

From
Thiru.K.Balasubramaniam, I.A.S.,
District Collector,
Cuddalore District,
Cuddalore.

To
The Registrar,
National Green Tribunal,
Southern Zone, Chennai-5.

Roc.C3/15107/2021 dt. 14.07.2021

Sir,

Sub: Cuddalore District- O.A.121/2021- Suo Motu case taken by
National Green Tribunal - Blast at Crimson Organics Private
Ltd, Cuddalore Case- Order Passed by National Green
Tribunal- Sending Interim Report- Reg

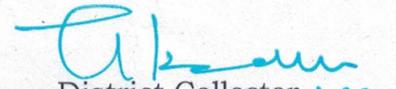
Ref: 1. National Green Tribunal, Southern Zone, Chennai Order in
O.A.No.121 of 2021 dated 04.06.21.
2. The Joint Committee report dated 08.07.2021.

I invite your kind attention to the reference cited.

With reference to the order 1st cited, a joint inspection was conducted by the
Joint Committee at Crimsun Organics Private Ltd on 08.07.2021. In this regard a
preliminary report is submitted herewith for kind perusal of the Hon'ble National
Green Tribunal.

Encl: As above

Yours faithfully


District Collector
Cuddalore.


From
Thiru.K.Balasubramaniam, I.A.S.,
District Collector,
Cuddalore District,
Cuddalore.

To
Standing Counsel for Government of
Tamilnadu ,
National Green Tribunal,
Southern Bench, Chennai..

Roc.C3/15107/2021 dt. 14.07.2021

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Sub: Cuddalore District- O.A.121/2021- Suo Motu case taken by
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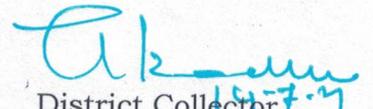
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I invite your kind attention to the reference cited.

With reference to the order 1st cited, a joint inspection was conducted by the
Joint Committee at Crimsun Organics Private Ltd on 08.07.2021. In this regard a
preliminary report is submitted herewith. I request you to file the same before the
National Green Tribunal (Southern Zone).

Encl: As above

Yours faithfully


District Collector
Cuddalore.

26/7
14/7/21

Preliminary Inspection Report of Joint Committee in the matter of OA No. 121 of 2021

(As per Hon'ble National Green Tribunal, Southern Zone, Chennai Oder dated: June
04, 2021)

1.0 Preamble

The Hon'ble National Green Tribunal, Southern Zone, Chennai has taken "Suo Motu" case on the basis of the newspaper report published in the Hindu Chennai Edition dated, 14.05.2021, under the caption "**Cuddalore pesticide unit blast kills 4**". In the matter of Application No. 121 of 2021 the National Green Tribunal, South zone, Chennai has passed an order dated 04th June, 2021 (**Annexure – 1**), constituted a Joint Committee and directed that ;

".....10. In order to ascertain the genuineness of the allegation and also the violations if any, committed by the 8th respondent/ Crimsun Organics Private Limited mention in the newspaper report and its impact, we feel it appropriate to appoint a joint committee comprising of (1) The District Collector, Cuddalore, (2) a Senior Officer from Tamil Nadu Pollution control Board (TNPCB) designated by its Chairman, (3) a Senior Officer from the Central Pollution Control Board (CPCB), Integrated Regional Office, Chennai (4) a Senior Officer from the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) deputed by its Chairman and the Managing Director to inspect the 8th respondent/Crimsun Organics Private Ltd., unit in question and submit a factual as well as action taken report, if there is any violation found.

12. The Committee is directed to ascertain as to

(i) whether the 8th respondent unit/M/s.Crimsun Organic Private Ltd., is having all necessary permissions and clearances for running their unit, including environmental clearance if any required,

(ii) whether the 8th respondent unit M/s.Crimsun Organic Private Limited is complying with all the imposed conditions in the clearances and the permission granted,

(iii) If there is any deficiency for providing safety measures against the conditions imposed whether it is the cause for the accident,

(iv) whether any environmental damage has been caused on account of the incident, if so assess the environmental damage caused and the environmental compensation to be

13. The committee is also directed to ascertain the general precautions taken by the industries and the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) in the complex to avoid such incidents and regulatory mechanism to ascertain the number of units that are strictly adhering to the permissions granted and if not, what is the nature of action taken by the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) against such erring industries.

14. The committee is also directed to ascertain as to

a. whether any unauthorized discharge of untreated trade effluents/sewage is being done by any of the industries and

b. whether necessary pollution control mechanism has been provided to curb air pollution likely to be caused on account of the poisonous gas emission being emitted from the units or any,

c. If there is any deficiency found, what is the nature of action taken and what are all the steps to be taken to improve the system to protect environment.

16. The Committee is directed to submit the report in this regard to this Tribunal on or before 16.07.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of image PDF along with necessary hardcopies to be produced as per rules.

The Individual respondents were also directed to file their reports before the Hon'ble NGT(SZ) in the above case.

2.0 Constitution of Committee

In Compliance to Hon'ble NGT order, the Committee was constituted comprising of following members;

1. Thiru. K. Balasubramaniam, District Collector, Cuddalore.
2. Mrs. H.D. Varalaxmi, Sc. E & Regional Director, CPCB, Chennai.
3. Thiru K. Elankumaran, Joint Chief Environmental Engineer, TNPCB (M) Trichy.
4. Thiru A. Balu, Assistant General Manager, SIPCOT, Chennai.

3.0 Committee Meeting and Field Visit

Upon the constitution of the committee, a meeting was conducted on 08.07.2021 at Collectorate Office headed by the District Collector, Cuddalore. Along with Committee members following officers from different department also participated in the meeting and also accompanied the Committee during field visit;

1. Thiru. R. Ravichandran, Joint Director, DISH, Cuddalore.
2. Mrs. R. Thamizhselvi, Project officer, SIPCOT, Cuddalore.
3. Thiru R. Seralathan, District Environmental Engineer, TNPCB, Cuddalore.

During the meeting, District Collector briefed the Hon'ble NGT order and discussed the tasks to be completed in compliance of the order. CPCB member explained the details of information's obtained from the line department and field work required to be carried out by the committee to address the issues raised by the Hon'ble NGT.

3.1 Field visit by Joint Committee

As per the orders of the Hon'ble National Green tribunal (SZ), the Joint Committee has inspected the unit on 08.07.2021 in the presence of Thiru.A.Paranitharan, General Manager of the industry. The Committee has inspected the distillation vessel in which the accident has occurred.

The General Manager has explained the cause of the accident and about the response action taken during that time, to the Joint Committee. It was informed that the accident was occurred due to a mild blast in distillation kettle R-108 followed by minor fire and fumes on the second floor of the production block of the industry. The accident resulted in death of four persons and mild injuries to 2 persons and 10 numbers had inhalation impact. The main cause of death and injury/inhalation of fumes from reactor (distillation kettle) due to sudden blast-opening of the manhole of distillation kettle R-108, with a resultant fire and splash of fluid and subsequent inhalation of gases/fumes.

The Committee has also inspected the Air Pollution Control measures attached to the

The Committee has also inspected the steam production boiler, the effluent treatment systems including mechanical evaporator installed for achieving the zero discharge of effluent. There is no discharge of Treated / untreated Trade effluent inside/outside the premises of the industry. The committee has also inspected the storage of the Hazardous waste generated from the industry in the protected shed before disposal of the waste to the respective disposal facility.

4.0 SIPCOT Industrial Complex Cuddalore:-

The SIPCOT Industrial Complex, Cuddalore was established during the year 1984. The Industrial complex has phase-I and phase-II where Textile processing, Pharmaceuticals, Dye, Chemicals, Pesticides and miscellaneous industries are located. The SIPCOT Industrial Complex, Cuddalore is located along the Cuddalore – Chidambaram High ways (NH 45-A). SIPCOT Phase-I has a total extent of 518.79 acres and SIPCOT Phase-II has a total extent of 190.52 acres. The total area of SIPCOT Industrial Complex Cuddalore is 709.31 Acres (Phase I & Phase II).

As per the GO.No: 1730 Dated: 24.07.1974 The SIPCOT Industrial Estate is classified as Special and Hazardous Industrial use zone.

4.2 Set up of M/s Crimsun Organics Private Limited in SIPCOT

SIPCOT has allotted Plot No. C-10/1.40 acres of land to M/s. Crimsun Organics Pvt. Ltd in Phase – I, vide allotment order dated on 13.01.2017 and Modified Lease Deed was executed on 02.08.2017, vide Doc.No.2434/2017 & another 1 allotment order issued for Plot No. C-9/1.83 acre dated on 10.05.2018 and Modified Lease Deed was executed on 08.06.2018 vide Doc No.2077/2018. SIPCOT has allotted land for 99 years long lease basis only. Totally 3.23 acres allotted to M/s. Crimsun Organics Pvt. Ltd in SIPCOT Industrial complex.

The industry is a pesticide manufacturing unit which has obtained permissions from Directorate of Boiler, Department of Agriculture, Tamil Nadu Fire and Rescue Service Department, PESO, Tamil Nadu Pollution Control Board, Department of Industries Safety and Health and Ministry of Environment and Forest and Climate Change.

4.3 Cause of Accident as reported by Joint Director (DISH)

- 1.) In order to release sudden abrupt rise of pressure and heat in the reactor vessel above the required level of pressure and heat, for additional safety purpose, the safety valve had not been installed and not connected to Scrubber system to avoid gas release outside.
- 2.) If the leak occurred in between steam line to reactor vessel, in order to avoid steam leak, double valves had not been installed & in between the double valves, a bleeder valve had not been installed.
- 3.) In case of temperature rise above the required level in the reactor vessel, the arrangement for supply of cooling water in the steam line has not been made.
- 4.) Since the Acetamipride impurities are decomposing material, it should not store in the reactor vessel at large quantity. It should be drained to Drums. After draining the reactor vessel, the reactor vessel should be tested.

4.4 Permissions obtained by the Industry:

1. The unit has obtained permissions from SIPCOT, Department of Industrial Safety and Health, Tamil Nadu Pollution Control Board, Department of Fire and Rescue, PESO, Inspectorate of Boilers. The details of permissions granted and its validity are enclosed in **(Annexure – 2)**.
2. The Compliance status of the imposed conditions in the license/ consent issued to the industry is enclosed in **(Annexure –3)**.
3. As per the report of DISH the investigation was made by additional director of Industrial Safety & health, Trichy & Deputy Director of Industrial Safety & Health, Villupuram. Since, the intermediate products are aromatic compound and the process is amino process, it is covered under chemical works and Show Cause Notice given by Additional director of Industrial Safety & health, Trichy, under scheduled XVI and provisions. **(Annexure – 4)**.
4. The accident has occurred at 7.30 AM on 13.05.2021. The spillage of fluids and subsequent fire caused in the area was quenched by fire fighting personnel using

emissions of suspended particulate matters, and gases like NO_x, SO₂, CO, CO₂ as recorded in the Continuous Ambient Air Quality Monitoring Stations functioning at about 340 meters and 390 meters in the western side of the unit and about 495 meters in the northern side of the industry were retrieved for the period during the accident and observed that there is no significant rise in the levels of the gases and within the Ambient Air Quality Standards prescribed by the Board (**Annexure -5**). However the environmental damage will be worked out after obtaining the mass balance details of the chemicals present in the distillation vessel and the quantity of the spilled out fluids during the accident so as to assess the Environmental Compensation due to the accident.

5.0 PRAYER

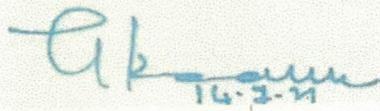
As per the orders of the Hon'ble National Green Tribunal (South Zone), the industry M/s. Crimsun Organics Pvt Ltd was inspected by the Joint Committee on 08.07.2021 in the presence of the representative of the industry. However, to address the issues raised by the Hon'ble NGT, following activities required to be carried out by line departments;

- i. The SIPCOT has collected the all necessary permissions obtained by the unit, the line departments required to be submit the compliance reports of condition imposed in the clearance and permission granted so that committee will cross verify the compliances.
- ii. The unit also asked to provide information on stock of raw material taken for process, expected Chemical reactions caused for blasting of manhole of reactor, material released to atmosphere to calculate the Environmental Damage cost.
- iii. To ascertain the general precautions taken by the industries in the complex to avoid such incidents and regulatory mechanism to ascertain the number of units that are strictly adhering to the permissions granted, the competent authority (DISH) have to check the safety and the health measures in every industry in SIPCOT which have chemical reaction processes in reaction/ distillation vessels. For this purpose each and every reaction/ distillation vessels functioning in every such industry has to be checked and verified for safety measures. Every such industry has many reactors for

different processes which have to be checked. This exercise will require at least one month for verification and documentation. The individual members of the committee also require time for submitting their individual report to the Hon'ble NGT.

