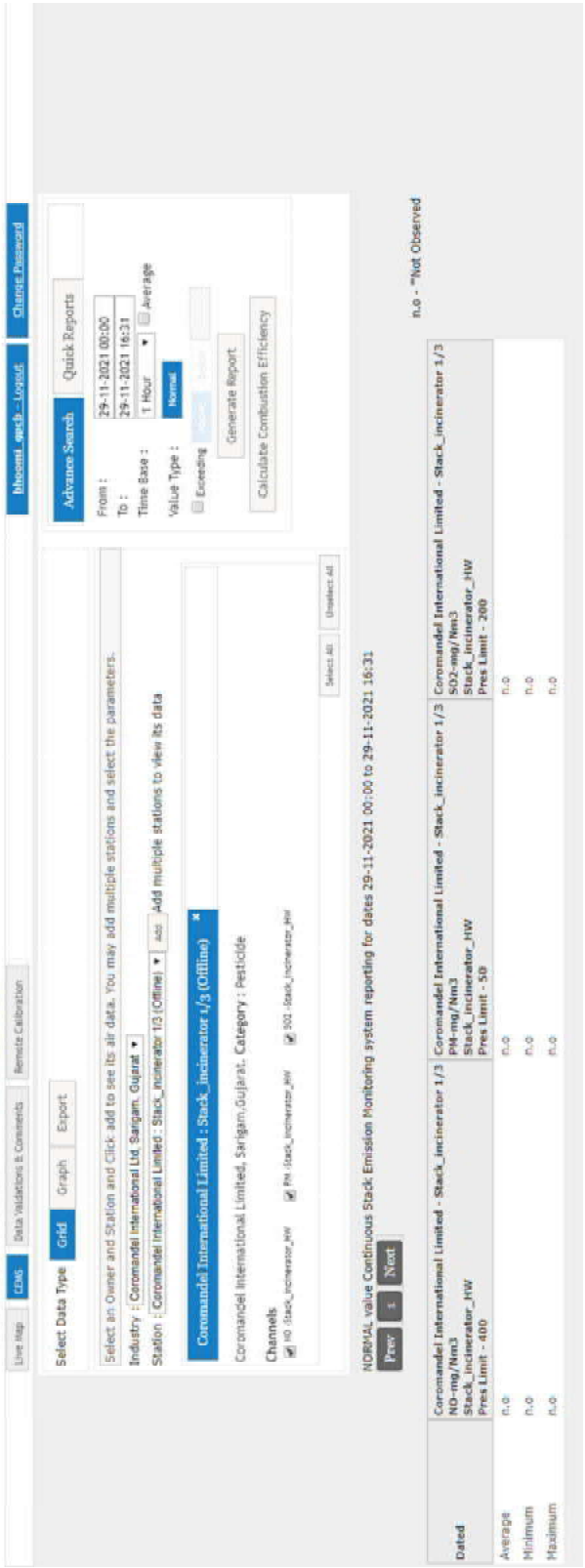
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OCEMS connectivity of final discharge and Incinerator stack

http://saksham.unitechinstrument.com/Default/Home.aspx



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1103

Final Storm outlet





pH meter at final storm outlet



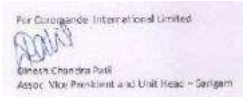
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Annexure – 6

Compliance of CCA Amendment (AWH - 105201)

<table>
<tr><th>SR. NO.</th><th>CONDITION</th><th>REMARKS</th></tr>
<tr><td colspan="3">CCA Amendment order no.: AWH-105201issued vide letter no. GPCB/SRG-CCA -229(33)/ID-24285/529243dated 06/12/2019.</td></tr>
<tr><td>1.</td><td>Amendment in Products of N Group only:
<table>
<tr><th>Sr. No.</th><th>Products</th><th>Existing</th><th>Additional</th><th>Total</th></tr>
<tr><td>1</td><td>2-(4-Hydroxy 1henoxy) Propionic Acid</td><td>429</td><td>00</td><td>429</td></tr>
<tr><td>2</td><td>2,3-Difluoro-5-chloro pyridine</td><td>353</td><td>00</td><td>353</td></tr>
<tr><td>3</td><td>Clodinafoppropargyl (Tech.)</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>4</td><td>Triclopyr Acid (Tech.)</td><td>933</td><td>-933</td><td>00</td></tr>
<tr><td>5</td><td>TriclopyrButotyl Ester (Tech.)</td><td>933</td><td>-933</td><td>00</td></tr>
<tr><td>6</td><td>Picloram (Tech.)</td><td>495</td><td>-495</td><td>00</td></tr>
<tr><td>7</td><td>Pyrazosulfuron Ethyl</td><td>0</td><td>933</td><td>933</td></tr>
<tr><td>8</td><td>Pretilachlor (Tech.)</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>9</td><td>Bispyribac Sodium (Tech.)</td><td>330</td><td>00</td><td>330</td></tr>
<tr><td>10</td><td>Azoxystrobin</td><td>52.8</td><td>00</td><td>52.8</td></tr>
<tr><td>11</td><td>Boscalid</td><td>660</td><td>00</td><td>660</td></tr>
<tr><td>12</td><td>Metalaxyl</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td>13</td><td>Proclaraz</td><td>933</td><td>00</td><td>933</td></tr>
<tr><td colspan="2">Total Production</td><td colspan="3">933 MT/Year</td></tr>
</table>
The validity period of the order shall be up to 30/09/2021.</td><td>Complied</td></tr>
<tr><td></td><td>There shall be no change in water consumption, waste water generation, wastewater discharge, flue gas emission and hazardous waste quantity with reference to CCA – AWH – 84402 issued vide letter no. GPCB/CCA-SRG -229(25)/ID-24285/408584dated 31/03/2017&amended thereof.</td><td>Complied</td></tr>
</table>

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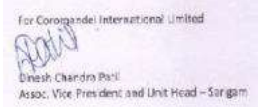
Annexure–7

Compliance Of CCA Amendment (AWH - 110281)

<table>
<tr><th>SR. NO.</th><th>CONDITION</th><th>REMARKS</th></tr>
<tr><td colspan="3">CCA Amendment order no.: AWH-110281issued vide letter no. GPCB/SRG-CCA -229(35)/ID-24285/573714dated 24/11/2020.
The validity period of the CCA Amendment order will be up to 30.09.2021.</td></tr>
<tr><td colspan="3">Conditions under Air Act 1981:</td></tr>
<tr><td>1.</td><td>There shall be no change in fuel consumption and flue gas emission.</td><td>Complied</td></tr>
<tr><td>2.</td><td>The process emission through various Stacks/Vent of reactor. Process, Vessel in Group A shall be substituted as follow:
<table>
<tr><th>Sr. No</th><th>Plant</th><th>Stack Attached to</th><th>Stack Height (m)</th><th>APCM</th><th>Parameter</th><th>Permissible Limit mg/Nm^3</th><th>Remarks</th></tr>
<tr><td colspan="8">Group A</td></tr>
<tr><td>1</td><td>Mancozeb</td><td>Mancozeb Reactor</td><td rowspan="4">30</td><td rowspan="4">Air Blower/ Ventury Scrubber</td><td rowspan="5">CS_2
PM
SO_2</td><td rowspan="5">180
50
40</td><td rowspan="5">Either or combination of the products</td></tr>
<tr><td>2</td><td>Mancozeb + Maneb</td><td>ManebReactor</td></tr>
<tr><td>3</td><td>Mancozeb + Zineb</td><td>ZinebReactor</td></tr>
<tr><td>4</td><td>Mancozeb +Propineb</td><td>PropinebReactor</td></tr>
<tr><td></td><td></td><td>Spray Dryer(3 Nos.)</td><td>30</td><td>Bag Filter/ Water Scrubber</td></tr>
</table></td><td>Complied</td></tr>
<tr><td colspan="3">Authorization under the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.</td></tr>
<tr><td></td><td>M/s. Coromandel International Limitedis hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot no. 2102, 2104/1, 735 & 2112/2113, GIDC Sarigam - 396155, Tal: Umbergaon, Dist. Valsad – Sarigam.</td><td>Complied</td></tr>
</table>

Sr. No.	Hazardous Waste	CAT. No.	Quantity (MT/Year)			Mode of Disposal	
			Existing	Additional	Total	Existing	Proposed
1	ETP Sludge	Sch-I/ 35.3	2640	-	2640	Collection, storage, transportation, disposal at GPCB approved TSDF site SEPPL - Kutch, GISPL-Palsana, and for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at GPCB approved TSDF site SEPPL - Kutch, GISPL-Palsana, **Eco Care – Dasada.**
2	Chemical Sludge containing residue pesticides	Sch-I/ 29.2	2145	-	2145	Collection, storage, transportation, disposal at common hazardous waste incinerator	Collection, storage, transportation, disposal at common

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						facility of SEPPL, GISPL & RSPL co-processing facility.	hazardous waste **incinerator facility** of SEPPL, GISPL, **DIPL, Dahej, BEIL, or cement industries**& RSPL **co-processing facility.**
10	Organic residue	Sch-I/ 28.1	2032	-	2032	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch, GISPL-Palsana& for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at common incinerator facility, TSDF site SEPPL, Kutch, GISPL-Palsana, **DIPL, Dahej, BEIL, or Cement industries**& for co-processing RSPL-Panoli.
11	Salts from MEE	Sch-I/ 37.3	4570.44	-	4570.44	Collection, storage, transportation, disposal at common incinerator facility TSDF site SEPPL, Kutch. GISPL-Palsana, & for co-processing RSPL-Panoli.	Collection, storage, transportation, disposal at common incinerator facility, TSDF site SEPPL, Kutch. GISPL-Palsana, **Eco Care – Dasada**.

1.	The authorization shall be valid up to 30/09/2021.	Noted
2.	The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act – 1986.	Noted
The other conditions of CCA – AWH – 84402 issued vide letter no. GPCB/CCA-SRG -229(25)/ID-24285/408584 dated 31/03/2017 & amended thereof shall remain unchanged.		Noted & Complied

- Reply to Direction Under HW Act Uploaded in XGN on 04/08/2022 17:50:22 from IP No: 172.16.31.15.
- Note: IP of machine is captured by the browser of client machine.IP is depends upon the Internet Service Provider.

For Coromandel International Limited
Dinesh Chandra Pant
Assoc. Vice President and Unit Head – Sarigam

Annexure-8

Print Screen payment details for paid Interim Environmental Compensation

Transaction Date	Value Date	Reference No.	Description	Transaction Branch	Debit Amount
02/08/2022 18:30:17	02/08/2022	N214222061837983	40150CC153-02/08/2022-0004403837	MUMBAI - INTERNET SYSTEM	67500.00



- Reply to Direction Under HW Act Uploaded in XGN on 04/08/2022 17:50:22 from IP No: 172.16.31.15.
- Note: IP of machine is captured by the browser of client machine.IP is depends upon the Internet Service Provider.

ANNEXURE-R-27

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

RPAD

NOTICE OF DIRECTION UNDER SECTION 31(A) OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT-1981 (HERE IN AFTER REFERRED TO AS THE 'AIR ACT') AS AMENDED FROM TIME TO TIME

WHEREAS you are having an industrial plant for manufacturing of Pesticides at Plot no. 734/1, 735 & 2112/2113, GIDC Sarigam- 396 155, Tal-Umbergaon, Dist-Valsad-

AND WHEREAS the Gujarat Pollution Control Board has issued Consolidated Consent and Authorization. (CCA), AWH- 84402 vide order no. GPCB/SRG-CCA-229(25)/ID-24285/408584 dated 31/03/2017 for operation of the industrial plant for the manufacturing of pesticides at the above site with specific terms & conditions.

AND WHEREAS various complains received regarding the air pollution from your plant.

AND WHEREAS, during the inspection of your industrial plant on 15/01/2020 under Section 24 of The Air (Prevention and Control of Pollution) Act-1981 by authorized officer of Board following was observed:

Plant was found in operation. Mancozeb Plant A & B, MCP and Acephate were found operation.

During inspection the pesticides odor were sensed in production and nearby area.

Stack monitoring of Incinerator-I and process stack attached to NH3 solution preparation vessel at Acephate Plant were carried out.

4. Online instrument attached to Incinerator shows, PM – 8.269 mg/NM^3, CO- 00 ppm, NO – 01 ppm and SO_2 – 00 ppm

AND WHEREAS, analysis report of Incinerator sampling shows PM- 175 mg/Nm^3. which is much higher than the permissible norms.

Now, therefore you are directed as under:

1. You shall submit the action taken report in order to achieve the permissible norms specified in CCA.

   There is vast difference in the stack sampling results carried out though manual sampling by Board and online instrument. This shows that online instrument is not working properly, hence take the corrective action and submit the same.

Outward No: 55[illegible] 21/02/2020

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/09-2020/ID-24285

Date: 13/02/ 2020

To,
Mr. G.B. Vasavada,
(Unit Head - Vapi)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382 010, Gujarat.