Hence, It is humbly prayed that a time period of 8 weeks may kindly be given to this Joint committee as well as official respondents to file their reports before the Hon'ble NGT (SZ).

Signature of Committee Members :



14.3.21

Balasubramaniam,
District Collector, Cuddalore.



H.D. Varalaxmi
Sc. E & Regional Director
CPCB, Chennai.



K. Elankumaran (2/2021)

Joint Chief Environmental Engineer
TNPCB (M) Trichy.



A. Balu (2/2021)

Assistant General Manager,
SIPCOT, Chennai.

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Hence, It is humbly prayed that a time period of 8 weeks may kindly be given to this Joint committee as well as official respondents to file their reports before the Hon'ble NGT (SZ).

Signature of Committee Members :

K. Balasubramaniam,
District Collector, Cuddalore.

H.D. Varalaxmi
Sc. E & Regional Director
CPCB, Chennai.

K. Elankumaran
Joint Chief Environmental Engineer
TNPCC (M) Trichy.

A. Balu
Assistant General Manager,
SIPCOT, Chennai.

Corrected CopyItem No.03:

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Original Application No. 121 of 2021 (SZ)*(Through Video Conference)*

IN THE MATTER OF

Tribunal on its own motion-SUO MOTU Based on the
News items published in The Hindu Newspaper, Chennai Edition,
Dated: 14.05.2021, under the caption "Cuddalore pesticide
Unit blast kills 4"

... Applicant(s)

Versus

1. *The Chief Secretary to Govt. of Tamil Nadu,
Government Secretariat, Fort, St. George,
Chennai, Tamil Nadu- 600- 009.
2. The Secretary to Govt. of Tamil Nadu,
Department of Environment & Forests,
Govt. Secretariat, Fort St. George
Chennai, Tamil Nadu – 600- 009.
3. The Principal Secretary to Govt. of Tamil Nadu,
Industries Department,
Govt. Secretariat, Fort St. George
Chennai, Tamil Nadu – 600- 009.
4. Additional Chief Secretary to Govt. of Tamil Nadu,
Labour and Employment Department,
Govt. Secretariat. Fort St. George,
Chennai, Tamil Nadu – 600 009.

5. The Chairman,
Tamil Nadu Pollution Control Board,
No. 76, Anna Salai, Guindy,
Chennai, Tamil Nadu – 600 032.

6. Directorate of Boilers,
Rep. by its Director,
First Floor, (North Wing),
PWD Office Compound, Chepauk,
Chennai – 600 005.

7. The District Collector,
Cuddalore District,
First Floor, New Collectorate Building,
Collectorate Manjakuppam,
Cuddalore – 607 001.

8. Crimsun Organics Private Limited,
Rep. by its Managing Director,
C-9, E-10 & C-11, SIPCOT Industrial Complex,
Kudikadu, Cuddalore – 607 005.

...Respondent(s)

Date of hearing: 04.06.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. DR. K. SATYAGOPAL, EXPERT MEMBER

For Applicant(s): Suo Motu by Court

For Respondent(s): Dr. V. R. Thirunarayanan for R1 to R4, R6 & R7
Mr. C. Kasirajan through
Ms. D. Ashwini for R5

ORDER

1. The above case has been Suo Motu registered by this Tribunal on the basis of the newspaper report published in the Hindu Chennai Edition dated, 14.05.2021, under the caption "*Cuddalore pesticide unit blast kills 4*"

2. It is alleged in the newspaper report that there occurred a major industrial mishap, caused due to a blast in the 8th respondent unit/ Crimsun Organics Private Limited in Cuddalore in the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) area in Kudikadu. It is alleged in the newspaper report that in the blast 4 persons died and the several persons injured.

3. According to the newspaper report, this was caused on account of the lapses on the part of the industry in maintaining the safety measures and not complying with the conditions imposed in the clearance and the permissions granted.

4. Further on account of the fire broke out in the blast some environmental damage has been caused in that area.

5. The Pollution Control Board (TNPCB) had already issued an order for certain investigation to ascertain the reason for the incident.

6. It was also alleged in the newspaper report that an environmentalist in that area, informed that they were anticipating similar type of incidents in future as well and the people were having apprehension

of such disasters and though it was brought to the notice of the authorities, they have not taken any steps to redress the grievance or remove clear the apprehension of the people in that area.

7. It is also alleged that that there were frequent incidents of gas leak, effluent discharge etc., which contaminates the air as well as the groundwater.

8. On going through the allegations made in the newspaper report, we are satisfied that there arises a substantial question of environment which requires the interference of this Tribunal for resolving the same. So, the application is admitted.

9. When the matter came up for hearing for admission today through Video Conference, Dr. V.K. Thirunarayanan represented respondents 1 to 4 & 6 & 7 and Mr. C. Kasirajan through Ms. D. Ashwini represented 5th respondent.

10. Issue notice to the respondents by Registered post with acknowledgement due and also by e-mail, so as to ensure service on them along with the copy of the paper report and the gist of the Suo - Motu proceedings with full cause title immediately in order to ensure their service.

11. In order to ascertain the genuineness of the allegations and also the violations if any, committed by the 8th respondent/Crimsun Organics Private Limited mentioned in the newspaper report and its impact,

we feel it appropriate to appoint a joint committee comprising of (1) The District Collector, Cuddalore District, (2) a Senior Officer from Tamil Nadu Pollution Control Board (TNPCB) designated by its Chairman, (3) a Senior Officer from the Central Pollution Control Board (CPCB) Integrated Regional Office, Chennai (4) a Senior Officer from the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) deputed by its Chairman and the Managing Director to inspect the 8th respondent/Crimsun Organics Private Limited unit in question and submit a factual as well as action taken report, if there is any violation found.

12. The committee is directed to ascertain as to

- (i) whether the 8th respondent unit/ Crimsun Organics Private Limited is having all necessary permissions and clearances for running their unit, including environmental clearance if any required,
- (ii) whether the 8th respondent unit/ Crimsun Organics Private Limited is complying with all the imposed conditions in the clearance and the permission granted,
- (iii) If there is any deficiency for providing safety measures against the conditions imposed whether it is the cause for the accident,
- (iv) Whether any environmental damage has been caused on account of the incident, if so assess the environmental damage caused and

the environmental compensation to be recovered from them.

13. The committee is also directed to ascertain the general precautions taken by the industries and the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) in the complex to avoid such incidents and regulatory mechanism to ascertain the number of units that are strictly adhering to the permissions granted and if not, what is the nature of action taken by the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) against such erring industries.

14. The committee is also directed to ascertain as to

सत्यमेव जयते

- a. whether any unauthorised discharge of untreated trade effluents/sewage is being done by any of the industries and
- b. whether necessary pollution control mechanism has been provided to curb air pollution, likely to be caused on account of the poisonous gas emission being emitted from the units if any,
- c. If there is any deficiency found, what is the nature of action taken and what are all the steps to be taken to improve the system to protect environment.

15. The State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Industries will be the nodal agency for co-ordination and also for providing necessary logistics for this purpose.

16. The committee is directed to submit the report in this regard to this Tribunal on or before **16.07.2021** by e-filing in the form of searchable

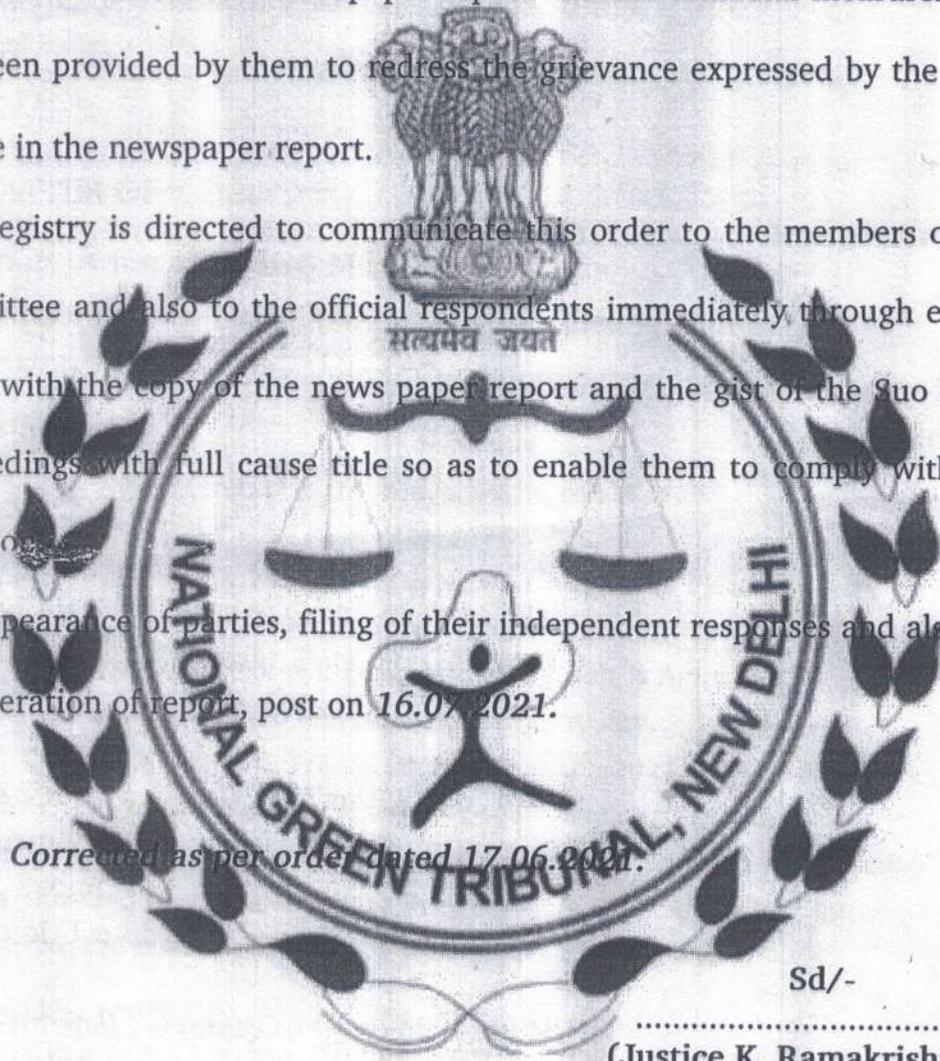
PDF/OCR Support PDF and not in the form of Image PDF along with necessary hardcopies to be produced as per rules.

17. Apart from filing the report, the official respondents are also directed to file their independent statements regarding the action taken and the remedial measures that has been provided by them to redress the grievance expressed by the local people in the newspaper report.

18. The Registry is directed to communicate this order to the members of the committee and also to the official respondents immediately through e-mail along with the copy of the news paper report and the gist of the Suo Motu proceedings with full cause title so as to enable them to comply with the direction.

19. For appearance of parties, filing of their independent responses and also for consideration of report, post on 16.07.2021.

(*) Corrected as per order dated 17.06.2021.



Sd/-

.....J.M.
(Justice K. Ramakrishnan)

Sd/-

.....E.M.
(Dr. K. Satyagopal)

O.A. No. 121 /2021
04.06.2021, Sr.

Annexure -7

| S. No. | Permissions obtained by unit | Document/ license no. | Issue date | Valid upto | Name of the Department |
|--------|-------------------------------|--|------------|--------------------------------|---|
| 1 | Boiler License | 92/SAC/2020-21 | 31.07.2020 | 30.07.2021 | Directorate of Boiler |
| 2 | Manufacturing License | 544/2018 | 22.01.2019 | Lifetime | Department of Agriculture |
| 3 | Fire NOC | L.Dis.No.10139/A2/2020 | 09.11.2020 | 08.11.2021 | Tamil Nadu Fire and Rescue Service Department |
| 4 | PESO License | P/SC/TN/15/2832 (P429874) | 24.07.2020 | 31.12.2029 | PESO |
| 5 | CTO | For Water - 2008130980190 For AIR - 2008230980190 | 19.08.2020 | 31.03.2021 | TNPCB |
| 6 | CTE | For AIR - 1901220649983 For Water - 1904224153001 | 25.04.2019 | 31.03.2026 | TNPCB |
| 7 | Hazardous Waste authorization | TS/TNPCB/F.0616CUD/HWA/ RL/CUD/2020 | 19.03.2020 | 18.03.2025 | TNPCB |
| 8 | Factory License | CDR01044 | 17.12.2020 | 31.12.2021 | DISH |
| 9 | EC Letter | IA-J-11011/207/2018-IA II(I) | 28.03.2019 | 5 Years From the date of Issue | MoEF&CC |
| 10 | Panchayath Running License | | | 31.03.2022 | |

**Compliance status of RCO conditions - M/s. CRIMSUN ORGANICS PRIVATE LIMITED,
SIPCOT Industrial Complex, KUDIKADU Village, Cuddalore Taluk and Cuddalore District**

| Sl. No | Condition | Compliance status |
|--------|---|---|
| | Water Act | |
| 1 | The unit shall manufacture only the products specified in the EC and shall not manufacture pesticide formulation products. | Complied. The industry is manufacturing products mentioned in the EC only. |
| 2 | The unit shall not carry out any establishment activities in the Plot No. C-9 and C-11 without obtaining consent of the Board. | No industrial activity is carried out in C- 9 and C-11 for the existing activity. |
| 3 | The unit shall operate and maintain the Sewage Treatment Plant efficiently and continuously and the treated sewage shall be utilised for green belt development/gardening after satisfying the standards prescribed by the Board. | Complied. The STP was in operation during the time of inspection. The ROA of the treated sewage samples collected from the industry reveals that the standards are within the prescribed standards. |
| 4 | The unit shall not dispose the treated sewage to CUSECS and shall utilize the same for gardening as specified in the EC. | Complied. The treated sewage is not disposed to CUSECS. The treated sewage is disposed for gardening. |
| 5 | The unit shall operate and maintain the ETP followed by RO plant, MEE continuously and efficiently so as to achieve the ZLD. | Complied. The industry has provided ETP followed by RO plant and MEE and the unit achieves Zero Liquid Discharge.. |
| 6 | The unit shall ensure that no discharge of untreated/treated trade effluent on land or into any water bodies either inside or outside the premises at any point of time. | Complied. No untreated / treated trade effluent is disposed outside the premises. |
| 7 | The unit shall analyze the treated sewage and treated trade effluent samples through TNPCB lab periodically and furnish ROA of the same. | Complied. Treated sewage and treated trade effluent are collected and analysed in the TNPCB Lab. The ROA, enclosed. |
| 8 | The unit shall ensure that the effluent parameters shall satisfy the standards prescribed as per CPCB/MoEF& CC Notification issued from time to time. | Complied. ROA enclosed. |
| 9 | The unit shall furnish the Electro Magnetic Flow Meter readings and online connectivity data to JCEE (M), Trichy and DEE, Cuddalore on monthly basis without fail. | Complied. The details are furnished regularly. |

| | | |
|----|---|--|
| 10 | The unit shall operate and maintain the EMFM provided at the inlet of STP and provide EMFM with computer recording arrangement at the outlet of STP. | Complied. The industry has provided EMFM at the inlet and outlet of STP with computer recording arrangement. |
| 11 | The unit shall maintain the electromagnetic flow meters at the inlet of ETP, inlet of the RO System, RO permeate line, RO reject line, Inlet of Multiple Effect Evaporator, Multiple Evaporator condensate line in good condition and transmit the quality data to WQW, TNPCB, Chennai at all the time. | Complied. EMFMs installed and maintained. The same are connected to WQW, TNPCB, Chennai. |
| 12 | The unit shall maintain CCTV camera for monitoring the ZLD system in good condition and transmit the quality data to WQW, TNPCB, Chennai at all the time. | Complied. CCTV camera provided and data transmitted to WQW, TNPCB, Chennai. |
| 13 | The unit shall dispose the non-hazardous waste then and there without any accumulation. | Complied. The non hazardous solid waste is disposed then and there and no accumulation found. |
| 14 | The unit shall ensure that the Hazardous wastes generated shall be properly disposed as per the Authorization obtained under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. | Complied. The hazardous waste is disposed as per the instruction. |
| 15 | The unit shall dispose the hazardous wastes to the authorized facilities then & there before 90 days as per the conditions stipulated in the authorization issued under the provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016. | Assure to comply at all times. |
| 16 | The unit shall apply for Authorization for proper disposal of Hazardous waste under Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016 under category 28(Schedule-I) for disposal of 28.4 - off specification products and 28.5 - Date – expired products if any. | Complied. The industry has obtained Authorisation under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 vide Board's Proc. dated 19.03.2020 with validity for five years. |
| 17 | The unit shall ensure proper disposal of discarded/date expired medicines and not to dispose discarded/date expired medicines in the | Assure to comply. |

| | | |
|----|---|--|
| | lake or any other water bodies or any lands. | |
| 18 | The unit shall maintain Form - 3 for the generation of hazardous wastes and shall file annual return in Form - 4 to the Board. The unit shall maintain the hazardous waste display board in front of the unit clearly updating the same regularly as mandated by the Hon'ble Supreme Court Order dated 14.10.2003. | Complied. The industry has furnished annual returns for the year 2019-2020. |
| 19 | The unit shall not use 'use and throwaway plastics' such as plastic sheets used for food wrapping, spreading on dining table etc., plastic plates, plastic coated tea cups, plastic tumbler, water pouches and packets, plastic straw, plastic carry bag and plastic flags irrespective of thickness, within the industry premises. Instead it shall encourage use of eco friendly alternative such as banana leaf, arecanut palm plate, stainless steel, glass, porcelain plates/cups, cloth bag, Jute bag etc., | Generally Complied With. |
| 20 | The unit shall continue to develop adequate green belt with thick canopy within the premises, so as to attenuate air and noise pollution furnish the exact green belt area ear marked/developed as per norms in the unit premises and furnish photographs along with latitude and longitude co-ordinates. | The total land area available for the project is 18051.03 sqm. The industry has developed green belt in an area of about 6300 m ² with about 750 trees. |
| 21 | The unit shall liable to pay the consent fee and shall remit the difference in amount in case of any revision of consent fee by the Government. | Assured to comply. |
| 22 | The unit shall submit Environmental Statement for every financial year ending the 31st March in Form -V as per the Rule 14 of the Environment (Protection) Rules, 1986. | Complied. The industry has furnished environmental statement for the year 2019-2020. |
| 23 | The unit shall explore possibilities of reducing water consumption in process and also provide rain water harvesting facilities in the unit and practice water conservation measures. | Complied. The industry has provided rain water harvesting system for the buildings. |
| 24 | The operation of the unit shall not attract complaints from public. | Complied. No complaints received against the operation of the industry. |

| | | |
|----------------|--|---|
| 25 | The unit shall dispose the distillation residue to some other beneficial users/to explore some other better option instead of disposing it to cement industries if the calorific value of hazardous waste is found less. | Complied. The unit has disposed the Hazardous waste to cement industries as per the hazardous waste authorisation. |
| 26 | The unit shall comply with the EIA Notification 2006 in case of any proposed changes from consented conditions. | Complied with. |
| Air Act | | |
| 1 | The unit shall operate and maintain the air pollution control measures efficiently and continuously so as to satisfy the AAQ /Emission standards prescribed by the Board at all times. | Complied. The Air Pollution Control Measures are continuously operated. The ROA of the AAQ survey reveals that the standards are met with. |
| 2 | The unit shall conduct AAQ/Emission/ANL survey through Board lab and furnish report to the Board within a month. | Complied. Advanced Environmental Lab of TNPCB has conducted the AAQ survey. |
| 3 | The unit shall adhere to the National Ambient Air Quality / Stack / Ambient Noise Level standards prescribed by the Board from time to time. | Complied. The ROA of the AAQ/SM/ANL survey conducted in the industry reveals that all the parameters are within the prescribed standards. |
| 4 | The unit shall provide Online continuous Ambient Air Quality Monitoring stations at required places for TVOC, PM10, PM2.5, SO2, NOx, and provide proper data to Care Air Centre, TNPCB, Guindy all the times. | Assured to comply. The unit authority informed that continuous ambient air quality monitoring station will be installed before commissioning of the expansion activity. |
| 5 | The unit shall provide adsorption systems like Activated carbon/Charcoal to prevent /control odour from the reactors. | Complied. The industry has provided adsorption system. |
| 6 | The unit shall operate and maintain the safety measures and APC measures provided to arrest the fugitive emissions during its loading, unloading and handling operations. | Complied. The unit has provided safety measures at solvent storage tanks for charging of chemicals, loading of solid raw materials and product unloading. |
| 7 | The unit shall ensure the connectivity of Stack emission Online Monitoring system provided for PM attached to the stack of boiler and provide proper data to CPCB server. | Complied. The unit has provided continuous online monitoring system for the parameter PM for the Boiler stack and connected the same to the CPCB. |
| 8 | The unit shall connect the Stack emission Online | Complied. The unit has provided continuous |

| | | |
|----|--|--|
| | Monitoring system provided for PM attached to the stack of boiler with TNPCB server and provide proper data at all the time. | online monitoring system for the parameter PM for the Boiler stack and connected the same to the Care Air Centre, TNPCB, Chennai. |
| 9 | The unit shall maintain stack monitoring facility as per Emission Regulation Part-3 (ERP-3) norms for all the stacks attached with emissions sources. | Complied. The unit is maintaining stack monitoring facility as per Emission Regulation Part 3 norms. |
| 10 | The unit shall ensure that the port hole and ladder facility is safe to carry out monitoring. In place of monkey ladder, spiral type/scaffold ladder shall be provided to ensure safety of monitoring personnel. | Complied. The unit has provided port hole facilities as per ERP 3 norms and cage ladder. |
| 11 | The unit shall continue to develop adequate green belt with thick canopy within the premises, so as to attenuate air and noise pollution furnish the exact green belt area ear marked/developed as per norms in the unit premises and furnish photographs along with latitude and longitude coordinates. | Complied. The total land area available for the project is 18051.03 sqm, The unit has developed green belt in an area of 6303 m ² , which is 34.9 % of total land area. |
| 12 | The unit shall liable to pay the consent fee and shall remit the difference in amount in case of any revision of consent fee by the Government. | Assured to comply. |
| 13 | The unit shall submit Environmental Statement for every financial year ending the 31st March in Form -V as per the Rule 14 of the Environment (Protection) Rules, 1986. | Complied. The industry has furnished environmental statement for the year 2019-2020. |
| 14 | The operation of the unit shall not attract complaints from public. | Complied. |
| 15 | The unit shall comply with the EIA Notification 2006 in case of any proposed changes from consented conditions. | Assured to comply. |

REPORT OF JOINT INSPECTION ON 29.06.2021 AT CRIMSON ORGANICS PVT LIMITED, SIPCOT, CUDDALORE.

In the Office of the Directorate of Industrial Safety & Health, the following permission are given

1. Factory Licence
2. Plan Approval
3. Registration Certificate for Contract Labours

Factory Licence (Annexure – I)and Registration Certificate (Annexure – III)for Contract Labour have no specific Safety conditions.