Subject: Regarding notice of direction under section 31(A) of the Air (Prevention & Control of Pollution) Act-1981, No.-GPCB/CCA-SRG-229(34)/ID:24285 dated 10/02/2020.

Dear Sir,

This has reference to the notice of direction under section 31(A) of the Air (Prevention & Control of Pollution) Act-1981, No.-GPCB/CCA-SRG-229(34)/ID:24285 dated 10/02/2020. In that context we are hereby submitting the action taken report of same for your kind reference and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,
For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.

C.C.: Regional Officer-Sarigam, Gujarat Pollution Control Board.

Encl.: 1. Action taken report.
2. Copy of the mail regarding information of maintenance work of Incinerator, Incinerator stack and online stack monitor dated 27/01/2020.
3. Photographs of the opened Incinerator, Incinerator stack including scrubber.
4. Photographs of the re-erected Incinerator, Incinerator stack, scrubber, Third party stack monitoring, and online stack monitor display.
5. Copy of the Third Party Calibration certificate of Online stack monitor of Incinerator dated 11/02/2020.
6. Copy of the Third Party Stack Monitoring report dated 11/02/2020.
7. Copy of the mail regarding Information of the completion of Maintenance work and Internal inspection of Incinerator, Incinerator stack, Scrubber and online stack Monitor dated 13/02/2020.

RECEIVED
Sign.
Date . 14/2/2020
G.P.C. BOARD SARIGAM

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

Action Taken report:

Sr. No.	Action Taken	Existing Status	Remark
1.	Stopped the incinerator with immediate effect & completely opened all equipment for internal inspection & maintenance (if any) purpose on 27/01/2020.	All equipment including scrubber have been opened & internally inspected, required cleaning & maintenance is performed between 27/01/2020 to 08/02/2020. Erection work of our Incinerator, scrubber and stack along with installation of online stack monitor is completed on 10/02/2020. We have started the incinerator and it is running smoothly on 11/02/2020.	Information of same is given to CPCB and RO Office, GPCB. Copy of the same is enclosed. Photographs of the opened and re-erected incinerator, incinerator stack including scrubber is enclosed.
2.	Calibration work of the online stack monitor conducted from M/S. Bhoomi Analyzers on 11/02/2020.	Calibration work of the online stack monitor is completed on 11/02/2020.	Copy of the Calibration certificate of is enclosed.
3.	In order to meet the GPCB concern of online stack monitoring we have conducted the third-party manual stack monitoring with comparison of online stack monitoring on 11/02/2020. Copy of the both the analysis report is attached for your kind reference.	Results of the third-party monitoring report and online monitoring parameters are within the prescribed limits of GPCB standard.	Copy of the third-party stack monitoring report and online monitoring report is enclosed. Photographs of the third party stack monitoring and online monitor display is enclosed.
4.	We have requested to RO office, GPCB, Sarigam for resampling of incinerator stack monitoring for necessary GPCB compliance on 13/02/2020.	-	Copy of the same is enclosed

From: NitinMehta-AGM-EMS-Sarigam-Coromandel
Sent: 27 January 2020 13:47
To: westzonecpcb@yahoo.com; ro-gpcb-sari@gujarat.gov.in
Cc: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel <ShuklaH@coromandel.murugappa.com>
Subject: maintenance issue of our online stack monitor of Incinerator stack

Dear Sir,

Due to the maintenance issue, our online stack monitor of Incinerator stack will be closed for one week.

This is for your kind information and update.

With Regard's

Nitin Mehta
AGM-EMS

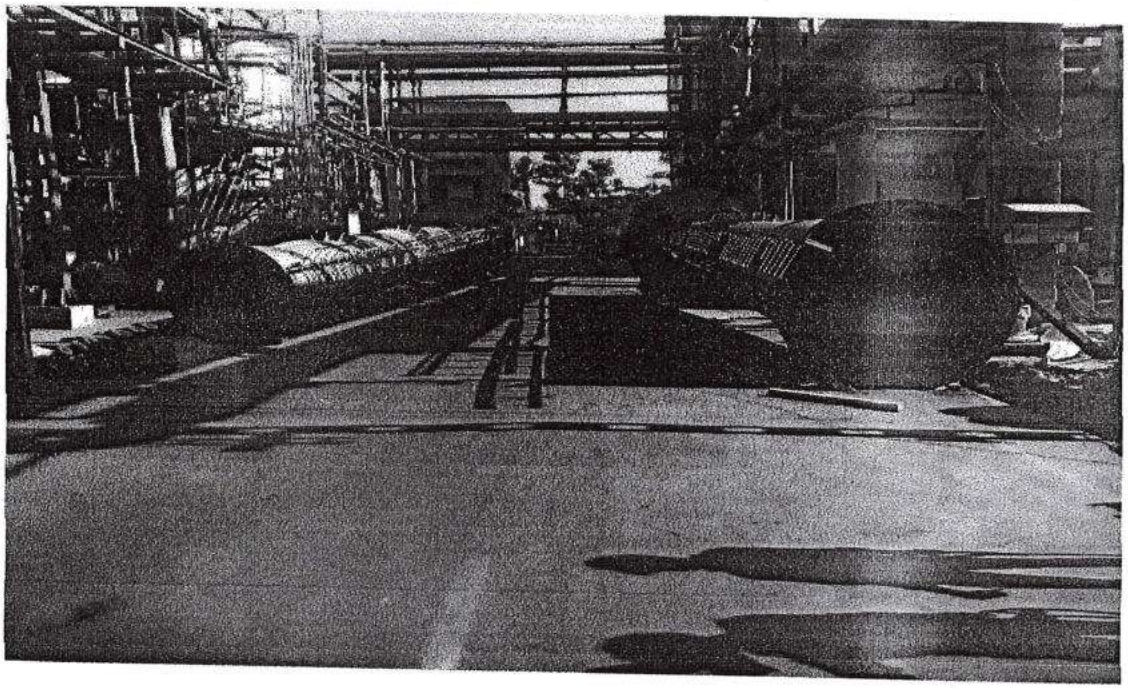
Coromandel

Coromandel International Limited
(Crop Protection Division)
Plot No. 2102, GIDC
Sarigam – 396155
Dt. Valsad, Gujarat, India
T: +91 260 2780395
W: www.coromandel.biz

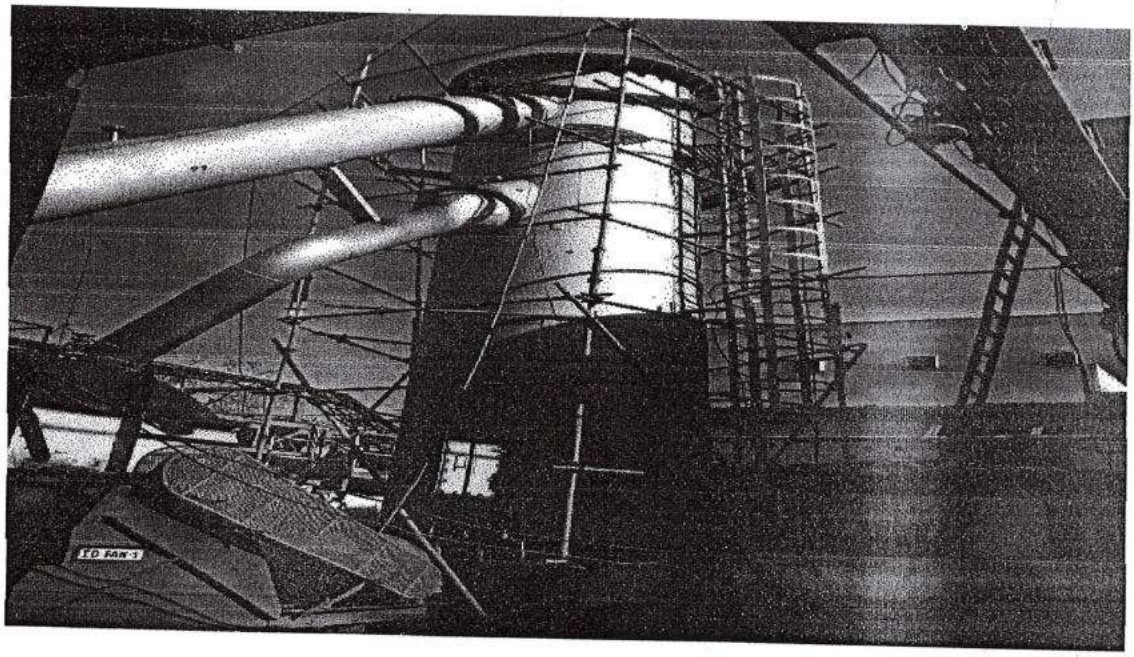
A Murugappa Group Company

Please don't print this e-mail unless you really need to.