The above mentioned Crimson Organics Private Limited has been inspected jointly on 29.06.2021 along with Project Officer Sipcot, Cuddalore, District Environment Engineer, Cuddalore (DEE-TNPCB)

The Plan approved by the Director of Industrial Safety & Health, Chennai, has the following conditions and they are verified. (Annexure – II)

The report is given as below.

| SL.No. | Conditions | Conditions Complied or not | Details |
|--------|--|--|---|
| 1. | The Plan and application form should indicate the details of purpose of Plan have been sent for approval. | Instruction only | Instruction given to submit in future for additional changes. |
| 2. | The application form should specify the Horse Power (HP) specification of the existing and additional machineries in column 8. | Instruction | Instruction given to submit in future for additional changes. |
| 3. | Land layout should be drawn on a plan scale of 1: 400. Mention the details of the surrounding places. The border of the premises should be differentiated in the color of the pick. Color code index details should be given | Instruction | Instruction given to submit in future for additional changes. |
| 4. | Existing and additional buildings should be differentiated in color on the land layout. | Instruction | Instruction given to submit in future for additional changes. |
| 5. | Details and capacity of the material stored in the UG (Under Ground) Solvent tank should be given. Fire control monitors and fire hydrant should be installed around the solvent tank | The unit has got PESO approval and constructed under ground tank for storage of Class A&B (Toluene, Methanol & n-Hexane). Currently, UG (Under Ground) tanks are not yet commissioned and tanks are empty. fire fighting | Instruction given to submit in future for additional changes. |

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| | | equipments are provided in the UG(Under Ground) tank area. 2. Capacity – 30 Kilo litres Complied. | |
| 6. | Specify the material and capacity to be stored in the tank provided in the main plant | 1.Caustic lye - 17 KL 2. EDC- 30 KL 3.Recovery IPA - 15KL 4. Light Diesel Oil- 30KL | Instruction given to submit in future for additional changes. |
| 7. | Additional equipments should be shown in contrast to the color on the layout. | Instruction | Instruction given to submit in future for additional changes. |
| 8. | Toilets, which are indicated to be built in addition to the land layout, should be given in detail. | Complied | Instruction to submit if construction made |
| 9. | Mess room, Cloak room, Washing Facilities To be set. | The unit has provided mess room for both regular employees and contract workers Cloak room and wash room facilities. | - |
| 10. | The conditions stated in this office letter number Nimu / 29673/2005 dated 12.08.2005 should be corrected | Not applicable | Previous factory Plan |
| 11. | Adequate fire hydrant - firefighting arrangements should be set up for industrial areas as per the provisions of Rule 61 (11) (13) (15) of Tamil Nadu Factories and their Layout layout should be sent. | Complied | provided sufficient fire fighting equipment's covered in all the area of the plant and the unit has got Fire License from Fire Department. |
| 12. | All structures must be constructed as defined in the National Building Code 2005. | Not applicable to DISH | Fire and Rescue Department purview. |
| 13. | The size of the door windows should be not less than 1.2 X 2 meters and 0.31% 152 meters respectively. | Complied | No doors, Slabs provided instead of windows. |
| 14. | All doors and windows must be fitted so that they are fully open to the outside | Complied | - |
| 15. | The base of all windows should not be more than 1 meter from the floor. | Complied | - |
| 16. | At least 60 cm distance between machineries. Let the gap be longer | Complied | - |
| 17. | The factory license must be applied for amendment if required. | Instruction | - |
| 18. | Must provide building Stability certification. | Not complied | Instruction given to submit in the Office of |

| | | | JDISH |
|-----|---|------------------------|--|
| 19. | All buildings must be certified as having been constructed in accordance with the approved drawings | Instruction | -- |
| 20. | All traps must be certified to be set up in accordance with approved drawings. | Complied | Certificate submitted. |
| 21. | Approval so far is for approval only for the installation / installation of buildings and machinery under factory law. | Instruction | Certificate submitted. |
| 22. | Wastewater and all effluents discharged from the factory should be certified as being disposed of as per the norms of the Tamil Nadu Environmental Pollution Control Board. | Not applicable to DISH | Approved by TNPCB purview. |
| 23. | All safety measures of Sec 87 rule 95 Schedule-XXIX the Tamil Nadu Factories Rules 1950 must be complied with | Not Complied. | In Crimson Organic Private Limited, accident occurred on 13.05.2021 investigation made by additional director of Industrial Safety & health, Trichy & Deputy Director of Industrial Safety & Health, Villupuram. Since, the intermediate products are aromatic compound and the process is amino process, it is covered under chemical works and Show Cause Notice given by Additional director of Industrial Safety & health, Trichy , under scheduled XVI and provisions are attached. |

Enclosures :-

1. Factory License.
2. Plan Approval Letter.
3. Registration Certificate for Contract Labour
4. Certificate by Management
5. Layout of Fire Fighting equipment's.
6. Provisions of Schedule XVI.

**Joint Director,
Industrial Safety and Health,
Cuddalore.**

பதிவுச்சல் - ஒப்புதல் அட்டையுடன்

தொழிலக பாதுகாப்பு மற்றும் சுகாதார இணை இயக்குநர் அலுவலகம்,கடலூர்

அனுப்புநர்

திரு.ரெ.சித்தார்த்தன்,எம்.இ.,எம்.பி.ஏ.,டி.ஐ.எச்.,
இணை இயக்குநர்,
தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம்,
கடலூர்.(மு.கூ.பொ)

பெறுநர்

Thiru.S.RameshPrabakaran,(Age53)
S/O. Senthur Pandiyan,
Occupier
Crimsun Organics Private Limited,
Plot No.C9, C10,C11,
Sipcot Industrial Complex,
Kudikadu Village,
Cuddalore District.

எண்.இ/ 908/2021 நாள்:08.06.2021

ஐயா,

பொருள்:

தொழிற்சாலைகள் சட்டம் 1948 (திருத்திய சட்டம் 1987) மற்றும் தமிழ்நாடு தொழிற்சாலைகள் விதிகள் 1950 மற்றும் இதர சட்டங்கள் - விபத்து - கடலூர் மாவட்டம், குடிக்காடு கிராமம், சிப்காட் வளாகம், பிளாட் எண்.C9, C10,C11, என்ற முகவரியில் அமைந்துள்ள கிரிம்சன் ஆர்கானிக்ஸ் பிரைவேட் லிமிடெட் (பதிவு எண் CDR01044) என்ற இத்தொழிற்சாலையில் 13.05.2021 அன்று ஏற்பட்ட விபத்தில்4 தொழிலாளர்கள் மரணமடைந்தது மற்றும் 12 தொழிலாளர்கள் காயமடைந்தது - சில வழிவகைகளின் முரண்பாடுகள் காணப்பட்டது - உரிமையாளர் (Occupier) திரு.S.ரமேஷ் பிரபாகரன் என்பவருக்கு காரணம் கோரும் அறிக்கை - வழங்கப்படுகிறது.

பார்வை: இவ்வலுவலக ஆய்வறிக்கை சுருக்கம் CDR 01044 நாள்: 08.06.2021

தங்கள் தொழிற்சாலையை 13.05.2021 அன்று ஆய்வு செய்த போது கண்டறியப்பட்ட சட்ட மீறுதல்கள் மற்றும் பார்வையில் காணும் இவ்வலுவலக ஆய்வறிக்கை இனங்கள் 01 முதல் 09 வரையிலான காரணங்களுக்கு இக்கடிதம் கிடைத்த 7 நாட்களுக்குள் எழுத்து மூலம் பதில் அனுப்பும்படி கேட்டுக் கொள்ளப்படுகிறது. குறிப்பிட்ட கால வரைக்குள் தங்களிடமிருந்து மறுமொழி ஏதும் வரப்பெறவில்லை எனில் அளிக்கத்தக்க காரணம் / விளக்கம் ஏதும் இல்லை எனக் கருதி மேற்கொண்டு அறிவிப்பு ஏதுமின்றி தங்கள் மீது தக்க நடவடிக்கை தொடரப்படும் என்று தெரிவிக்கப்படுகிறது.

இணை இயக்குநர்,
தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம்,
கடலூர்.(மு.கூ.பொ)

நகல் பணிநிறுத்தப்படுகிறது

இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம், சென்னை.
கூடுதல் இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம்,திருச்சிராப்பள்ளி.

நகல்

துணை இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம் கடலூர்.

Station: TNPCB_OFFICE_CUDDALORE
 Date: 13-05-2021 06:01 To 13-05-2021 09:00
 Report Type: Station Report
 Reporting Average: 1 Minutes
 Aggregation Type: Average

Tamilnadu State Pollution Control Board
 Ambient Air Quality Monitoring Station cuddalore, Cuddalore



| Date/Time | SO2 (µg/m3) | NOX (µg/m3) | NH3 (µg/m3) | PM10 (µg/m3) | PM2.5 (µg/m3) | CO (µg/m3) | O3 (µg/m3) | Wind Direction (°) |
|------------------|-------------|-------------|-------------|--------------|---------------|------------|------------|--------------------|
| 13-05-2021 06:01 | 6.77 | 20.7 | 17.7 | 27 | 12 | 0.21 | 3.73 | 191.4 |
| 13-05-2021 06:02 | 6.74 | 20.82 | 17.67 | 27 | 12 | 0.21 | 1.98 | 130.28 |
| 13-05-2021 06:03 | 6.45 | 21.13 | 17.65 | 27 | 12 | 0.21 | 0.43 | 174.46 |
| 13-05-2021 06:04 | 6.36 | 21.65 | 17.6 | 27 | 12 | 0.22 | 0.05 | 311.36 |
| 13-05-2021 06:05 | 6.44 | 21.77 | 17.67 | 27 | 12 | 0.22 | 0.27 | 321.63 |
| 13-05-2021 06:06 | 6.39 | 21.88 | 17.7 | 27 | 12 | 0.22 | 0.52 | 193.8 |
| 13-05-2021 06:07 | 6.46 | 21.93 | 17.7 | 27 | 12 | 0.22 | 1.45 | 182.08 |
| 13-05-2021 06:08 | 6.75 | 22.05 | 17.7 | 27 | 12 | 0.2 | 2.68 | 232.44 |
| 13-05-2021 06:09 | 6.87 | 22.2 | 17.7 | 27 | 12 | 0.2 | 4.27 | 248.3 |
| 13-05-2021 06:10 | 6.57 | 22.63 | 17.55 | 27 | 12 | 0.21 | 5.12 | 237.84 |
| 13-05-2021 06:11 | 6.6 | 23.13 | 17.5 | 27 | 14.5 | 0.23 | 5.17 | 236 |
| 13-05-2021 06:12 | 6.5 | 23.6 | 17.5 | 27 | 17 | 0.23 | 2.75 | 276.79 |
| 13-05-2021 06:13 | 6.18 | 23.93 | 17.5 | 27 | 17 | 0.23 | 0.95 | 61.26 |
| 13-05-2021 06:14 | 6.13 | 24.22 | 17.48 | 27 | 17 | 0.22 | 0.03 | 275.65 |
| 13-05-2021 06:15 | 6.21 | 24.53 | 17.4 | 27.67 | 17 | 0.22 | 0.48 | 180.5 |
| 13-05-2021 06:16 | 6.27 | 24.72 | 17.4 | 29 | 17 | 0.22 | 0.54 | 217.58 |
| 13-05-2021 06:17 | 6.32 | 24.82 | 17.38 | 29 | 17 | 0.22 | 2.45 | 132.8 |
| 13-05-2021 06:18 | 6.39 | 24.9 | 17.38 | 29 | 17 | 0.2 | 4.58 | 165.65 |
| 13-05-2021 06:19 | 6.47 | 25.07 | 17.4 | 29 | 17 | 0.2 | 5.98 | 68.85 |
| 13-05-2021 06:20 | 6.67 | 25.1 | 17.4 | 29 | 17 | 0.21 | 5.72 | 166.84 |
| 13-05-2021 06:21 | 6.61 | 25.2 | 17.4 | 29 | 17 | 0.21 | 4.5 | 109.96 |
| 13-05-2021 06:22 | 6.45 | 25.12 | 17.47 | 29 | 17 | 0.2 | 3.43 | 94.47 |
| 13-05-2021 06:23 | 6.49 | 24.87 | 17.55 | 29 | 17 | 0.19 | 3.6 | 148.87 |
| 13-05-2021 06:24 | 6.59 | 24.5 | 17.6 | 29 | 17 | 0.19 | 4.28 | 213.31 |
| 13-05-2021 06:25 | 6.49 | 24.3 | 17.57 | 29 | 17 | 0.18 | 4.13 | 225.56 |

| | | | | | | | | |
|------------------|------|-------|-------|----|----|------|-------|--------|
| 13-05-2021 06:26 | 6.79 | 24.1 | 17.57 | 29 | 17 | 0.18 | 4.6 | 213.39 |
| 13-05-2021 06:27 | 6.82 | 23.98 | 17.6 | 29 | 17 | 0.18 | 5.38 | 201.94 |
| 13-05-2021 06:28 | 6.73 | 23.9 | 17.6 | 29 | 17 | 0.17 | 7.02 | 242.14 |
| 13-05-2021 06:29 | 6.62 | 23.68 | 17.62 | 29 | 17 | 0.15 | 10.02 | 200 |
| 13-05-2021 06:30 | 6.34 | 23.33 | 17.75 | 29 | 17 | 0.15 | 10.52 | 247.96 |
| 13-05-2021 06:31 | 6.27 | 22.7 | 17.87 | 29 | 17 | 0.15 | 10.83 | 141.74 |
| 13-05-2021 06:32 | 6.37 | 22.27 | 17.9 | 29 | 17 | 0.15 | 10.18 | 244.15 |
| 13-05-2021 06:33 | 6.45 | 21.83 | 17.9 | 29 | 17 | 0.15 | 6.73 | 250.48 |
| 13-05-2021 06:34 | 6.48 | 21.37 | 17.9 | 29 | 17 | 0.15 | 3.73 | 165.93 |
| 13-05-2021 06:35 | 6.5 | 21.1 | 17.98 | 29 | 17 | 0.15 | 2.28 | 162.53 |
| 13-05-2021 06:36 | 6.63 | 20.92 | 17.95 | 29 | 17 | 0.17 | 2.57 | 171.86 |
| 13-05-2021 06:37 | 6.52 | 20.97 | 17.9 | 29 | 17 | 0.19 | 2.5 | 166.9 |
| 13-05-2021 06:38 | 6.33 | 20.85 | 17.9 | 29 | 17 | 0.2 | 1.8 | 144.14 |
| 13-05-2021 06:39 | 6.36 | 20.7 | 17.8 | 29 | 17 | 0.2 | 2.57 | 118.5 |
| 13-05-2021 06:40 | 6.43 | 20.6 | 17.8 | 29 | 17 | 0.2 | 3.17 | 193.57 |
| 13-05-2021 06:41 | 6.16 | 20.52 | 17.78 | 29 | 17 | 0.2 | 3.7 | 279.71 |
| 13-05-2021 06:42 | 6.4 | 20.5 | 17.7 | 29 | 17 | 0.21 | 7.07 | 196.26 |
| 13-05-2021 06:43 | 6.5 | 20.57 | 17.7 | 29 | 17 | 0.21 | 9.73 | 113.19 |
| 13-05-2021 06:44 | 6.49 | 20.6 | 17.7 | 29 | 17 | 0.2 | 10.13 | 181.46 |
| 13-05-2021 06:45 | 6.38 | 20.6 | 17.7 | 29 | 17 | 0.18 | 9.4 | 159.39 |
| 13-05-2021 06:46 | 6.39 | 20.73 | 17.6 | 29 | 17 | 0.18 | 5.98 | 148.31 |
| 13-05-2021 06:47 | 6.03 | 20.8 | 17.5 | 29 | 17 | 0.19 | 4.02 | 230.42 |
| 13-05-2021 06:48 | 5.93 | 20.8 | 17.5 | 29 | 17 | 0.18 | 4.05 | 226.3 |
| 13-05-2021 06:49 | 6.05 | 20.96 | 17.5 | 29 | 17 | 0.19 | 4.26 | 225.68 |
| 13-05-2021 06:50 | 6.08 | 21.03 | 17.4 | 29 | 17 | 0.21 | 4.5 | 242.95 |
| 13-05-2021 06:51 | 6.13 | 21.17 | 17.33 | 29 | 17 | 0.23 | 4.8 | 205.88 |
| 13-05-2021 06:52 | 6.25 | 21.2 | 17.3 | 29 | 17 | 0.22 | 5.18 | 188.29 |
| 13-05-2021 06:53 | 6.12 | 21.2 | 17.3 | 29 | 17 | 0.2 | 4.95 | 225.98 |
| 13-05-2021 06:54 | 6.13 | 21.28 | 17.22 | 29 | 17 | 0.2 | 5.72 | 155.66 |
| 13-05-2021 06:55 | 6.1 | 21.37 | 17.23 | 29 | 17 | 0.2 | 7.37 | 127.28 |
| 13-05-2021 06:56 | 5.99 | 21.33 | 17.23 | 29 | 17 | 0.21 | 9.53 | 153.16 |
| 13-05-2021 06:57 | 6.17 | 21.22 | 17.3 | 29 | 17 | 0.2 | 11.02 | 215.47 |
| 13-05-2021 06:58 | 6.26 | 21.2 | 17.3 | 29 | 17 | 0.2 | 9.98 | 241.35 |
| 13-05-2021 06:59 | 6.33 | 21.1 | 17.33 | 29 | 17 | 0.2 | 9.45 | 242.12 |
| 13-05-2021 07:00 | 6.65 | 20.95 | 17.4 | 29 | 17 | 0.19 | 9.6 | 163.74 |

| | | | | | | | | |
|------------------|------|-------|-------|-------|----|------|-------|--------|
| 13-05-2021 07:01 | 6.83 | 20.8 | 17.4 | 29 | 17 | 0.18 | 8.87 | 148.32 |
| 13-05-2021 07:02 | 6.77 | 20.53 | 17.4 | 29 | 17 | 0.18 | 7.73 | 235.68 |
| 13-05-2021 07:03 | 6.81 | 20.3 | 17.4 | 29 | 17 | 0.18 | 9.78 | 184.3 |
| 13-05-2021 07:04 | 6.88 | 20.18 | 17.4 | 29 | 17 | 0.17 | 14.73 | 124.87 |
| 13-05-2021 07:05 | 6.79 | 20.07 | 17.4 | 29 | 17 | 0.17 | 18.6 | 209.33 |
| 13-05-2021 07:06 | 6.92 | 19.87 | 17.48 | 29 | 17 | 0.17 | 22.8 | 191.35 |
| 13-05-2021 07:07 | 7.11 | 19.77 | 17.53 | 29 | 17 | 0.17 | 25.38 | 195.96 |
| 13-05-2021 07:08 | 7.08 | 19.55 | 17.6 | 29 | 17 | 0.17 | 23.23 | 233.76 |
| 13-05-2021 07:09 | 7.21 | 19.32 | 17.72 | 29 | 17 | 0.17 | 18.23 | 100.35 |
| 13-05-2021 07:10 | 7.26 | 19.03 | 17.82 | 29 | 17 | 0.18 | 15.83 | 145.83 |
| 13-05-2021 07:11 | 7.18 | 18.82 | 17.9 | 29 | 19 | 0.18 | 14.27 | 124.71 |
| 13-05-2021 07:12 | 6.98 | 18.6 | 18 | 29 | 21 | 0.17 | 12.07 | 148.72 |
| 13-05-2021 07:13 | 7.04 | 18.5 | 18 | 29 | 21 | 0.16 | 9.38 | 134.54 |
| 13-05-2021 07:14 | 6.99 | 18.3 | 18 | 29 | 21 | 0.16 | 7.5 | 134.85 |
| 13-05-2021 07:15 | 6.85 | 18.08 | 18.08 | 28.83 | 21 | 0.16 | 5.1 | 238.9 |
| 13-05-2021 07:16 | 6.89 | 17.87 | 18.15 | 28 | 21 | 0.16 | 2.85 | 206.12 |
| 13-05-2021 07:17 | 6.79 | 17.7 | 18.2 | 28 | 21 | 0.16 | 4.17 | 238.36 |
| 13-05-2021 07:18 | 6.69 | 17.53 | 18.2 | 28 | 21 | 0.16 | 6.48 | 184.53 |
| 13-05-2021 07:19 | 6.84 | 17.38 | 18.3 | 28 | 21 | 0.15 | 8.27 | 225.71 |
| 13-05-2021 07:20 | 6.93 | 17.25 | 18.32 | 28 | 21 | 0.15 | 7.85 | 152.69 |
| 13-05-2021 07:21 | 7.04 | 17.2 | 18.4 | 28 | 21 | 0.16 | 5.03 | 127.61 |
| 13-05-2021 07:22 | 7.1 | 17.2 | 18.4 | 28 | 21 | 0.17 | 5.45 | 204.07 |
| 13-05-2021 07:23 | 7.11 | 17.2 | 18.43 | 28 | 21 | 0.17 | 9.62 | 108.77 |
| 13-05-2021 07:24 | 7.31 | 17.22 | 18.5 | 28 | 21 | 0.17 | 11.88 | 93.1 |
| 13-05-2021 07:25 | 7.42 | 17.38 | 18.55 | 28 | 21 | 0.17 | 10.42 | 93.07 |
| 13-05-2021 07:26 | 7.51 | 17.4 | 18.6 | 28 | 21 | 0.17 | 6.2 | 148.6 |
| 13-05-2021 07:27 | 7.83 | 17.32 | 18.6 | 28 | 21 | 0.16 | 3.47 | 80.81 |
| 13-05-2021 07:28 | 7.77 | 17.43 | 18.6 | 28 | 21 | 0.16 | 4.1 | 227.24 |
| 13-05-2021 07:29 | 7.71 | 17.4 | 18.5 | 28 | 21 | 0.15 | 6.92 | 166.12 |
| 13-05-2021 07:30 | 7.56 | 17.4 | 18.55 | 28 | 21 | 0.14 | 12.68 | 110.83 |
| 13-05-2021 07:31 | 7.65 | 17.4 | 18.53 | 28 | 21 | 0.15 | 13.7 | 136.62 |
| 13-05-2021 07:32 | 7.69 | 17.57 | 18.5 | 28 | 21 | 0.16 | 12.77 | 190.94 |
| 13-05-2021 07:33 | 7.81 | 17.57 | 18.57 | 28 | 21 | 0.16 | 10.02 | 243.54 |
| 13-05-2021 07:34 | 8.03 | 17.6 | 18.62 | 28 | 21 | 0.16 | 9.85 | 235.16 |
| 13-05-2021 07:35 | 8.18 | 17.6 | 18.65 | 28 | 21 | 0.14 | 12.27 | 215.77 |