Photographs of the Incinerator Stack

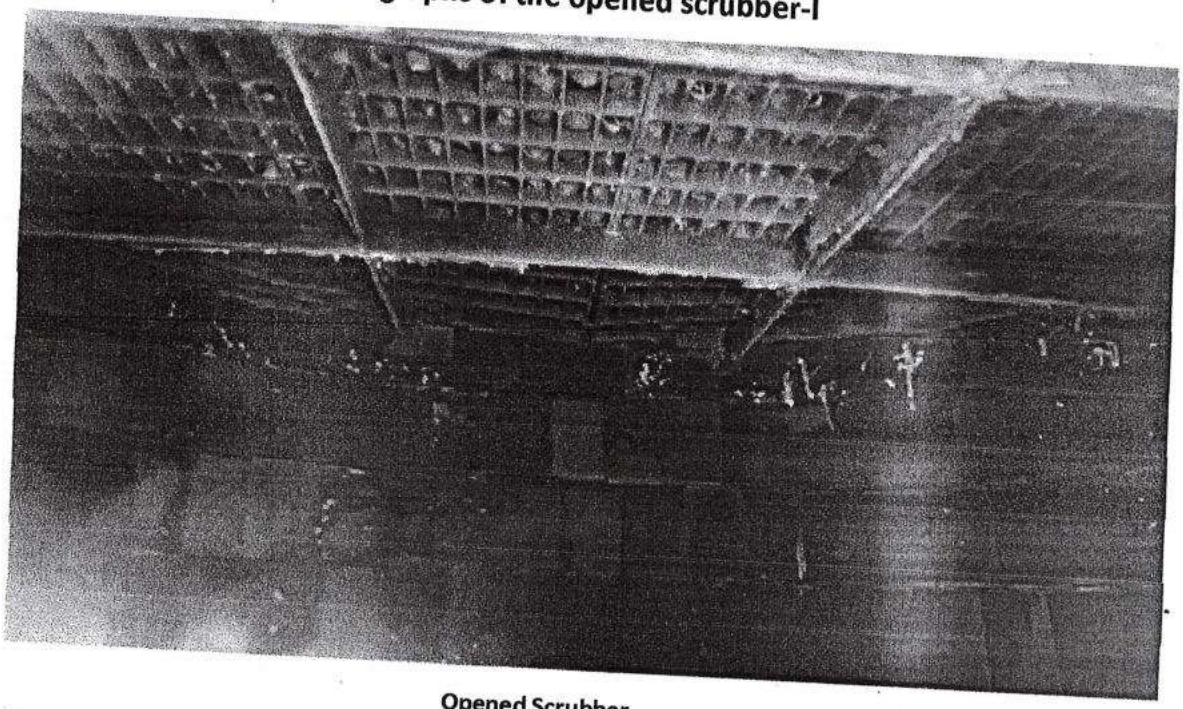


Opened Incinerator Stack

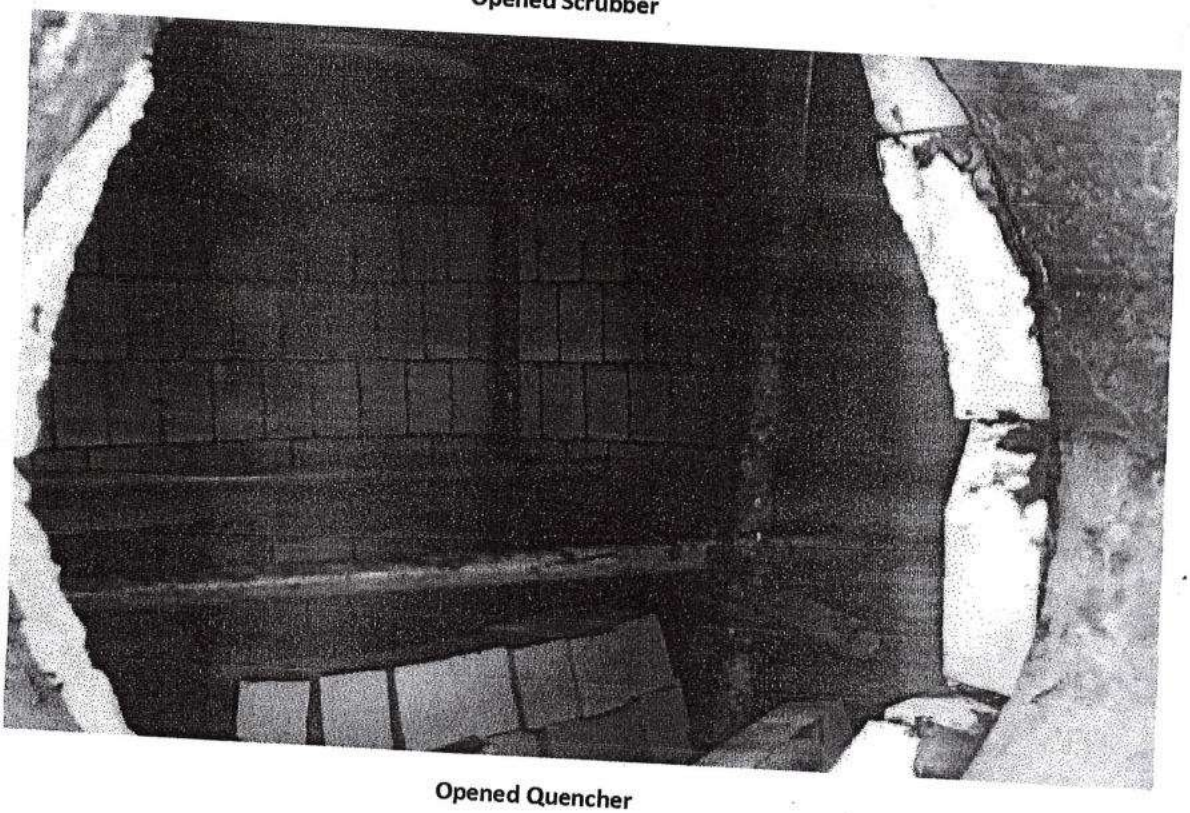


Incinerator Stack on Maintenance

Photographs of the opened scrubber-I



Opened Scrubber

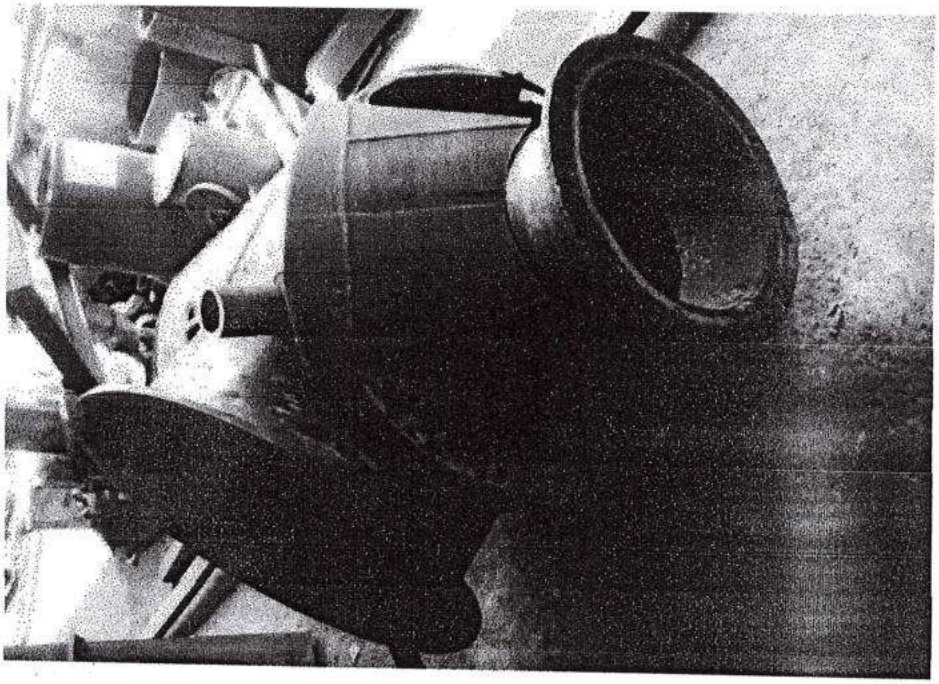


Opened Quencher

Photographs of the opened scrubber-II

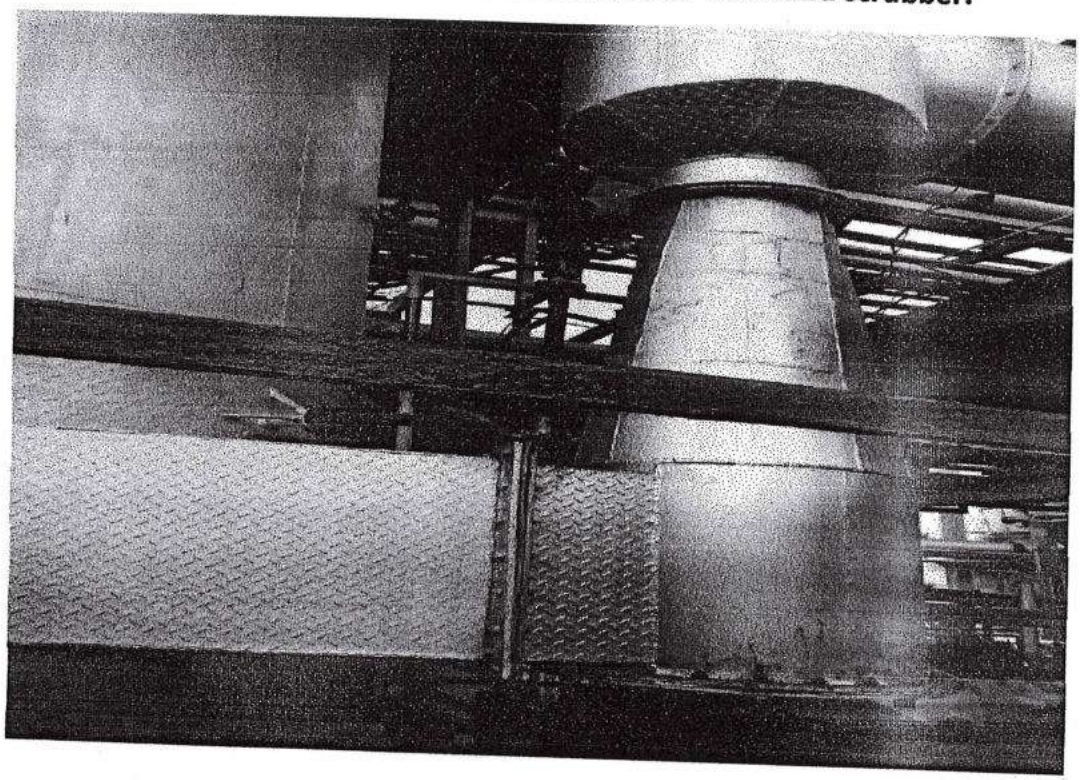


Packed- Bed



Opened Venturi

Photographs of the re-erected Incinerator stack and scrubber.

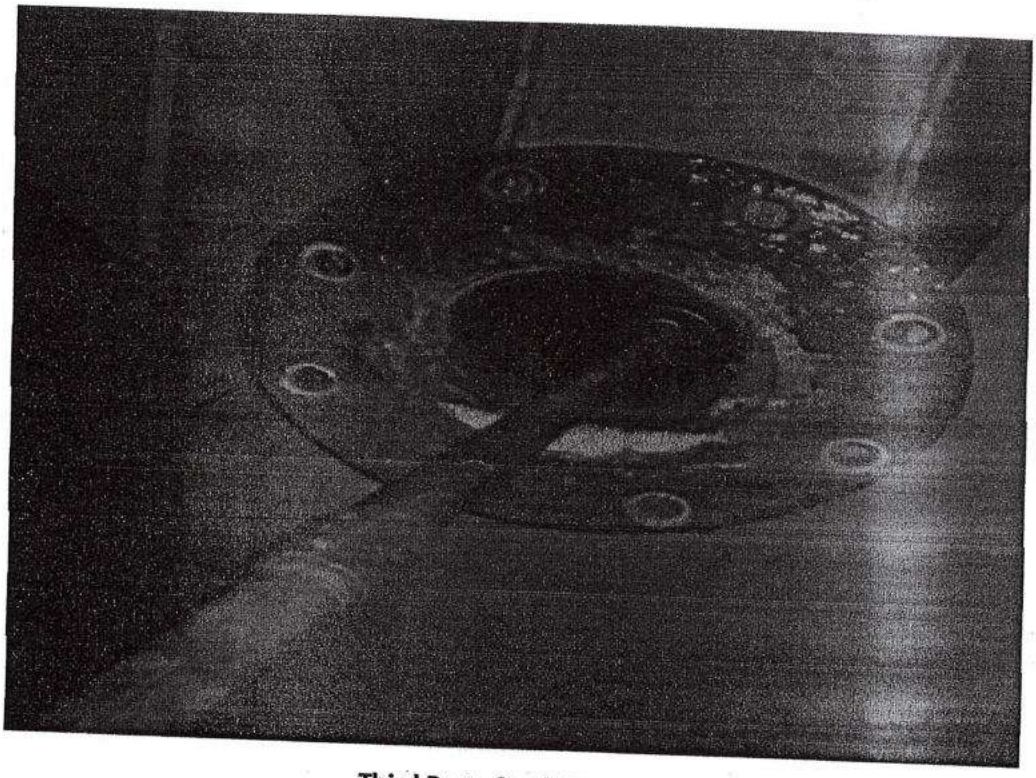


Re-Erected Venturi Scrubber

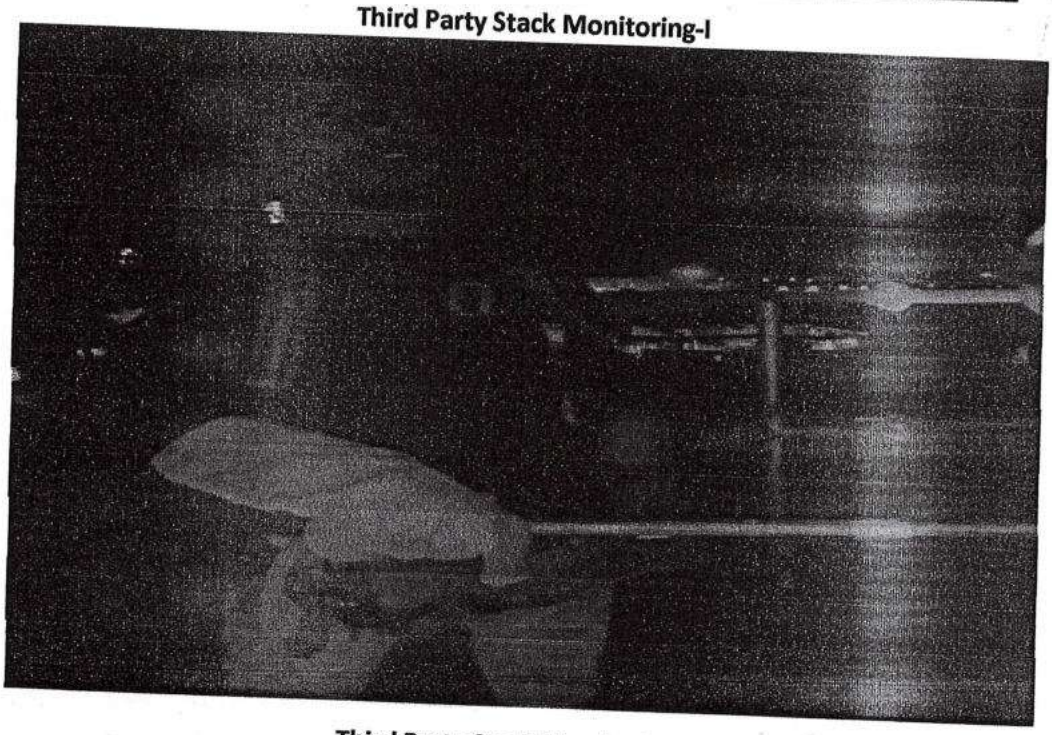


Re-Erected Incinerator Stack

Photographs of the Third Party Stack Monitoring.