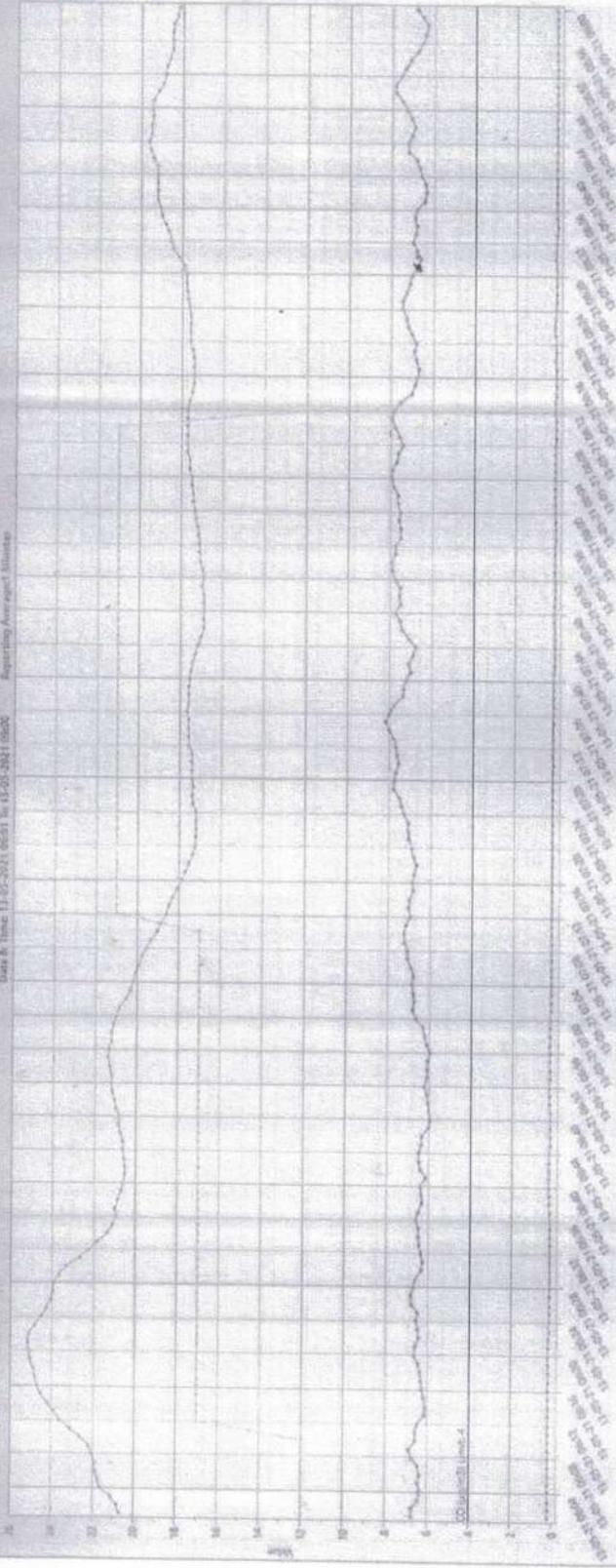
| | | | | | | | | |
|------------------|------|-------|-------|----|----|------|-------|--------|
| 13-05-2021 07:36 | 8.05 | 17.68 | 18.6 | 28 | 21 | 0.14 | 16.05 | 163.54 |
| 13-05-2021 07:37 | 7.81 | 17.6 | 18.7 | 28 | 21 | 0.14 | 17.23 | 280.52 |
| 13-05-2021 07:38 | 7.39 | 17.6 | 18.7 | 28 | 21 | 0.14 | 18.65 | 220.42 |
| 13-05-2021 07:39 | 7.37 | 17.6 | 18.72 | 28 | 21 | 0.14 | 20.25 | 257.01 |
| 13-05-2021 07:40 | 7.24 | 17.55 | 18.8 | 28 | 21 | 0.13 | 15.7 | 205.69 |
| 13-05-2021 07:41 | 7.02 | 17.5 | 18.8 | 28 | 21 | 0.12 | 10.65 | 141.44 |
| 13-05-2021 07:42 | 7.12 | 17.4 | 18.87 | 28 | 21 | 0.1 | 8.55 | 128.19 |
| 13-05-2021 07:43 | 6.93 | 17.3 | 18.9 | 28 | 21 | 0.1 | 6.07 | 297.68 |
| 13-05-2021 07:44 | 6.79 | 17.18 | 18.9 | 28 | 21 | 0.1 | 17.15 | 276.07 |
| 13-05-2021 07:45 | 7.14 | 17.02 | 18.9 | 28 | 21 | 0.1 | 26.78 | 225.1 |
| 13-05-2021 07:46 | 7.43 | 16.92 | 18.9 | 28 | 21 | 0.1 | 25.63 | 195.95 |
| 13-05-2021 07:47 | 7.54 | 16.9 | 18.9 | 28 | 21 | 0.11 | 20.23 | 171.52 |
| 13-05-2021 07:48 | 7.76 | 16.9 | 18.9 | 28 | 21 | 0.12 | 18.07 | 118.55 |
| 13-05-2021 07:49 | 7.54 | 16.9 | 18.9 | 28 | 21 | 0.11 | 15.6 | 193.27 |
| 13-05-2021 07:50 | 7.57 | 16.9 | 18.85 | 28 | 21 | 0.09 | 13.17 | 228.33 |
| 13-05-2021 07:51 | 7.54 | 16.98 | 18.8 | 28 | 21 | 0.08 | 16.62 | 191.16 |
| 13-05-2021 07:52 | 7.78 | 16.9 | 18.83 | 28 | 21 | 0.1 | 24.27 | 228.43 |
| 13-05-2021 07:53 | 7.91 | 16.97 | 18.8 | 28 | 21 | 0.11 | 28.88 | 256.69 |
| 13-05-2021 07:54 | 7.93 | 17.08 | 18.77 | 28 | 21 | 0.11 | 29 | 172.42 |
| 13-05-2021 07:55 | 7.78 | 17.1 | 18.7 | 28 | 21 | 0.11 | 23.02 | 125.74 |
| 13-05-2021 07:56 | 7.76 | 17.1 | 18.7 | 28 | 21 | 0.11 | 11.92 | 320.57 |
| 13-05-2021 07:57 | 7.5 | 17.15 | 18.63 | 28 | 21 | 0.09 | 11.8 | 182.2 |
| 13-05-2021 07:58 | 7.5 | 17.2 | 18.6 | 28 | 21 | 0.09 | 17.8 | 183.2 |
| 13-05-2021 07:59 | 7.6 | 17.3 | 18.5 | 28 | 21 | 0.09 | 19.22 | 88.03 |
| 13-05-2021 08:00 | 7.54 | 17.32 | 18.45 | 28 | 21 | 0.11 | 19.62 | 69.93 |
| 13-05-2021 08:01 | 7.66 | 17.4 | 18.4 | 28 | 21 | 0.11 | 21.62 | 202.39 |
| 13-05-2021 08:02 | 7.66 | 17.42 | 18.4 | 28 | 21 | 0.11 | 21.9 | 125.14 |
| 13-05-2021 08:03 | 7.86 | 17.5 | 18.33 | 28 | 21 | 0.12 | 24.68 | 208.38 |
| 13-05-2021 08:04 | 7.95 | 17.52 | 18.3 | 28 | 21 | 0.12 | 24.63 | 84.24 |
| 13-05-2021 08:05 | 7.95 | 17.6 | 18.3 | 28 | 21 | 0.11 | 17.12 | 90.29 |
| 13-05-2021 08:06 | 7.74 | 17.6 | 18.3 | 28 | 21 | 0.11 | 12.32 | 125.77 |
| 13-05-2021 08:07 | 7.64 | 17.7 | 18.3 | 28 | 21 | 0.11 | 12.08 | 205.35 |
| 13-05-2021 08:08 | 7.42 | 17.7 | 18.2 | 28 | 21 | 0.11 | 17.45 | 108.84 |
| 13-05-2021 08:09 | 7.6 | 17.7 | 18.12 | 28 | 21 | 0.1 | 28.37 | 193.31 |
| 13-05-2021 08:10 | 7.83 | 17.7 | 18.1 | 28 | 21 | 0.1 | 35.55 | 181 |

| | | | | | | | | |
|------------------|------|-------|-------|-------|------|------|-------|--------|
| 13-05-2021 08:11 | 7.97 | 17.7 | 18.1 | 28 | 16.5 | 0.09 | 36.28 | 246.51 |
| 13-05-2021 08:12 | 7.89 | 17.7 | 18.1 | 28 | 12 | 0.11 | 31.18 | 189.02 |
| 13-05-2021 08:13 | 7.56 | 17.63 | 18.1 | 28 | 12 | 0.12 | 20.05 | 301.18 |
| 13-05-2021 08:14 | 7.05 | 17.52 | 18.1 | 28 | 12 | 0.1 | 14.65 | 262.84 |
| 13-05-2021 08:15 | 6.9 | 17.42 | 18.1 | 29.17 | 12 | 0.08 | 19.93 | 249.89 |
| 13-05-2021 08:16 | 6.77 | 17.4 | 18.07 | 35 | 12 | 0.08 | 23.5 | 235.44 |
| 13-05-2021 08:17 | 6.71 | 17.4 | 18 | 35 | 12 | 0.1 | 25.63 | 117.45 |
| 13-05-2021 08:18 | 6.85 | 17.4 | 18 | 35 | 12 | 0.11 | 25.95 | 264.04 |
| 13-05-2021 08:19 | 6.92 | 17.5 | 18 | 35 | 12 | 0.1 | 25.3 | 207.15 |
| 13-05-2021 08:20 | 6.85 | 17.6 | 18 | 35 | 12 | 0.11 | 25.43 | 289.7 |
| 13-05-2021 08:21 | 7.06 | 17.6 | 18 | 35 | 12 | 0.13 | 20.95 | 221.78 |
| 13-05-2021 08:22 | 7.22 | 17.6 | 18 | 35 | 12 | 0.15 | 17.17 | 132.2 |
| 13-05-2021 08:23 | 7.32 | 17.6 | 17.97 | 35 | 12 | 0.13 | 21.52 | 148.42 |
| 13-05-2021 08:24 | 7.46 | 17.63 | 17.9 | 35 | 12 | 0.11 | 23.62 | 120.31 |
| 13-05-2021 08:25 | 7.48 | 17.7 | 17.85 | 35 | 12 | 0.1 | 23.5 | 249.14 |
| 13-05-2021 08:26 | 7.32 | 17.75 | 17.8 | 35 | 12 | 0.1 | 25.27 | 170.64 |
| 13-05-2021 08:27 | 7.15 | 17.8 | 17.8 | 35 | 12 | 0.09 | 32.28 | 219.81 |
| 13-05-2021 08:28 | 7.06 | 17.8 | 17.88 | 35 | 12 | 0.09 | 33.35 | 167.48 |
| 13-05-2021 08:29 | 6.78 | 17.9 | 17.9 | 35 | 12 | 0.09 | 26.67 | 230.73 |
| 13-05-2021 08:30 | 6.64 | 18.17 | 17.9 | 35 | 12 | 0.11 | 22.65 | 266.87 |
| 13-05-2021 08:31 | 6.82 | 18.42 | 17.9 | 35 | 12 | 0.11 | 25.87 | 161.11 |
| 13-05-2021 08:32 | 7.01 | 18.55 | 17.85 | 35 | 12 | 0.09 | 28.65 | 162.23 |
| 13-05-2021 08:33 | 6.89 | 18.63 | 17.8 | 35 | 12 | 0.07 | 28.45 | 118.56 |
| 13-05-2021 08:34 | 6.85 | 18.83 | 17.83 | 35 | 12 | 0.06 | 31.9 | 116.62 |
| 13-05-2021 08:35 | 6.94 | 19 | 17.9 | 35 | 12 | 0.07 | 37.04 | 194 |
| 13-05-2021 08:36 | 6.82 | 19.07 | 17.9 | 35 | 12 | 0.09 | 40.85 | 208.92 |
| 13-05-2021 08:37 | 6.45 | 19.2 | 17.93 | 35 | 12 | 0.09 | 42.7 | 210.83 |
| 13-05-2021 08:38 | 6.39 | 19.2 | 18.05 | 35 | 12 | 0.1 | 35.4 | 310.45 |
| 13-05-2021 08:39 | 6.4 | 19.2 | 18.1 | 35 | 12 | 0.1 | 31.2 | 211.17 |
| 13-05-2021 08:40 | 6.58 | 19.2 | 18.1 | 35 | 12 | 0.09 | 29.77 | 268.79 |
| 13-05-2021 08:41 | 6.72 | 19.2 | 18.1 | 35 | 12 | 0.08 | 30.02 | 278.59 |
| 13-05-2021 08:42 | 6.86 | 19.4 | 18.1 | 35 | 12 | 0.07 | 33.45 | 168 |
| 13-05-2021 08:43 | 7.24 | 19.55 | 18.1 | 35 | 12 | 0.07 | 32.02 | 158.55 |
| 13-05-2021 08:44 | 7.22 | 19.58 | 18.22 | 35 | 12 | 0.08 | 32.25 | 116.36 |
| 13-05-2021 08:45 | 7.06 | 19.5 | 18.35 | 35 | 12 | 0.09 | 30.68 | 64.84 |

THPCS OFFICE JOURNAL

Report Type: Station Report
Date & Time: 12-02-2011 06:01 To 12-02-2011 06:05
Reporting Agency: Bunkers

- 0.10ppm/3
- 0.10ppm/2
- 0.10ppm/1
- 0.10ppm/0
- 0.10ppm/0 Level 00
- 0.10ppm/0 Level 01
- 0.10ppm/0 Level 02
- 0.10ppm/0 Level 03
- 0.10ppm/0 Level 04



0.10ppm/0 Level 00

00:00 00:05 00:10 00:15 00:20 00:25 00:30 00:35 00:40 00:45 00:50 00:55 01:00 01:05 01:10 01:15 01:20 01:25 01:30 01:35 01:40 01:45 01:50 01:55 02:00 02:05 02:10 02:15 02:20 02:25 02:30 02:35 02:40 02:45 02:50 02:55 03:00 03:05 03:10 03:15 03:20 03:25 03:30 03:35 03:40 03:45 03:50 03:55 04:00 04:05 04:10 04:15 04:20 04:25 04:30 04:35 04:40 04:45 04:50 04:55 05:00 05:05 05:10 05:15 05:20 05:25 05:30 05:35 05:40 05:45 05:50 05:55 06:00

Online Pollution Monitoring Portal

Site Name: M/s Solara Active Pharma Sciences Limited (Formerly Known as M/s Strides Shasun Limited)
 From Date: 2021/05/12 To Date: 2021/05/14