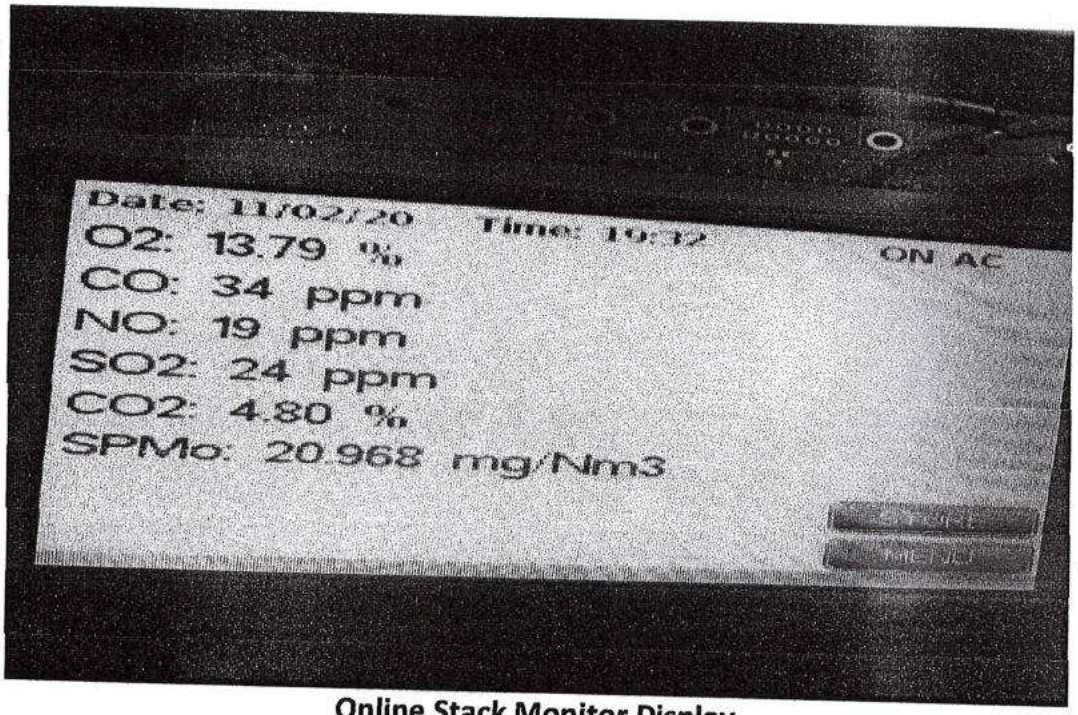


Third Party Stack Monitoring-I

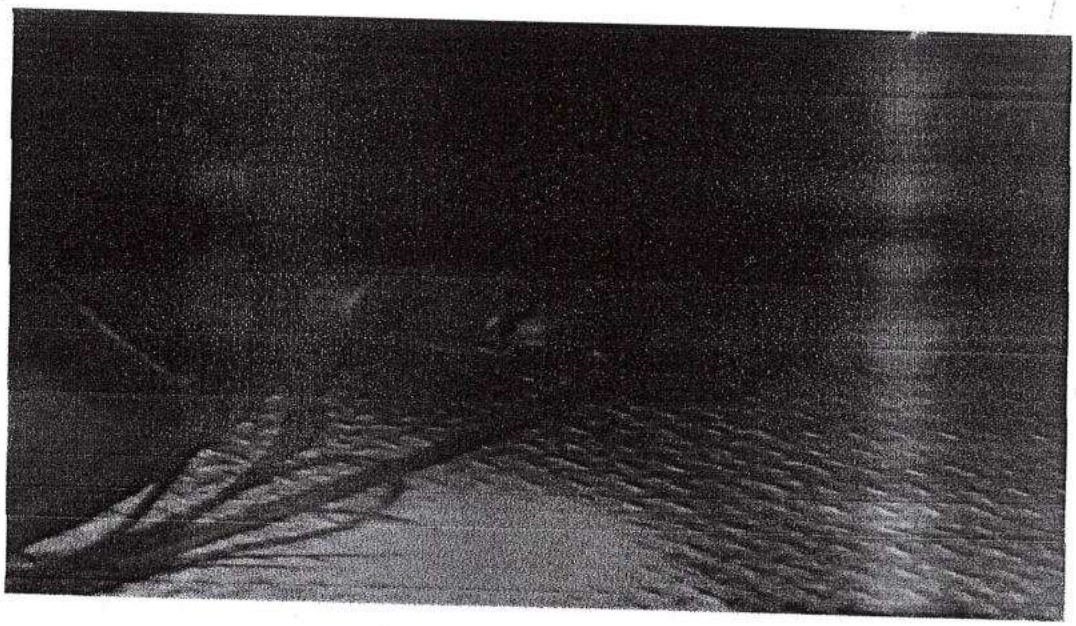


Third Party Stack Monitoring-II

Photographs of the Online Stack Monitor Display and Online Stack Monitor.



Online Stack Monitor Display



Online Stack Monitor

BHOOMI®

CERTIFICATE OF CALIBRATION

Certificate No: BA/19-20/00093
Certificate Issued Date: 11/02/2020

Make: - Bhoomi

Model:-BI 7000 EC

Product Type: - Continuous Emission Monitoring System

Serial No.:- 5000401

Customer:-M/s. Coromandel International Limited Sarigam

Bhoomi Analyzers certifies that the above listed instrument was calibrated on date noted and was released from laboratory performing in accordance with specifications.

Our calibration system complies with the requirements of ISO 17025:2005 standard and traceable to the International System of Units.

Sr. No.	Gas Type	Certified Gas Concentration	Electronics Reading
1.	O2	2.99%	2.99%
2.	CO	709 PPM	709 PPM
3.	NO	565 PPM	565 PPM
4.	SO2	537 PPM	538 PPM
5.	CO2	11.69%	11.69%

Calibrated Date: - 11 February 2020

By:

M/s. Bhoomi Analyzers

Ms. Chaitali Pawar

Calibration Due Date: - 10 February 2021

Bhoomi Analyzers

Head Office :
409, 4th Floor, Avior, Nirmal Galaxy,
Mulund (W) Mumbai - 400080

Works Address :
Unit No. 207/208, G Wing, Udyog Bhavan-2,
Plot No. K-3, Additional Ambernath Industrial Area,
Near Ananad Nagar, MIDC, Ambernath (East),
Thane - 421506 Maharashtra.

Contact :
: +91-22-25916858 / 6916
: +91- 251-2620539
: sales@bhoomiltd.com
: www.bhoomiltd.com

KADAM ENVIRONMENTAL CONSULTANTS
An ISO 9001:2015 Certified Company (MoEF Approved)
871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : (O) 0265 - 6131000, 6131001
Certificate No.: TC-7099

ENVIRONMENTAL MONITORING REPORT

LABORATORY TEST REPORT – STACK

REPORT NO.: FEB20/200/01 (ULR- TC709919000019557F)

SAMPLE DETAILS

1.	Name & Address of Client: M/s. Coromandel International Limited. Plot No. 2102, Sarigam Ind. Estate, Sarigam – 396155, Dist: Valsad.		
2.	Sample ID: 1940628246 – 200FB20SE01	3.	Client Representative: Mr.Nitin Mehta
4.	Sample Date: 11.02.2020	5.	Sampling Location: Incinerator – 1
6.	Sampling Time: 19:30 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 13.02.2020	9.	Analysis Completed on: 13.02.2020
10.	Reporting Date: 13.02.2020	11.	Sample Collected By: Mr. Parag Shah
12.	Test Requirement: Stack Air Monitoring	13.	Sampling Procedure: IS Method
14.	Description of Sample:	Sampling Bottles: Sealed √	Thimble: Packed √ / Bladder: Clamped

STACK DETAILS

S.No.	Parameters	Unit (SI)		Description
1.	Source		:	Incinerator – 1
2.	Height	m	:	52
3.	Diameter	mm	:	800
4.	Temperature	°c	:	80
5.	Velocity	m/s	:	9.19
6.	Type of fuel used		:	Natural Gas
7.	Quantity of fuel used		:	-

TEST RESULTS

S.No.	Parameters	Unit		Results	Specification/ SPCB Norms	Method Used
1.	Particulate Matter	mg/Nm^3	:	17	50	IS : 11255(Part 1) 1985
2.	Sulphur Dioxide(SO_2)	mg/Nm^3	:	20.12	200	IS : 11255(Part 2) 1985
3.	Oxides of Nitrogen (NOx)	mg/Nm^3	:	15.80	400	IS 5182 (Part 6) :2006
4.	CO	mg/Nm^3	:	30.19	100	Gas Chromatography

Remark :

Authorized By

Name : Sapana Amin **Designation : Lab Incharge**

NOTE :
1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
3) The results reported above relate to the sample identified under Sample Details.

----------END OF REPORT----------

NitinMehta-AGM-EMS-Sarigam-Coromandel

From: Account Type: Current
Bank Address: Prudential Building, Ground Floor, Hiranandani Business Park, Powai, Mumbai – 400076, MS - India
NitinMehta-AGM-EMS-Sarigam-Coromandel
Sent: 13 February 2020 09:21
To: westzonecpcb@yahoo.com; ro-gpcb-sari@gujarat.gov.in
Cc: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel
Subject: Information regarding the completion of Maintenance work and Internal inspection of Incinerator, Incinerator stack , Scrubber and online stack Monitor.

Dear Sir,

This has reference to our previous mail regarding information of closing the Incinerator, online stack monitor and Incinerator stack dated 27/01/2020. In that context we are hereby informing you that all equipment including scrubber have been opened & internally inspected, required cleaning & maintenance is performed. Erection work of our Incinerator, scrubber and stack along with installation of online stack monitor is completed. Calibration work of the Online stack monitor is also completed. We have started the incinerator and it is running smoothly.

This is for your kind information and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Regard's

Nitin Mehta
AGM-EMS

Coromandel

Coromandel International Limited
(Crop Protection Division)
Plot No. 2102, GIDC
Sarigam – 396155
Dt. Valsad, Gujarat, India
T: +91 260 2780395
W: www.coromandel.biz

A Murugappa Group Company

Please don't print this e-mail unless you really need to.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/08-2020/ID-24285

Date: 12/02/ 2020

To,
Mr.H.M. Ganvit,
Regional Officer, RO Office Sarigam,
Gujarat Pollution Control Board, Distt. Valsad.

Subject: Our email regarding information of maintenance work of Incinerator, Incinerator stack and online stack monitor dated 27/01/2020 and our reply of the sampling analysis report of your recent GPCB visit on 15/01/2020 No.: EMS- GPCB/COR/04-2020/ID-24285 dates: 31/01/ 2020.

Dear Sir,

This has reference to Our email regarding information of maintenance work of Incinerator, Incinerator stack and online stack monitor dated 27/01/2020 and our reply of the sampling analysis report of your recent GPCB visit on 15/01/2020 No.: EMS- GPCB/COR/04-2020/ID-24285 dates: 31/01/ 2020. In that context we are hereby informing you that all equipment including scrubber have been opened & internally inspected, required cleaning & maintenance is performed. Erection work of our Incinerator, scrubber and stack along with installation of online stack monitor is completed. We have started the incinerator and it is running smoothly.

We have conducted the third party calibration work of the online stack monitor from M/S. Bhoomi Analyzers on 11/02/2020. We have also conducted the third party stack monitoring of incinerator stack from M/S. Kadam Environment Consultant on 11/02/2020. Copy of the calibration certificate and stack monitoring report is enclosed for your kind reference.

In the matter of above we are kindly requesting you to visit to our plant and conduct the resampling of our incinerator stack for necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,
For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.

RECEIVED
Sign.
Date : 14/2/2020
G.P.C. BOARD SARIGAM.

Encl.: 1. Mail regarding information of maintenance work of Incinerator, Incinerator stack and online stack monitor dated 27/01/2020.
(2). Copy of the reply of the letter No.: EMS- GPCB/COR/04-2020/ID-24285 dates: 31/01/ 2020.
(3). Mail regarding Information of the completion of Maintenance work and Internal inspection of Incinerator, Incinerator stack, Scrubber and online stack Monitor dated 13/02/2020.

o/c

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

NitinMehta-AGM-EMS-Sarigam-Coromandel

From: NitinMehta-AGM-EMS-Sarigam-Coromandel
Sent: 27 January 2020 13:47
To: westzonecpcb@yahoo.com; ro-gpcb-sari@gujarat.gov.in
Cc: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel
Subject: maintenance issue of our online stack monitor of Incinerator stack

Dear Sir,

Due to the maintenance issue, our online stack monitor of Incinerator stack will be closed for one week.

This is for your kind information and update.

With Regard's

N... Mehta
AGM-EMS

Coromandel

Coromandel International Limited
(Crop Protection Division)
Plot No. 2102, GIDC
Sarigam – 396155
Dt. Valsad, Gujarat, India
T: +91 260 2780395
W: www.coromandel.biz

A Murugappa Group Company

Please don't print this e-mail unless you really need to.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/04-2020/ID-24285

Date: 31/01/ 2020

To,
Mr.H.V. Ganvit,
Regional Officer, RO Office Sarigam,
Gujarat Pollution Control Board, Distt. Valsad.

Subject: Regarding the sampling analysis report of your recent GPCB visit on 15/01/2020.

Dear Sir,

This has reference to the recent GPCB visit in our plant on 15/01/2020 and the analysis report of the one of the sampling parameters i.e. PM (Particulate Matter) of incinerator stack showing results above the prescribed standard of GPCB. In that context we would like to state as under-

Our incinerator stack is attached with online stack monitor linked with the GPCB server in which the result of same parameter (Particulate Matter) is showing below the prescribed standard of GPCB. Copy of the 24 hours online monitoring report of date 15/01/2020 is enclosed for your kind reference, therefore, there might be some error in sample collection or lab analysis of PM (Particulate Matter) of common stack attached to incinerator.

Even though based on the finding, we have stopped the incinerator with immediate effect & completely opened all equipment for internal inspection & maintenance (if any) purpose, information of same is given to your kind office through e-mail (27/1/2020).

Copy of the earlier given e-mail & photographs of the opened equipment are enclosed for your kind reference.

After completion of the inspection & maintenance work we will request you for resampling of the same parameter of same stack for your kind reference and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,

For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.
C.C.: Unit Head, Head office, GPCB, Gandhinagar.

RECEIVED
Sign.
Date : 03-02-2020
G.P.C. BOARD SARIGAM.

Encl.: 1. Copy of the 24 hours online monitoring report of date 15/01/2020.
2. Copy of the information of maintenance of online monitor and incinerator stack.
3. Photographs of the opened equipment.

omandel International Limited
Protection Division
No. 2102, GIDC,
am-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

istered Office : Coromandel House:
10, Sardar Patel Road,
nderabad - 500 003, Telangana, India.
T : +91 40 27842034
F : +91 40 27844117
E : info@coromandel.murugappa.com
W: www.coromandel.biz
murugappa

COROMANDAL INTERNATIONAL LIMITED DAILY REPORT PART 4 (PPM)							
DATE	TIME	INCINERATOR 1					
		PM	SO2	NOx	O2	CO2	CO
15-01-2020	0:01:00	0	0	4.43	20.59	0	0
15-01-2020	1:01:00	0	0	3.52	20.13	0	0
15-01-2020	2:01:00	0	0	3.14	19.27	0	0
15-01-2020	3:01:00	0	0	2.99	18.66	0	0
15-01-2020	4:01:00	0	0	2.85	18.61	0	0
15-01-2020	5:01:00	0	0	2.5	18.62	0	0
15-01-2020	6:01:00	0	0	2.37	18.92	0	0
15-01-2020	7:01:00	0	0	2.18	18.6	0	0
15-01-2020	8:01:00	0	0	1.95	18.57	0	0
15-01-2020	10:01:00	0	0	0.29	5.6	0	0
15-01-2020	11:01:00	0.54	0	0.64	18.53	0	0
15-01-2020	12:01:00	4.73	0	0.7	18.54	0	0
15-01-2020	13:01:00	8.55	0	1.23	18.24	0	0
15-01-2020	14:01:00	10.48	0	2.1	18.6	0	0
15-01-2020	15:01:00	16.56	0	3.26	18.86	0	0
15-01-2020	16:01:00	14.23	0	4.25	20.13	0	0
15-01-2020	17:01:00	4.18	0	3.97	18.78	0	0
15-01-2020	18:01:00	0.72	0	3.75	18.92	0	0
15-01-2020	19:01:00	0	0	3.75	18.62	0	0
15-01-2020	20:01:00	0	0	3.85	18.61	0	0
15-01-2020	21:01:00	0	0	3.92	18.62	0	0
15-01-2020	22:01:00	0	0	3.98	18.6	0	0
15-01-2020	23:01:00	0	0	3.86	18.6	0	0
Average		2.61	0	2.85	18.31	0	0
Maximum		16.56	0	4.43	20.59	0	0
Minimum		0	0	0.29	5.6	0	0

Mehta-AGM-EMS-Sarigam-Coromandel

m: NitinMehta-AGM-EMS-Sarigam-Coromandel
t: 27 January 2020 13:47
westzonecpcb@yahoo.com; ro-gpcb-sari@gujarat.gov.in
ject: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel
maintenance issue of our online stack monitor of Incinerator stack

ar Sir,

e to the maintenance issue, our online stack monitor of Incinerator stack will be closed for one week.

s is for your kind information and update.

h Regard's

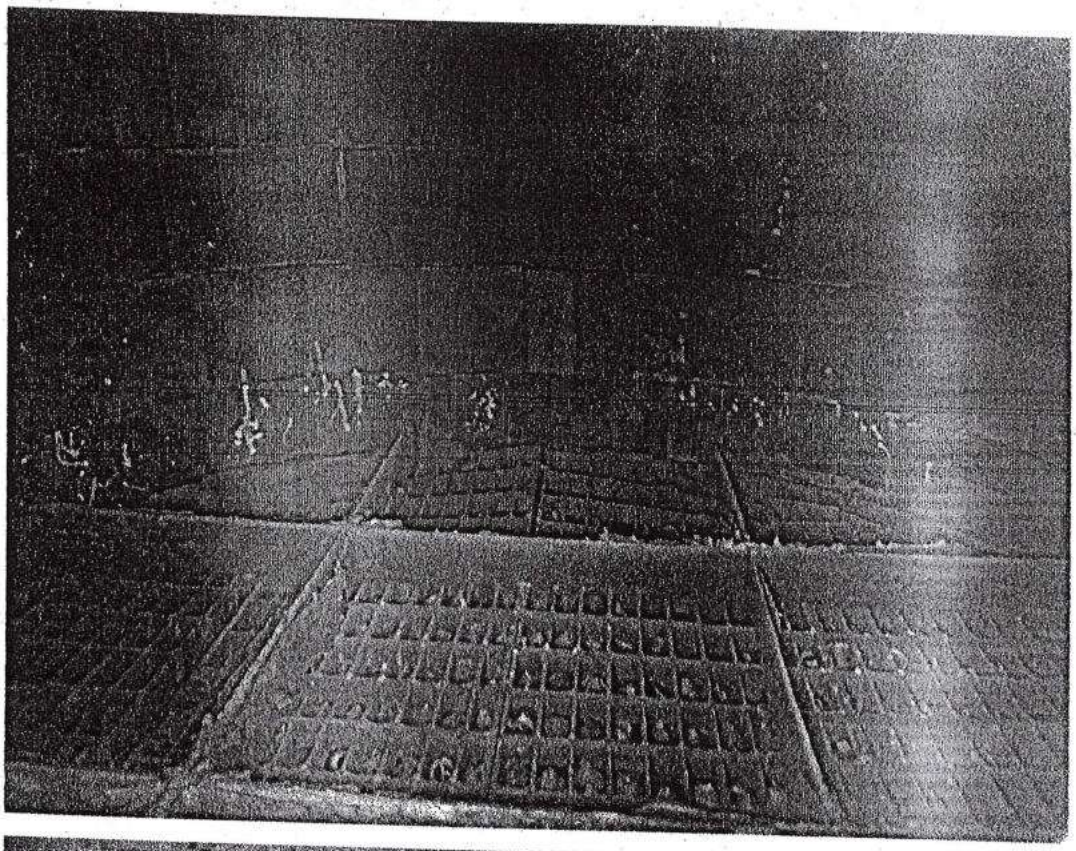
in M a
EMS

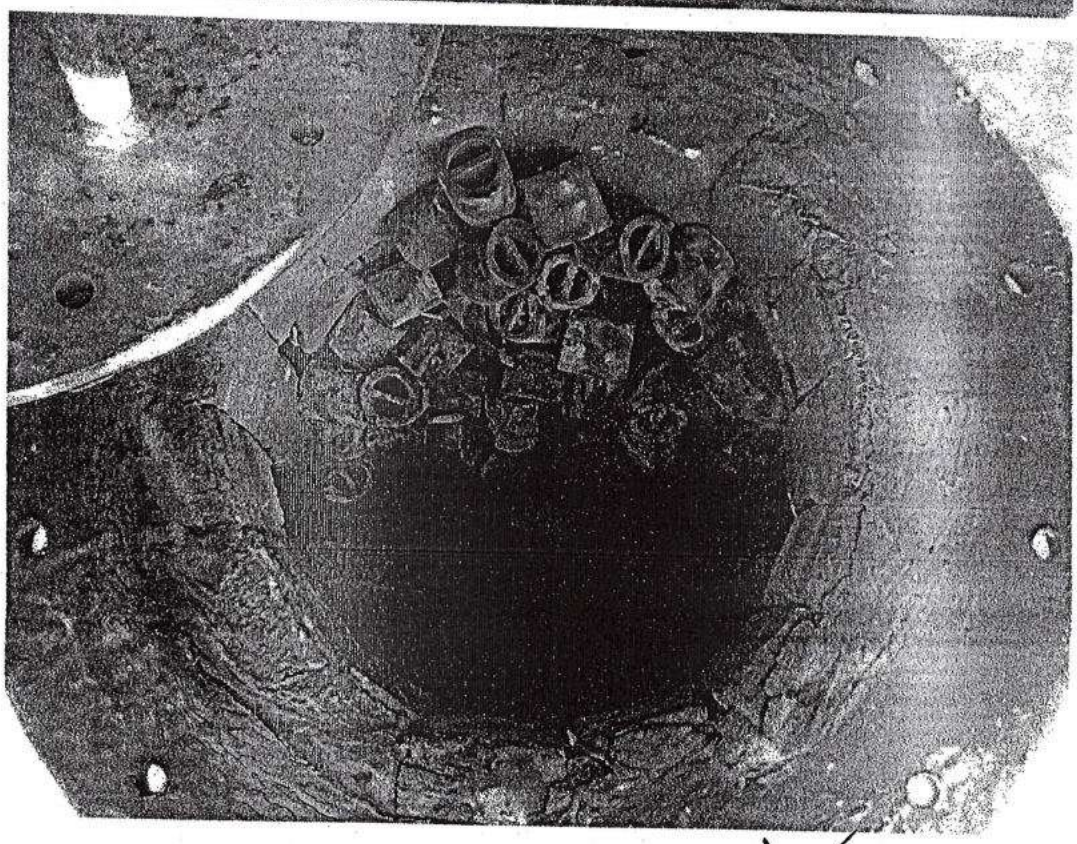
oromandel

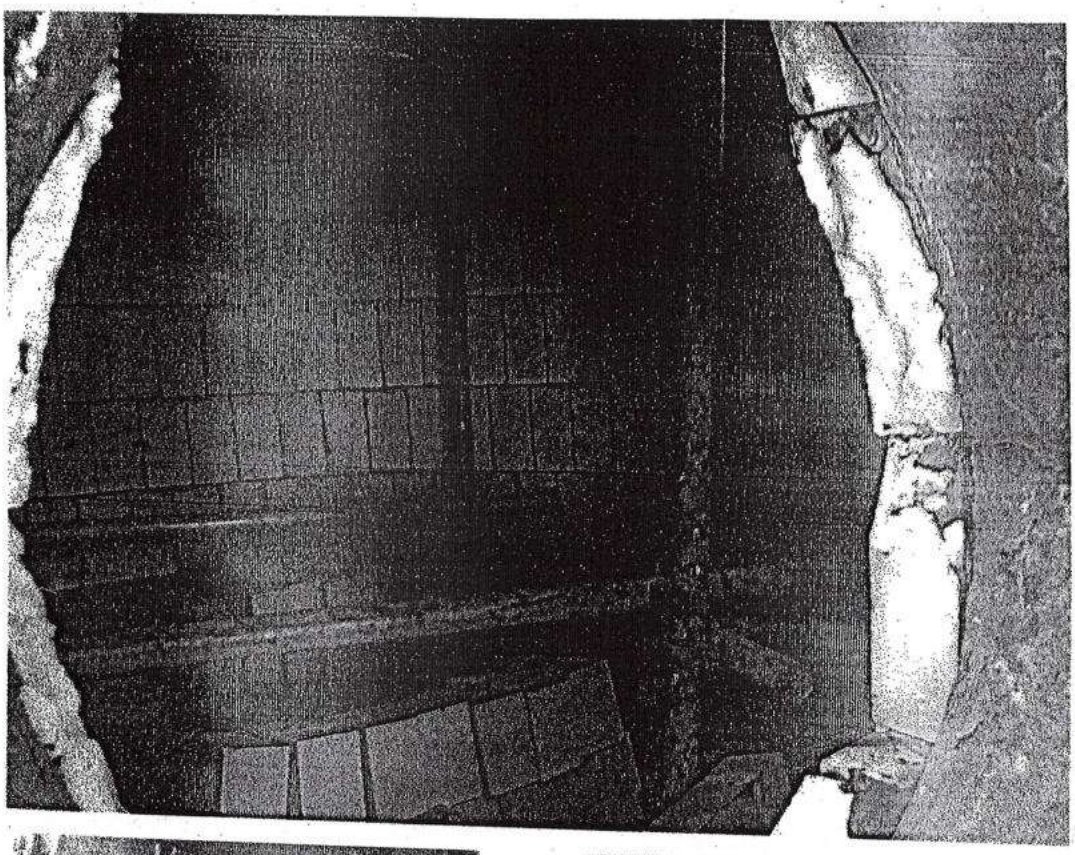
romandel International Limited
op Protection Division)
t No. 2102, GIDC
igam – 396155
Valsad, Gujarat, India
+91 260 2780395
www.coromandel.biz

Murugappa Group Company

Please don't print this e-mail unless you really need to.









NitinMehta-AGM-EMS-Sarigam-Coromandel

From: NitinMehta-AGM-EMS-Sarigam-Coromandel
Sent: 13 February 2020 09:21
To: westzonecpcb@yahoo.com; ro-gpcb-sari@gujarat.gov.in
Cc: HimanshuShukla-Associate VP & Unit Head-Sarigam-Coromandel
Subject: Information regarding the completion of Maintenance work and Internal inspection of Incinerator, Incinerator stack , Scrubber and online stack Monitor.