Report Name: Custom Report

Report Created by Strides on 2021-07-07 17:18:05

| Sl No. | Time | ADMIN-PM10_U | ADMIN-PM2.5_U | ADMIN-SO2_U | ADMIN-O3_U | ADMIN-NOx_U |
|--------|------------------|--------------|---------------|-------------|------------|-------------|
| 1 | 2021-05-12 00:00 | 9.74 | 6.47 | 49.06 | 9.9 | 17.66 |
| 2 | 2021-05-12 00:15 | 10 | 6.28 | 48.72 | 11.22 | 11.68 |
| 3 | 2021-05-12 00:30 | 10 | 6.28 | 48.93 | 10.42 | 11.02 |
| 4 | 2021-05-12 00:45 | 10 | 6.28 | 48.72 | 9.2 | 22.55* |
| 5 | 2021-05-12 01:00 | 14.69 | 8.15 | 48.72 | 9.28 | 21.97 |
| 6 | 2021-05-12 01:15 | 15.34 | 14.18 | 48.91 | 10.47 | 10.16 |
| 7 | 2021-05-12 01:30 | 15.38 | 14.06 | 49 | 10.08 | 12.93 |
| 8 | 2021-05-12 01:45 | 15.43 | 14.18 | 49 | 8.92 | 23.67 |
| 9 | 2021-05-12 02:00 | 8.87 | 12.95 | 49.46 | 9.91 | 14.36 |
| 10 | 2021-05-12 02:15 | 8 | 8.65 | 49.12 | 10.16 | 14.44 |
| 11 | 2021-05-12 02:30 | 8 | 8.61 | 49.12 | 9.77 | 11.1 |
| 12 | 2021-05-12 02:45 | 8.04 | 8.74 | 48.93 | 9.58 | 19.52 |
| 13 | 2021-05-12 03:00 | 8 | 8.58 | 48.34 | 9.74 | 15.24 |
| 14 | 2021-05-12 03:15 | 8 | 8.34 | 49.61 | 9.39 | 15.66 |
| 15 | 2021-05-12 03:30 | 8 | 8.37 | 49.82 | 9.62 | 13.28 |
| 16 | 2021-05-12 03:45 | 8 | 8.41 | 49.56 | 8.88 | 21.95 |
| 17 | 2021-05-12 04:00 | 10.65 | 8.12 | 49.52 | 9.97 | 14.7 |
| 18 | 2021-05-12 04:15 | 11 | 7.28 | 49.14 | 9.72 | 13.17 |
| 19 | 2021-05-12 04:30 | 11 | 7.28 | 48.98 | 9.95 | 11.22 |
| 20 | 2021-05-12 04:45 | 11 | 7.28 | 48.7 | 9.91 | 10.18 |
| 21 | 2021-05-12 05:00 | 9.01 | 6.51 | 48.87 | 10.14 | 10.31 |
| 22 | 2021-05-12 05:15 | 8.75 | 4.02 | 48.85 | 9.99 | 11.15 |
| 23 | 2021-05-12 05:30 | 8.75 | 4.02 | 48.43 | 9.73 | 16.23 |
| 24 | 2021-05-12 05:45 | 8.75 | 4.02 | 48.81 | 9.36 | 22.36 |
| 25 | 2021-05-12 06:00 | 9.99 | 5.2 | 49.12 | 9.49 | 18.27 |
| 26 | 2021-05-12 06:15 | 10.25 | 9.04 | 48.87 | 10.01 | 16.04 |

| | | | | | | |
|----|------------------|-------|-------|-------|-------|-------|
| 27 | 2021-05-12 06:30 | 10.25 | 9.04 | 48.39 | 10.02 | 14.09 |
| 28 | 2021-05-12 06:45 | 10.28 | 9.04 | 48.24 | 9.45 | 19.2 |
| 29 | 2021-05-12 07:00 | 6.28 | 8.86 | 47.57 | 10 | 15.62 |
| 30 | 2021-05-12 07:15 | 5.6 | 8.29 | 47.86 | 9.86 | 19.48 |
| 31 | 2021-05-12 07:30 | 5.66 | 8.28 | 48.47 | 10 | 18.38 |
| 32 | 2021-05-12 07:45 | 5.71 | 8.28 | 48.34 | 9.76 | 15.42 |
| 33 | 2021-05-12 08:00 | 15.03 | 9.16 | 48.83 | 9.82 | 26.34 |
| 34 | 2021-05-12 08:15 | 16.43 | 11.8 | 48.34 | 10.51 | 19.19 |
| 35 | 2021-05-12 08:30 | 16.41 | 11.8 | 48.3 | 10.67 | 15.39 |
| 36 | 2021-05-12 08:45 | 16.44 | 11.8 | 47.93 | 10.37 | 17.08 |
| 37 | 2021-05-12 09:00 | 17.81 | 12.24 | 47.86 | 10.68 | 9.3 |
| 38 | 2021-05-12 09:15 | 17.87 | 13.6 | 47.44 | 13.01 | 8.93 |
| 39 | 2021-05-12 09:30 | 18 | 13.55 | 48.34 | 11.7 | 8.78 |
| 40 | 2021-05-12 09:45 | 17.97 | 13.55 | 48.05 | 11.19 | 9 |
| 41 | 2021-05-12 10:00 | 9.63 | 13.96 | 48.55 | 11.38 | 8.92 |
| 42 | 2021-05-12 10:15 | 8.5 | 15.31 | 48.56 | 11.95 | 7.53 |
| 43 | 2021-05-12 10:30 | 8.65 | 15.31 | 48.04 | 12.13 | 7.32 |
| 44 | 2021-05-12 10:45 | 8.66 | 15.31 | 47.71 | 12.25 | 6.55 |
| 45 | 2021-05-12 11:00 | 19.33 | 15.39 | 47.64 | 12.88 | 5.71 |
| 46 | 2021-05-12 11:15 | 21.5 | 15.81 | 47.26 | 12.73 | 7.97 |
| 47 | 2021-05-12 11:30 | 21.5 | 15.81 | 47.16 | 13.28 | 9.16 |
| 48 | 2021-05-12 11:45 | 21.5 | 15.81 | 47.4 | 13.49 | 8.07 |
| 49 | 2021-05-12 12:00 | 3.06 | 15.69 | 47.61 | 13.18 | 11.42 |
| 50 | 2021-05-12 12:15 | 1.25 | 15.31 | 47.33 | 13.9 | 8.24 |
| 51 | 2021-05-12 12:30 | NA | NA | NA | NA | NA |
| 52 | 2021-05-12 12:45 | NA | NA | NA | NA | NA |
| 53 | 2021-05-12 13:00 | NA | NA | NA | NA | NA |
| 54 | 2021-05-12 13:15 | NA | NA | NA | NA | NA |
| 55 | 2021-05-12 13:30 | NA | NA | NA | NA | NA |
| 56 | 2021-05-12 13:45 | NA | NA | NA | NA | NA |
| 57 | 2021-05-12 14:00 | NA | NA | NA | NA | NA |
| 58 | 2021-05-12 14:15 | NA | NA | NA | NA | NA |
| 59 | 2021-05-12 14:30 | NA | NA | NA | NA | NA |

| | | | | | | | | | |
|----|------------------|----|----|----|-------|-------|-------|----|----|
| 60 | 2021-05-12 14:45 | NA | NA | NA | NA | NA | NA | NA | NA |
| 61 | 2021-05-12 15:00 | NA | NA | NA | NA | NA | NA | NA | NA |
| 62 | 2021-05-12 15:15 | NA | NA | NA | NA | NA | NA | NA | NA |
| 63 | 2021-05-12 15:30 | NA | NA | NA | NA | NA | NA | NA | NA |
| 64 | 2021-05-12 15:45 | NA | NA | NA | NA | NA | NA | NA | NA |
| 65 | 2021-05-12 16:00 | NA | NA | NA | NA | NA | NA | NA | NA |
| 66 | 2021-05-12 16:15 | NA | NA | NA | NA | NA | NA | NA | NA |
| 67 | 2021-05-12 16:30 | NA | NA | NA | NA | NA | NA | NA | NA |
| 68 | 2021-05-12 16:45 | NA | NA | NA | NA | NA | NA | NA | NA |
| 69 | 2021-05-12 17:00 | NA | NA | NA | NA | NA | NA | NA | NA |
| 70 | 2021-05-12 17:15 | NA | NA | NA | NA | NA | NA | NA | NA |
| 71 | 2021-05-12 17:30 | NA | NA | NA | NA | NA | NA | NA | NA |
| 72 | 2021-05-12 17:45 | NA | NA | NA | NA | NA | NA | NA | NA |
| 73 | 2021-05-12 18:00 | NA | NA | NA | 47.4 | 11.76 | 11.17 | NA | NA |
| 74 | 2021-05-12 18:15 | NA | NA | NA | 47.64 | 13 | 9.6 | NA | NA |
| 75 | 2021-05-12 18:30 | NA | NA | NA | 47.46 | 11.88 | 10.49 | NA | NA |
| 76 | 2021-05-12 18:45 | NA | NA | NA | 47.81 | 11.31 | 9.76 | NA | NA |
| 77 | 2021-05-12 19:00 | NA | NA | NA | 47.85 | 12.13 | 6.71 | NA | NA |
| 78 | 2021-05-12 19:15 | NA | NA | NA | 47.28 | 12.81 | 4.36 | NA | NA |
| 79 | 2021-05-12 19:30 | NA | NA | NA | 47.78 | 11.65 | 4.57 | NA | NA |
| 80 | 2021-05-12 19:45 | NA | NA | NA | 47.07 | 10.7 | 5.71 | NA | NA |
| 81 | 2021-05-12 20:00 | NA | NA | NA | 47.58 | 10.05 | 13.2 | NA | NA |
| 82 | 2021-05-12 20:15 | NA | NA | NA | 48.8 | 10.55 | 14.56 | NA | NA |
| 83 | 2021-05-12 20:30 | NA | NA | NA | 48.89 | 9.74 | 15.82 | NA | NA |
| 84 | 2021-05-12 20:45 | NA | NA | NA | 48.72 | 9.85 | 10.6 | NA | NA |
| 85 | 2021-05-12 21:00 | NA | NA | NA | 48.53 | 9.98 | 13.61 | NA | NA |
| 86 | 2021-05-12 21:15 | NA | NA | NA | 48.98 | 10.26 | 12.07 | NA | NA |
| 87 | 2021-05-12 21:30 | NA | NA | NA | 49.32 | 9.88 | 15.14 | NA | NA |
| 88 | 2021-05-12 21:45 | NA | NA | NA | 48.86 | 9.74 | 9.68 | NA | NA |
| 89 | 2021-05-12 22:00 | NA | NA | NA | 48.64 | 10.23 | 8.73 | NA | NA |
| 90 | 2021-05-12 22:15 | NA | NA | NA | 48.86 | 10.73 | 9.41 | NA | NA |
| 91 | 2021-05-12 22:30 | NA | NA | NA | 49.28 | 9.91 | 17.25 | NA | NA |
| 92 | 2021-05-12 22:45 | NA | NA | NA | 48.61 | 9.51 | 11.65 | NA | NA |

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|-----|------------------|----|----|----|-------|-------|-------|
| 93 | 2021-05-12 23:00 | NA | NA | NA | 49.13 | 9.84 | 9.57 |
| 94 | 2021-05-12 23:15 | NA | NA | NA | 49.27 | 10.07 | 11.29 |
| 95 | 2021-05-12 23:30 | NA | NA | NA | 49.31 | 9.28 | 26.84 |
| 96 | 2021-05-12 23:45 | NA | NA | NA | 49.1 | 8.95 | 17.17 |
| 97 | 2021-05-13 00:00 | NA | NA | NA | 49.16 | 9.45 | 11.35 |
| 98 | 2021-05-13 00:15 | NA | NA | NA | 48.68 | 10.32 | 10.22 |
| 99 | 2021-05-13 00:30 | NA | NA | NA | 48.74 | 9.59 | 13.02 |
| 100 | 2021-05-13 00:45 | NA | NA | NA | 48.97 | 9 | 27.33 |
| 101 | 2021-05-13 01:00 | NA | NA | NA | 49.13 | 9.16 | 26.35 |
| 102 | 2021-05-13 01:15 | NA | NA | NA | 49.02 | 9.52 | 21.02 |
| 103 | 2021-05-13 01:30 | NA | NA | NA | 48.77 | 9.29 | 23.65 |
| 104 | 2021-05-13 01:45 | NA | NA | NA | 48.56 | 9.47 | 11.14 |
| 105 | 2021-05-13 02:00 | NA | NA | NA | 47.73 | 9.73 | 12.82 |
| 106 | 2021-05-13 02:15 | NA | NA | NA | 47.84 | 10.29 | 9.51 |
| 107 | 2021-05-13 02:30 | NA | NA | NA | 47.32 | 9.53 | 10.2 |
| 108 | 2021-05-13 02:45 | NA | NA | NA | 47.67 | 9.46 | 11.69 |
| 109 | 2021-05-13 03:00 | NA | NA | NA | 47.91 | 9.67 | 9.48 |
| 110 | 2021-05-13 03:15 | NA | NA | NA | 48 | 9.88 | 15.14 |
| 111 | 2021-05-13 03:30 | NA | NA | NA | 48.02 | 9.35 | 16.95 |
| 112 | 2021-05-13 03:45 | NA | NA | NA | 47.76 | 9.38 | 8.56 |
| 113 | 2021-05-13 04:00 | NA | NA | NA | 47.1 | 9.47 | 8.3 |
| 114 | 2021-05-13 04:15 | NA | NA | NA | 46.8 | 10.34 | 9.01 |
| 115 | 2021-05-13 04:30 | NA | NA | NA | 48.03 | 9.6 | 14.51 |
| 116 | 2021-05-13 04:45 | NA | NA | NA | 47.43 | 9.23 | 15.19 |
| 117 | 2021-05-13 05:00 | NA | NA | NA | 47.43 | 9.48 | 14.24 |
| 118 | 2021-05-13 05:15 | NA | NA | NA | 47.4 | 10.09 | 10.77 |
| 119 | 2021-05-13 05:30 | NA | NA | NA | 47.22 | 9.47 | 11.23 |
| 120 | 2021-05-13 05:45 | NA | NA | NA | 47.37 | 9.2 | 17.44 |
| 121 | 2021-05-13 06:00 | NA | NA | NA | 46.92 | 9.44 | 18.41 |
| 122 | 2021-05-13 06:15 | NA | NA | NA | 47.04 | 10.29 | 8.86 |
| 123 | 2021-05-13 06:30 | NA | NA | NA | 47.07 | 9.76 | 8.76 |
| 124 | 2021-05-13 06:45 | NA | NA | NA | 47.58 | 10.45 | 11.79 |
| 125 | 2021-05-13 07:00 | NA | NA | NA | 47.86 | 10.17 | 13.74 |