Dear Sir,

This has reference to our previous mail regarding information of closing the Incinerator, online stack monitor and Incinerator stack dated 27/01/2020. In that context we are hereby informing you that all equipment including scrubber have been opened & internally inspected, required cleaning & maintenance is performed. Erection work of our Incinerator, scrubber and stack along with installation of online stack monitor is completed. Calibration work of the Online stack monitor is also completed. We have started the incinerator and it is running smoothly.

This is for your kind information and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Regard's

Nitin Mehta
AGM-EMS

Coromandel

Coromandel International Limited
(Crop Protection Division)
P[illegible]No. 2102, GIDC
S[illegible]gam – 396155
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W: www.coromandel.biz

A Murugappa Group Company

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TRUE COPY
ADVOCATE

ANNEXURE-R-28

Coromandel
FUTURE POSITIVE

No.: EMS- GPCB/COR/15-2020/ID-24285

Date: 18/06/2020

To,
Mr. N.M. Tabhani
(Unit Head - Vapi)
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382 010, Gujarat.

Subject: Show cause Notice. No: SCN-562141 dated 15/06/2020 regarding properly working of TOC meter.

Dear Sir,

This has reference to your show cause notice no.: SCN-562141 dated 15/06/2020 regarding properly working of TOC meter. In that context we would like to state as under-

(1) We have well maintained TOC meter which is properly calibrated as per the norms and guidelines of GPCB.
(2) Validity of the calibration of TOC meter is one year and our last third-party calibration was completed on 25/12/2019 . Copy of the calibration certificate is attached for your kind reference.
(3) We are regularly analysing the COD parameter in our QC laboratory and comparing the reading of same with our online TOC meter on daily basis.
(4) Deviation in TOC meter reading with manually analysed COD reading during GPCB visit was might be due to the chocking of some trash in filter of the TOC meter for short period of time. As a practice we clean filter of the TOC meter once in every shift so any deviation due to filter chocking gets attended.
(5) Further to this to fulfil our commitment towards compliance we have recalibrated our TOC meter on 17/06/2020 and compared the calibration reading with our laboratory COD reading. Copy of the latest calibration certificate and the result of the laboratory COD reading is attached for your kind reference.

In the matter of above we would again like to ensure you that our TOC meter is functioning properly as per the norms and guidelines of the GPCB. We would also like to inform you that we are strictly complying the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,
For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.

RECEIVED
Sign.
Date. 19-06-2020
G.P.C. BOARD SARIGAM.

C.C.: Regional Officer-Sarigam, Gujarat Pollution Control Board.
Encl.: (1). Third-Party Calibration Certificate conducted on 25/12/2019.
(2). Third-Party Calibration Certificate conducted on 17/06/2020.
(3). Comparison of the TOC meter reading with laboratory COD reading.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003. Telangana, India.
T : +91 40 27842034
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E : info@coromandel.murugappa.com
W: www.coromandel.biz

Calibration Certificate

Instrument: Total Organic Carbon Analyzer

Serial No: H66965630165

Model: TOC – 4200

Supplied to: Coromandel International Ltd., Sarigam

Calibration Solution Used: For TC: KHP (Potassium Hydrogen Phethalate)

Calibrated On: 25.12.2019

Type	Standard Concentration	Reading on Machine	Variation in Percentage
TOC(NPOC)	1000	1009	+0.9%

Calibration Result: Pass

Note: Calibration is Pass only if Percentage Variation is for TOC ≤ ±5%

For Shreedhar Instruments

Authorized Signatory

Calibration Certificate

Instrument: Total Organic Carbon Analyzer

Serial No: H66965630165

Model: TOC – 4200

Supplied to: Coromandel International Ltd., Sarigam

Calibration Solution Used: For TC: KHP (Potassium Hydrogen Phethalate)

Calibrated On: 17.06.2020

Type	Standard Concentration	Reading on Machine	Variation in Percentage
TOC(NPOC)	1000	1001	+0.1%

Calibration Result: Pass

Note: Calibration is Pass only if Percentage Variation is for TOC ≤ ±5%

For Shreedhar Instruments

Authorized Signatory

TOC Meter reading comparison with Laboratory analysed COD Results

Sr. No.	Sample	Date and time	TOC Meter reading		Lab Result	Factor for Lab.
			TOC (mg/l)	COD (mg/l)	COD (mg/l)	COD
1	Final Disharge	17/06/2020 (07:00)	56	140	142	2.54
2	Final Disharge	17/06/2020 (11:30)	59.55	148.9	152	2.55
3	Final Disharge	17/06/2020 (23:00)	61	153	156	2.56
4	KHP Std solution Trial 1	KHP Std solution Trial 1	1001	2502.5	2515	2.51
5	KHP Std solution Trial 2	KHP Std solution Trial 2	1001	2502.5	2512	2.51

Note : Please note that 2.5 is a conversion factor to convert the TOC value in COD.



SHOW CAUSE NOTICE

PCB ID : 24285

Legal ID : 41022

Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
23222756

ACT : Air , Water , Hazardous

Show Cause Notice DATE : 15/06/2020

WHEREAS, the Officials of the Gujarat Pollution Control Board (hereinafter referred to as the Board, in short), conducted inspection on 15/05/2020 in order to verify the statements made by you in your application for Consent to Operate under the Air , Water , Hazardous Act / to ascertain the Compliances of Conditions specified in Consent Order.

WHEREAS during the inspection it was observed that:-

Reason :

The online TOC meter at ETP outlet shows TOC - 8.8 mg/l (i.e COD - 12.95 mg/l) while manual analysis of treated wastewater sample shows COD - 96 mg/l, which shows that online TOC meter is not working properly or not calibrated

NOW THEREFORE, in exercise of the powers vested with this Board
Under Section 33(A) read with section 25/26 of the Water(Prevention and Control of Pollution) Act, 1974
Under section 31(A) read with section 21 of the Air (Prevention and Control of Pollution) Act, 1981
Under Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008
notice is hereby served on you, to show cause within 15 days from the date of receipt of this show cause notice in view of the non compliance observed above and why legal action should not be initiated as per the provision of the Acts which may include rejection of your application and suspension/ closure of your unit.

For and on behalf of

Gujarat Pollution Control Board

N.M. Tabhani,Unit Head

NO : SGN-562141 , 15/06/2020

Coromandel International Limited,
2102, 2104/1,735,&2112/2113, SARIGAM GIDC ESTATE, SARIGAM ,, SARIGAM,
Dist : Valsad-Sarigam, Tal : Umbergaon, SIDC : Sarigam
Phone : 02602780201

TRUE COPY ADVOCATE

COPY TO :-

The RO Head(P.C.B.), Valsad-Sarigam

With a request to carryout monitoring and send the detailed I.R. & A.R. for the sample collected to this office immediately.

ANNEXURE-R-29

Coromandel

No.: EMS- GPCB/COR/22-2020/ID-24285 Date: 29/09/ 2020

To,
Unit Head – Vapi,
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382 010, Gujarat.

Subject: Reply of Show cause Notice. No: SCN-568002 dated 18/09/2020 regarding observation made during last GPCB inspection on 17/08/2020.

Dear Sir,

This has reference to your Show cause Notice. No: SCN-568002 dated 18/09/2020 regarding observation made during last GPCB inspection on 17/08/2020.In that context please find attached herewith the compliance report of the same for your kind reference and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,

For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.
C.C.: Regional Officer-Sarigam, Gujarat Pollution Control Board.

Encl.: 1. Compliance Report of the show cause notice.
2. Photographs of the storage tank attached with the scrubber/ dip/ incinerator.
3. Copy of the logbook showing shutdown during cleaning.
4. Copy of the screen shot of the temperature panel and copy of last three-month log book of details of the temperature of incinerator stack.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

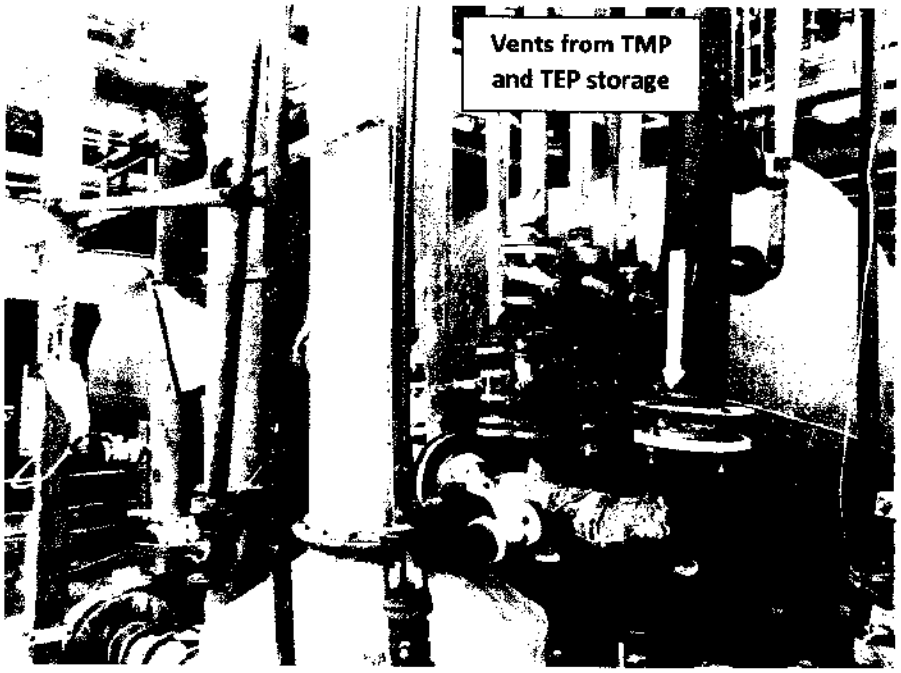
Registered Office : Coromandel House,
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana India
T : +91 40 27842034
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E : info@coromandel.murugappa.com
W: www.coromandel.biz

Compliance Report of the observation of show cause notice made during last GPCB visit on 17/08/2020.

Sr. No.	Observation	Compliance status	Remark
1.	Bad odor felt near storage tank vent i.e. ML, Aqueous Layer storage tank, Raw Material storage tank.	Complied.	As per the suggestion made during the visit, we have connected our tank with dip pipe. Copy of the photographs of implemented tanks are attached for your kind reference.
2.	Unit is not maintaining the requisite temperature in primary & secondary chamber of incinerator.	Complied.	During the visit our plant was under startup after routine cleaning and the temperature of primary & secondary chamber was gradually increasing. It required minimum 1-2 hour to reach the optimum level of the temperature of both the chamber. We have feed the $MeCl_3$ gas only when we reached to optimum temperature and during the visit feed was not started due to not reaching the optimum temperature. Copy of the logbook showing shutdown during cleaning of same date is attached for your kind reference. We would also like to add that we are regularly maintaining the requisite temperature of the primary & secondary chamber of the incinerator. Copy of the screen shot of the temperature panel and copy of last three-month logbook of details of the temperature of incinerator stack are attached.
3.	The unit has stored MEE salt in open within premises in HDPE bags hence there is possibility of contamination during rain.	Complied.	We have shifted our MEE salt to storage area and copy of the photographs of the empty open area and storage area are attached.



TMP-TEP solvent storage tank



TMP Storage tank scrubber



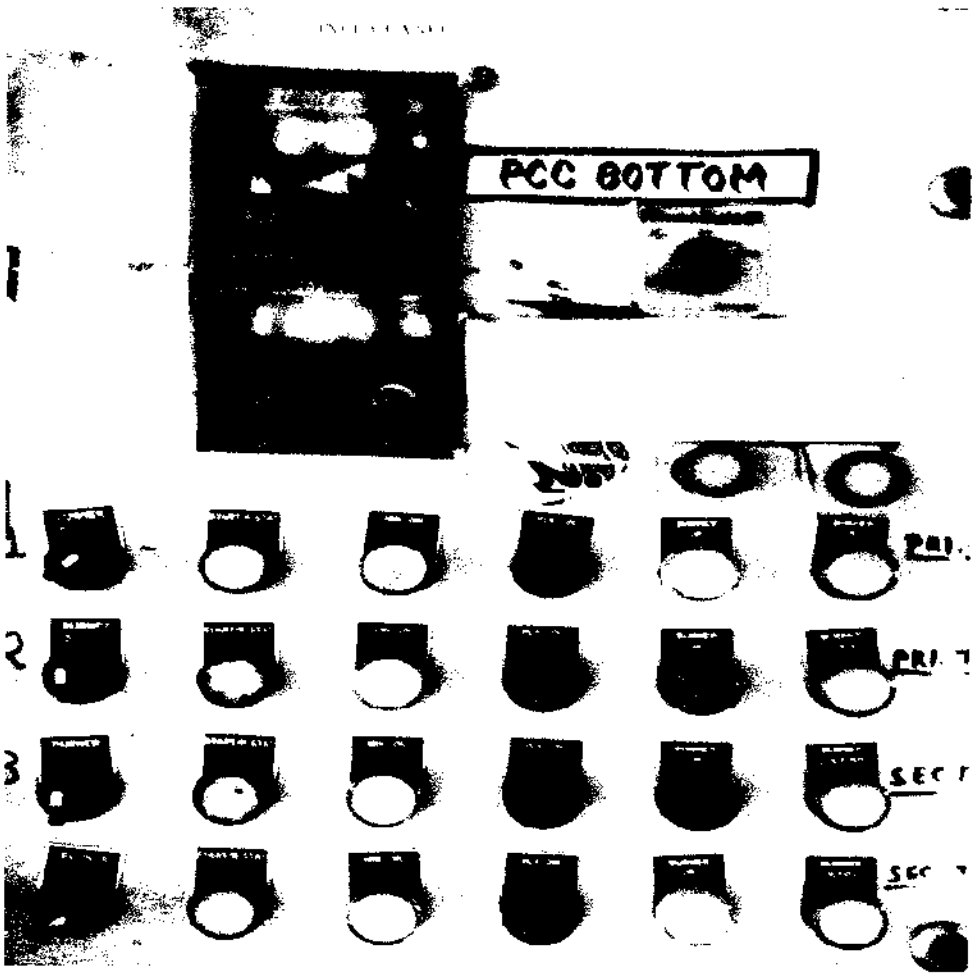
ACP Aqueous storage tank



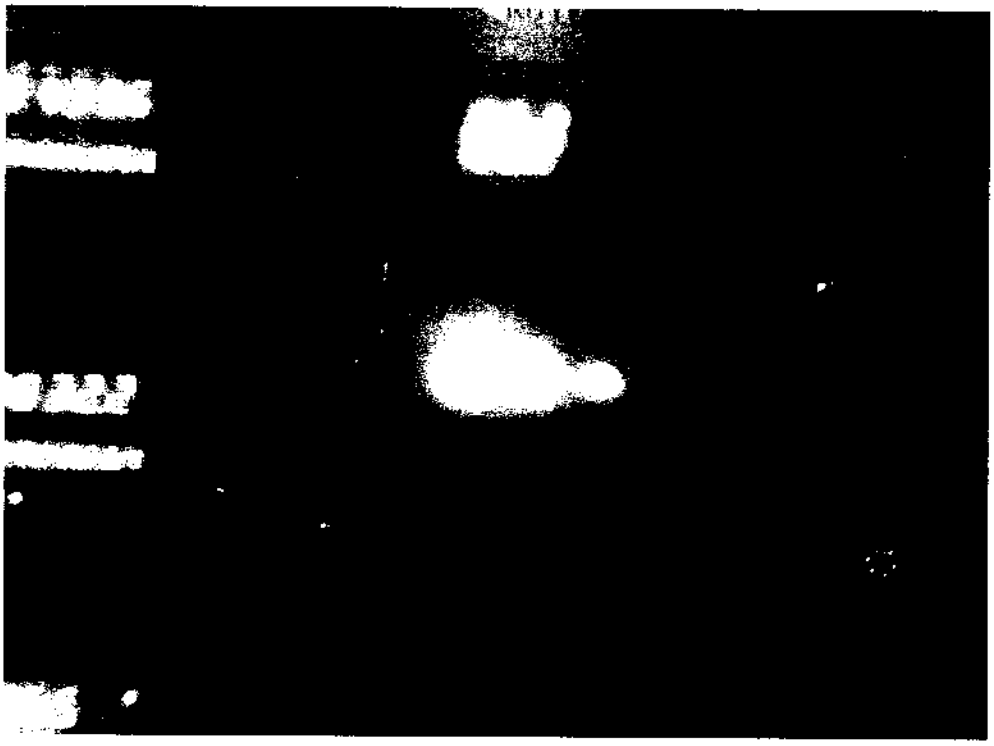
Raw Material (EDA) Storage Tank attached with scrubber



MCP Aqueous Storage Tank



Incinerator Temperature Panel Screen shot Date- 20/09/2020



Incinerator Temperature Panel Screen shot Screen shot Date- 21/09/2020



MEE Salt storage godown



MEE Salt open empty area I



MEE Salt open empty area II

TRUE COPY
ADVOCATE

ANNEXURE-R-30

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/26-2020/ID-24285 Date: 11/11/ 2020

To,
Unit Head – Vapi,
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector 10 – A, Gandhinagar – 382 010, Gujarat.

Subject: Reply of Show cause Notice. No: SCN-572236 dated 04/11/2020 regarding analysis result of sample collected from stack attached to spray dryer of Mancozeb Plant A on 22/09/2020.

Dear Sir,

This has reference to your Show cause Notice. No: SCN-572236 dated 04/11/2020 regarding analysis result of sample collected from stack attach to spray dryer of Mancozeb Plant A on 22/09/2020 shows; PM stack higher than the permissible limit.

In that context we would like to state as under: -

1. As this stack is having online monitoring system, we also noticed intermittent spike in reading during 23/9/2020, we immediately stopped the plant & inspected bag house, on inspection we found that 2 bags out of 520 no. were torn, these bags were giving intermittent dust, same were immediately changed.

2. Since then system is running well & online data of PM is within specified limit of 50 ppm. Our current online monitoring data showing in the range of 28-36 ppm. Copy of the same is enclosed for your kind reference.

Hence you are invited to conduct another sampling and ensure compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,

For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.
C.C.: R.O. Head, GPCB Sarigram.
Enclosures: Copy of the current online monitoring data.

RECEIVED
G P C Board Sarigam
Sign. Dt.

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
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W: www.coromandel.biz

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COROMANDEL INTERNATIONAL LIMITED			COROMANDEL INTERNATIONAL LIMITED			COROMANDEL INTERNATIONAL LIMITED			COROMANDEL INTERNATIONAL LIMITED		
DAILY REPORT PART 1 (PPM)			DAILY REPORT PART 1 (PPM)			DAILY REPORT PART 1 (PPM)			DAILY REPORT PART 1 (PPM)		
DATE	TIME	MNZ-A PLANT SPRAY DRYER PM	DATE	TIME	MNZ-A PLANT SPRAY DRYER PM	DATE	TIME	MNZ-A PLANT SPRAY DRYER PM	DATE	TIME	MNZ-A PLANT SPRAY DRYER PM
08-11-2020	00:01:00	29.32	09-11-2020	00:01:00	30.81	10-11-2020	00:01:00	29.51	11-11-2020	00:01:00	30.61
08-11-2020	01:01:00	30.12	09-11-2020	01:01:00	29.31	10-11-2020	01:01:00	33.4	11-11-2020	01:01:00	31.21
08-11-2020	02:01:00	31.62	09-11-2020	02:01:00	32.64	10-11-2020	02:01:00	35.81	11-11-2020	02:01:00	33.73
08-11-2020	03:01:00	28.57	09-11-2020	03:01:00	29.89	10-11-2020	03:01:00	34.66	11-11-2020	03:01:00	32.37
08-11-2020	04:01:00	34.32	09-11-2020	04:01:00	30.84	10-11-2020	04:01:00	33.92	11-11-2020	04:01:00	34.43
08-11-2020	05:01:00	34.21	09-11-2020	05:01:00	32.46	10-11-2020	05:01:00	32.15	11-11-2020	05:01:00	35.03
08-11-2020	06:01:00	33.62	09-11-2020	06:01:00	30.54	10-11-2020	06:01:00	29.94	11-11-2020	06:01:00	34.12
08-11-2020	07:01:00	31.54	09-11-2020	07:01:00	32.68	10-11-2020	07:01:00	30.43	11-11-2020	07:01:00	34.87
08-11-2020	08:01:00	30.78	09-11-2020	08:01:00	30.11	10-11-2020	08:01:00	30.21	11-11-2020	08:01:00	32.33
08-11-2020	09:01:00	30.64	09-11-2020	09:01:00	29.32	10-11-2020	09:01:00	30.74	11-11-2020	09:01:00	31.03
08-11-2020	10:01:00	32.29	09-11-2020	10:01:00	29.78	10-11-2020	10:01:00	32.35	11-11-2020	10:01:00	30.13
08-11-2020	11:01:00	28.65	09-11-2020	11:01:00	29.15	10-11-2020	11:01:00	33.59	11-11-2020	11:01:00	28.51
08-11-2020	12:01:00	33.29	09-11-2020	12:01:00	28.94	10-11-2020	12:01:00	35.86	11-11-2020	12:01:00	32.44
08-11-2020	13:01:00	29.28	09-11-2020	13:01:00	30.12	10-11-2020	13:01:00	32.35	11-11-2020	13:01:00	31.41
08-11-2020	14:01:00	32.38	09-11-2020	14:01:00	32.89	10-11-2020	14:01:00	33.47	11-11-2020	14:01:00	29.74
08-11-2020	15:01:00	31.84	09-11-2020	15:01:00	33.87	10-11-2020	15:01:00	35.07	11-11-2020	15:01:00	31.34
08-11-2020	16:01:00	32.13	09-11-2020	16:01:00	28.4	10-11-2020	16:01:00	34.22	11-11-2020	16:01:00	34.84
08-11-2020	17:01:00	31.63	09-11-2020	17:01:00	28.46	10-11-2020	17:01:00	30.72	11-11-2020	17:01:00	33.21
08-11-2020	18:01:00	29.21	09-11-2020	18:01:00	28.14	10-11-2020	18:01:00	29.63	11-11-2020	18:01:00	32.15
08-11-2020	19:01:00	28.58	09-11-2020	19:01:00	29.42	10-11-2020	19:01:00	28.45	11-11-2020	19:01:00	31.87
08-11-2020	20:01:00	30.18	09-11-2020	20:01:00	30.42	10-11-2020	20:01:00	33.1	11-11-2020	20:01:00	31.53
08-11-2020	21:01:00	32.53	09-11-2020	21:01:00	32.77	10-11-2020	21:01:00	32.69	11-11-2020	21:01:00	33.58
08-11-2020	22:01:00	32.47	09-11-2020	22:01:00	29.46	10-11-2020	22:01:00	33.55	11-11-2020	22:01:00	29.52
08-11-2020	23:01:00	32.67	09-11-2020	23:01:00	32.35	10-11-2020	23:01:00	32.14	11-11-2020	23:01:00	29.67

SHOW CAUSE NOTICE

PCB ID : 24285

Legal ID : 42018

Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
23222756

ACT : Air

Show Cause Notice DATE : 04/11/2020

WHEREAS, the Officials of the Gujarat Pollution Control Board (hereinafter referred to as the Board, in short), conducted inspection on 22/09/2020 in order to verify the statements made by you in your application for Consent to Operate under the Air Act / to ascertain the Compliances of Conditions specified in Consent Order.

WHEREAS during the inspection it was observed that:-

Reason :

Analysis result of sample collected from stack attached to Spray dryer of Mancozeb Plant A shows; PM stack -- 64.0 MG/NM3, which is higher than permissible limit.

NOW THEREFORE, in exercise of the powers vested with this Board
Under section 31(A) read with section 21 of the Air (Prevention and Control of Pollution) Act, 1981
notice is hereby served on you, to show cause within 15 days from the date of receipt of this show cause notice in view of the non compliance observed above and why legal action should not be initiated as per the provision of the Acts which may include rejection of your application and suspension/ closure of your unit.

For and on behalf of
Gujarat Pollution Control Board

N.M. Tabhani,Unit Head

NO : SCN-572236 , 04/11/2020

Coromandel International Limited,
2102, 2104/1,735,&2112/2113, SARIGAM GIDC ESTATE, SARIGAM ,,
SARIGAM,
Dist : Valsad-Sarigam, Tal : Umbergaon, SIDC : Sarigam
Phone : 02602780201

COPY TO :-

The RO Head(P.C.B.), Valsad-Sarigam

With a request to carryout monitoring and send the detailed I.R. & A.R. for the sample collected to this office immediately.

TRUE COPY
ADVOCATE

ANNEXURE-R-31

SHOW CAUSE NOTICE

PCB ID : 24285
Legal ID : 43891

Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
23222756

ACT : Hazardous

Show Cause Notice DATE : 13/05/2021

WHEREAS, the Officials of the Gujarat Pollution Control Board (hereinafter referred to as the Board, in short), conducted inspection on 01/02/2021 in order to verify the statements made by you in your application for Consent to Operate under the Hazardous Act / to ascertain the Compliances of Conditions specified in Consent Order.

WHEREAS during the inspection it was observed that:-

Reason :

1. Contaminated plastic/ liners waste lifted from plastic scrap storage area & filling in Eicher tempo number GJ-15-X-6936 was observed during inspection. Thus you have not complying CCA condition.

NOW THEREFORE, in exercise of the powers vested with this Board
Under Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008
notice is hereby served on you, to show cause within 15 days from the date of receipt of this show cause notice in view of the non compliance observed above and why legal action should not be initiated as per the provision of the Acts which may include rejection of your application and suspension/ closure of your unit.

For and on behalf of
Gujarat Pollution Control Board

M.V. PATEL, UNH

NO : SCN-595306 , 17/07/2021

Coromandel International Limited,
2102, 2104/1,735,&2112/2113, SARIGAM GIDC ESTATE, SARIGAM ,,
SARIGAM,
Dist : Valsad-Sarigam, Tal : Umbergaon, SIDC : Sarigam
Phone : 02602780201

COPY TO :-

The RO Head(P.C.B.), Valsad-Sarigam

With a request to carryout monitoring and send the detailed I.R. & A.R. for the sample collected to this office immediately.

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

No.: EMS- GPCB/COR/04-2021/ID-24285

Date: 02/02/ 2021

To,
Mr. B R Gajjar,
Regional Officer, Sarigam
Gujarat Pollution Control Board.

Subject: Compliance report of the observation made during last GPCB Visit on 01/02/2021.

Dear Sir,

This has reference to the observation made during last visit on 01/02/2021 at our plant. In that context we hereby submitting the compliance report of same for your kind reference and necessary compliance.

We would also like to inform you that we are strictly comply the GPCB norms and doing our sincere efforts in this regard.

With Best Regards,

For Coromandel International Limited

Himanshu Kumar Shukla
Assoc. Vice President and Unit Head.
C.C.: Unit Head, Head office, GPCB, Gandhinagar.
Encl.: (1) Compliance Report of the observation made during last GPCB visit on 01/02/2021.
(2) Last three months disposal details of plastic bags/ liners.

RECEIVED
G P C Board Sarigam
Sign. 05-02-2021

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.
T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
T : +91 40 27842034

Compliance Report of the Observation made during last GPCB Visit on 01/02/2021.

Sr. No	Observation	Compliance Status	Remark
1	During the routine visit of Sarigam GIDC today, chemicals contaminated (powdered) plastic bag/ liner produced from your unit was stored in plastic storage area and was seen loading them in tempo no. GJ-15-X-6936 and after that again materials/ plastic bag/ liners were seen getting vacant in storage area from the said tempo. So present the necessary documental evidence for the final disposal of the said contaminated waste.	Complied	Tempo is used internally for the transportation of liners from storage area to our dedicated area for the decontamination. Tempo after loading the liner was having some maintenance issue therefore, we have to immediately unload the material in storage area and sent it for repairing.
2	In accordance of your aforementioned action it seems that you have disposed the contaminated plastic/ liner against the conditions mentioned in CCA. So, give clarification regarding it.	Complied	We are always disposing decontaminated plastic/liners to GPCB authorized recycler as per the conditions mentioned in the CCA.
3	To submit the last three months disposal details of plastic bags/ liners along with documental evidence .	Complied	Details Attached.

Last three months disposal details of plastic bags/ liners.

Sr. No.	Months	Quantity (Nos.)
1.	November-20.	1423
2.	December-20.	1386
3.	January- 21	1447

Mohmmed Yunus & Sons [23938]

(Hazardous Waste Manifest)

Manifest No: 1235347 27/01/2021 **Copy 2**

To be forwarded by To be Carried by the occupier after taking signature on it form the transporter.

Sender's Details			
Sender Name	Coromandel International Limited [24285]		
Address	SARIGAM GIDC ESTATE, SARIGAM ,,- Taluka :UMB Distict:SAR Pin no:396155		
Contact Details	7574801724 shuklaH@coromandel.murugappa.com	GPS Coordinates	Lat :21.4000 Long :72.3300

Receiver's Details			
State	Gujarat	Type of Facility	Actual user (within state)
Facility Details	Mohmmed Yunus & Sons [23938]		
Contact Details	9377506229 aziz.neopaints@gmail.com	GPS Coordinates	Lat :20.3600 Long:72.9200
Address	PLOT NO.176/3B,PHASE-II Taluka :PAR Distict:VAL Pin no:396195		

Waste Details					
Waste Details					
Waste Intended for	Recycling	Total Qty	1.470MT	Consistency	Solid

Transporter Details			
Name	MOHAMMAD YUNUS AND SONS	Contact Details	9374460232 aziz.neopaints@gmail.com
Address	PLOT NO 176/3 SECOND PHASE GIDC VAPI,PLOT NO 176/3 SECOND PHASE GIDC VAPI District :Vapi Taluka :Vapi		

Vehicle Details					
Vehicle no	GJ15XX6632	GPS Enabled	Yes	Type of Vehicle	Tempo
Driver name	RAJKUMAR	Driver Contact No	9998358850		

Waste Transportation Details					
Vehicle Depart.	27/01/2021 3:33PM	Number of Drums	0	Loose Waste	1.470
Remarks	Plastic waste sent for recycling process.			No of bags	0

Sender's Declaration :

1. I hereby declare that contents of the consignment are fully and accurate described above by proper shipping name and are categorized , packed, marked , and labeled , and are all in all respects in proper condition for transport by road according to applicable national government regulations.
2. I hereby declare that we have obtained membership of common facility / carried out agreement with actual user for disposal/ actual use of hazardous waste.

COROMANDEL INTERNATIONAL LIMITED
Name and stamp of sender: P.O. G.I.D.C. Estate,
SARIGAM-396 155, Dist.Valsad, Gujarat

Date: 27/01/21

Signature:

Transporter's Acknowledgement of Receipt of waste

Stamp:

Date: 27/01/21

Signature:

Receiver's Certification of Receipt of Hazardous waste

In Principal Approval Details :Accepted - 27/01/2021 3:16PM - Remarks :For 33.1 waste

Stamp:

Date:

Signature:

TRUE COPY ADVOCATE

N I C

ANNEXURE-R-32

ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ

પ્રાદેશિક કચેરી–સરીગામ

સરીગામ ભાંડારવાડ ૩૯૬ ૧૫૫, તા. ઉમરગામ, જીલ્લા. વલસાડ

ફોન : (૦૨૬૦) ૨૭૮૬૦૩૩, ૨૭૮૬૦૪૪

Email : ro-gpcb-sari@gujarat.gov.in | Website : www.gpcb.gov.in

તપાસ માટે દાખલ થવાની સૂચના (નોટીસ)

નં. 24285

પાણી અધિનિયમ ૧૯૭૪ની કલમ-૨૩, હવા અધિનિયમ ૧૯૮૧ ની કલમ-૨૪ અને પર્યાવરણ (સુરક્ષા) અધિનિયમ-૧૯૮૬ ની કલમ-૧૦ હેઠળ અમોને મળેલ સત્તાની રૂએ અમો નીચે સહી કરનાર અમોને જરુરી લાગે તેની સહાય લઈને તમામ સમયે નીચેના હેતુઓ માટે આપની જગ્યામાં દાખલ થવાનો અને તપાસ કરવાનો અધિકાર ધરાવીએ છીએ.

(૧) અમોને સોંપેલા રાજ્ય બોર્ડ/કેન્દ્ર સરકારનાં કાર્ય બજાવવાના હેતુ માટે,

(૨) આવા કોઈ કાર્યો બજાવવાના છે કે કેમ અને તેમ હોય તો કઈ રીતે તે બજાવવાના છે અથવા આ અધિનિયમ અથવા તે હેઠળ કરેલા નિયમોની અથવા આ અધિનિયમ હેઠળ બજાવેલી કોઈ નોટીસની, કરેલા કોઈ હુકમની, આદેશની અથવા આપેલા કોઈ અધિકારપત્રની કોઈ જોગવાઈનું પાલન કરવામા આવી રહયું છે કે પાલન કરવામાં આવ્યું છે કે કેમ તે નક્કી કરવાના હેતુ માટે.

(૩) કોઈ સાધન સામગ્રી, ઔદ્યોગિક પ્લાન્ટ, રેકર્ડ, રજીસ્ટર, દસ્તાવેજ અથવા અન્ય કોઈ મહત્વની વસ્તુની તપાસ કરવા અને તેની કસોટી કરવાનાં હેતુ માટે અથવા જે જગામાં તેને એમ માનવાને કારણ હોય કે આ કાયદા કે તે હેઠળ કરેલા નિયમો મુજબ કોઈ ગુનો કરવામાં આવ્યો છે, અથવા થવાની તૈયારીમાં છે, તેવી કોઈ જગ્યાની ઝડતી લેવા માટે અને તેને એમ માનવાને કારણ હોય કે આ કાયદા કે તે હેઠળ કરેલ નિયમો હેઠળ શિક્ષાપાત્ર કોઈ ગુનો કર્યાનો પુરાવો, તેવા સાધન સામગ્રી, ઔદ્યોગિક પ્લાન્ટ, રેકર્ડ, રજીસ્ટર, દસ્તાવેજ અથવા અન્ય મહત્વની વસ્તુ કબજે લેવા માટે અમે નીચે જણાવેલ સમયે દાખલ થઈએ છીએ.

ઉદ્યોગ/કારખાનામાં દાખલ થવાનો સમય : સવારના/સાંજના 10:30 HRS તા. 26 / 11 /2021

અમારી સાથે સહાય માટે નીચેની વ્યક્તિઓ પણ છે.

૧. Dr. K.D. Yadav (Associate Professor-SVNIT), Surat

૨. Dr. Bhavesh Tandel (Asst. Professor-SVNIT), Surat.

પ્રતિ,

COROMANDEL INTERNATIONAL LIMITED
Plot No.2102, G.I.D.C. Estate,
SARIGAM-396 155, Dist.Valsad, Gujarat.

સહી :-

અધિકારીનું નામ : R.K. Mehta (SO.)

હોદ્દો :

આ સૂચના (નોટીસ) મેળવનારની સહી :- T - Arumugamar (Asst. Mgr-EHS)

સ્વીકારનારનુ નામ તથા હોદ્દો :-

Note:- This unit is inspected along with SVNIT-Team members w.r.to carrying out Random verification of Annual Inventory of Hazardous waste management Regularly

TRUE COPY ADVOCATE

ANNEXURE-R-33

Coromandel
FUTURE POSITIVE
CIN : L24120TG1961PLC000892

PCB ID : 24285

Date: 29/11/ 2021

To,
Mr. K D Yadav, B N Tandel,
Dept. of Civil Engg.
SVNIT, Surat

Subject: Submission of document regarding CPCB Audit visit dated 26/11/2021

Dear Sir,

This is to inform you that we hereby submitting all the supporting documents as per physical verification during Hazardous waste inventory Audited on date 26.11.2021.

Hereby we have attached Scan copy of document with Authorized Signatory.

This is for your kind information.

TRUE COPY
ADVOCATE

With Best Regards,

For Coromandel International Limited

Dinesh Chandra Patil
Assoc. Vice President and Unit Head.

Received the Copy

KD Yadav 30/11/21

Dr K D Yadav

Coromandel International Limited
Crop Protection Division
Plot No. 2102, GIDC,
Sarigam-396 155. Dist. Valsad, Gujarat, India.

T : +91 0260 2780 395 / 396 / 852
F : +91 0260 2780853

Registered Office : Coromandel House:
1-2-10, Sardar Patel Road,
Secunderabad - 500 003, Telangana, India.

T : +91 40 27842034
F : +91 40 27844117

E : info@coromandel.murugappa.com
W: www.coromandel.biz

murugappa

BEFORE THE NATIONAL GREEN TRIBUNAL

WESTERN ZONE BENCH, PUNE

AT PUNE

Original Application No. 30/2023(WZ)

Aryavat Foundation **APPLICANT**

Versus

M/s. Coromandel International Ltd. & Ors. **RESPONDENTS**

VAKALATNAMA

KNOW ALL to whom these present shall come that I, **Santosh Chandrashekhar Hordoddi the General Manager and Unit Head of Respondent No.1 (M/s. Coromandel International Ltd.)** the above named do hereby appoint:

Saurabh Kulkarni,
Advocate

Prashant Bhat
Advocate

M/s.D.V. Kulkarni & Co., Advocates
420, Shaniwar Peth, Near Ahilya Devi School,
Next to Sudarshan Hall, Pune – 411 030.
Ph(O) 24459027
(Email) sdkadvocate@gmail.com

Hereinafter called the Advocates to be **Respondent No.1 (M/s.Coromandel International Ltd.)** Advocates in the above noted case & authorize them;

To, act appear and plead in the above noted case in this court or in any other court in which the same may tried or heard.

To sign file, verify and present pleadings, appeals, cross-objections or petitions fee executions review, revision, withdraw compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the execution of the said case in all its stages subject to payment for fees for each stage.

To file and take back document, to admit &/or deny the document of opposite party

To take execution proceedings.

And I the undersigned do hereby agree to ratify and confirm all acts done by the Advocates or their substitute in the matter as my/our own acts, as if done by me/us intents and purposes.

AND I/We undertake that I/We or My/Our duly authorized agent would appear in court on all hearing &will inform the Advocate for appearance when the case in called

IN WITNESS WHEREOF we do hereunto set our hand to their presents the contents of which have been understood by us on this 24 day of April 2023

For COROMANDEL INTERNATIONAL LIMITED

AUTHORISED SIGNATORY

ADVOCATES

Signature

COROMANDEL INTERNATIONAL LIMITED SARIGAM

I am not a member of Advocates Welfare Fund and therefore stamp of Rs.2 is not affixed herewith.