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| 126 | 2021-05-13 07:15 | NA | NA | 47.79 | 10.4 | 21.98 |
| 127 | 2021-05-13 07:30 | NA | NA | 47.67 | 9.94 | 18.69 |
| 128 | 2021-05-13 07:45 | NA | NA | 47.87 | 10.02 | 25.55 |
| 129 | 2021-05-13 08:00 | NA | NA | 47.7 | 10.25 | 12.32 |
| 130 | 2021-05-13 08:15 | NA | NA | 48.72 | 10.93 | 20.34 |
| 131 | 2021-05-13 08:30 | NA | NA | 48.89 | 10.94 | 13.83 |
| 132 | 2021-05-13 08:45 | NA | NA | 48.74 | 10.05 | 17.83 |
| 133 | 2021-05-13 09:00 | NA | NA | 48.33 | 10.81 | 9.68 |
| 134 | 2021-05-13 09:15 | NA | NA | 48.59 | 11.69 | 6.56 |
| 135 | 2021-05-13 09:30 | NA | NA | 48.45 | 12.43 | 6.24 |
| 136 | 2021-05-13 09:45 | NA | NA | 48.71 | 11.86 | 5.39 |
| 137 | 2021-05-13 10:00 | NA | NA | 47.91 | 11.99 | 5.04 |
| 138 | 2021-05-13 10:15 | NA | NA | 47.84 | 13.44 | 7.1 |
| 139 | 2021-05-13 10:30 | NA | NA | 47.81 | 12.71 | 4.82 |
| 140 | 2021-05-13 10:45 | NA | NA | 47.63 | 12.43 | 4.65 |
| 141 | 2021-05-13 11:00 | NA | NA | 47.23 | 13.44 | 4.99 |
| 142 | 2021-05-13 11:15 | NA | NA | 48.03 | 13.7 | 4.19 |
| 143 | 2021-05-13 11:30 | NA | NA | 48.85 | 13.89 | 4.1 |
| 144 | 2021-05-13 11:45 | NA | NA | 47.57 | 13.51 | 3.22 |
| 145 | 2021-05-13 12:00 | NA | NA | 47.29 | 13.92 | 4.49 |
| 146 | 2021-05-13 12:15 | NA | NA | 47.9 | 14.4 | 3.62 |
| 147 | 2021-05-13 12:30 | NA | NA | 48.41 | 14.48 | 4.25 |
| 148 | 2021-05-13 12:45 | NA | NA | 49.04 | 13.62 | 3.51 |
| 149 | 2021-05-13 13:00 | NA | NA | 48.24 | 13.23 | 3.44 |
| 150 | 2021-05-13 13:15 | NA | NA | 48.2 | 14.02 | 3.16 |
| 151 | 2021-05-13 13:30 | NA | NA | 47.86 | 14.54 | 3.31 |
| 152 | 2021-05-13 13:45 | NA | NA | 48.03 | 14.45 | 2.73 |
| 153 | 2021-05-13 14:00 | NA | NA | 48.28 | 14.4 | 2.65 |
| 154 | 2021-05-13 14:15 | NA | NA | 47.48 | 14.29 | 3.08 |
| 155 | 2021-05-13 14:30 | NA | NA | 48.37 | 13.99 | 2.74 |
| 156 | 2021-05-13 14:45 | NA | NA | 48.09 | 12.82 | 3.92 |
| 157 | 2021-05-13 15:00 | NA | NA | 47.74 | 14.35 | 3.11 |
| 158 | 2021-05-13 15:15 | NA | NA | 48.01 | 14.52 | 2.92 |

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| 93 | 2021-05-12 23:00 | NA | NA | NA | 49.13 | 9.84 | 9.57 |
| 94 | 2021-05-12 23:15 | NA | NA | NA | 49.27 | 10.07 | 11.29 |
| 95 | 2021-05-12 23:30 | NA | NA | NA | 49.31 | 9.28 | 26.84 |
| 96 | 2021-05-12 23:45 | NA | NA | NA | 49.1 | 8.95 | 17.17 |
| 97 | 2021-05-13 00:00 | NA | NA | NA | 49.16 | 9.45 | 11.35 |
| 98 | 2021-05-13 00:15 | NA | NA | NA | 48.68 | 10.32 | 10.22 |
| 99 | 2021-05-13 00:30 | NA | NA | NA | 48.74 | 9.59 | 13.02 |
| 100 | 2021-05-13 00:45 | NA | NA | NA | 48.97 | 9 | 27.33 |
| 101 | 2021-05-13 01:00 | NA | NA | NA | 49.13 | 9.16 | 26.35 |
| 102 | 2021-05-13 01:15 | NA | NA | NA | 49.02 | 9.52 | 21.02 |
| 103 | 2021-05-13 01:30 | NA | NA | NA | 48.77 | 9.29 | 23.65 |
| 104 | 2021-05-13 01:45 | NA | NA | NA | 48.56 | 9.47 | 11.14 |
| 105 | 2021-05-13 02:00 | NA | NA | NA | 47.73 | 9.73 | 12.82 |
| 106 | 2021-05-13 02:15 | NA | NA | NA | 47.84 | 10.29 | 9.51 |
| 107 | 2021-05-13 02:30 | NA | NA | NA | 47.32 | 9.53 | 10.2 |
| 108 | 2021-05-13 02:45 | NA | NA | NA | 47.67 | 9.46 | 11.69 |
| 109 | 2021-05-13 03:00 | NA | NA | NA | 47.91 | 9.67 | 9.48 |
| 110 | 2021-05-13 03:15 | NA | NA | NA | 48 | 9.88 | 15.14 |
| 111 | 2021-05-13 03:30 | NA | NA | NA | 48.02 | 9.35 | 16.95 |
| 112 | 2021-05-13 03:45 | NA | NA | NA | 47.76 | 9.38 | 8.56 |
| 113 | 2021-05-13 04:00 | NA | NA | NA | 47.1 | 9.47 | 8.3 |
| 114 | 2021-05-13 04:15 | NA | NA | NA | 46.8 | 10.34 | 9.01 |
| 115 | 2021-05-13 04:30 | NA | NA | NA | 48.03 | 9.6 | 14.51 |
| 116 | 2021-05-13 04:45 | NA | NA | NA | 47.43 | 9.23 | 15.19 |
| 117 | 2021-05-13 05:00 | NA | NA | NA | 47.43 | 9.48 | 14.24 |
| 118 | 2021-05-13 05:15 | NA | NA | NA | 47.4 | 10.09 | 10.77 |
| 119 | 2021-05-13 05:30 | NA | NA | NA | 47.22 | 9.47 | 11.23 |
| 120 | 2021-05-13 05:45 | NA | NA | NA | 47.37 | 9.2 | 17.44 |
| 121 | 2021-05-13 06:00 | NA | NA | NA | 46.92 | 9.44 | 18.41 |
| 122 | 2021-05-13 06:15 | NA | NA | NA | 47.04 | 10.29 | 8.86 |
| 123 | 2021-05-13 06:30 | NA | NA | NA | 47.07 | 9.76 | 8.76 |
| 124 | 2021-05-13 06:45 | NA | NA | NA | 47.58 | 10.45 | 11.79 |
| 125 | 2021-05-13 07:00 | NA | NA | NA | 47.86 | 10.17 | 13.74 |

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| 159 | 2021-05-13 15:30 | NA | NA | 48.11 | 14.22 | 2.98 |
| 160 | 2021-05-13 15:45 | NA | NA | 47.99 | 13.42 | 3.2 |
| 161 | 2021-05-13 16:00 | NA | NA | 48.41 | 14.21 | 2.67 |
| 162 | 2021-05-13 16:15 | NA | NA | 48.28 | 16.15 | 2.75 |
| 163 | 2021-05-13 16:30 | NA | NA | 49 | 14.09 | 3.17 |
| 164 | 2021-05-13 16:45 | NA | NA | 48.77 | 12.94 | 3.49 |
| 165 | 2021-05-13 17:00 | NA | NA | 48.23 | 13.94 | 4.21 |
| 166 | 2021-05-13 17:15 | NA | NA | 48.2 | 14.78 | 3.23 |
| 167 | 2021-05-13 17:30 | NA | NA | 48.07 | 14.71 | 3.26 |
| 168 | 2021-05-13 17:45 | NA | NA | 48.43 | 13.24 | 3.82 |
| 169 | 2021-05-13 18:00 | NA | NA | 48.3 | 14.21 | 5.66 |
| 170 | 2021-05-13 18:15 | NA | NA | 48.93 | 15.74 | 3.21 |
| 171 | 2021-05-13 18:30 | NA | NA | 49.1 | 14.08 | 3.4 |
| 172 | 2021-05-13 18:45 | NA | NA | 49.1 | 12.86 | 3.87 |
| 173 | 2021-05-13 19:00 | NA | NA | 48.95 | 13.32 | 5.63 |
| 174 | 2021-05-13 19:15 | NA | NA | 48.28 | 14.85 | 6.07 |
| 175 | 2021-05-13 19:30 | NA | NA | 48.13 | 13.36 | 7.21 |
| 176 | 2021-05-13 19:45 | NA | NA | 48.79 | 11.31 | 8.5 |
| 177 | 2021-05-13 20:00 | NA | NA | 48.45 | 12.39 | 9.54 |
| 178 | 2021-05-13 20:15 | NA | NA | 47.97 | 13.54 | 8.98 |
| 179 | 2021-05-13 20:30 | NA | NA | 48.2 | 13.02 | 5.67 |
| 180 | 2021-05-13 20:45 | NA | NA | 48.28 | 12.03 | 6 |
| 181 | 2021-05-13 21:00 | NA | NA | 48.77 | 12.66 | 7.3 |
| 182 | 2021-05-13 21:15 | NA | NA | 48.41 | 12.75 | 7.11 |
| 183 | 2021-05-13 21:30 | NA | NA | 47.95 | 12 | 8.53 |
| 184 | 2021-05-13 21:45 | NA | NA | 47.69 | 11.02 | 7.97 |
| 185 | 2021-05-13 22:00 | NA | NA | 47.9 | 12.15 | 7.11 |
| 186 | 2021-05-13 22:15 | NA | NA | 47.74 | 12.65 | 11.4 |
| 187 | 2021-05-13 22:30 | NA | NA | 47.88 | 12.26 | 9.61 |
| 188 | 2021-05-13 22:45 | NA | NA | 48.53 | 10.97 | 6.14 |
| 189 | 2021-05-13 23:00 | NA | NA | 48.35 | 11.46 | 6.76 |
| 190 | 2021-05-13 23:15 | NA | NA | 48.24 | 11.86 | 6.48 |
| 191 | 2021-05-13 23:30 | NA | NA | 48.45 | 10.68 | 6.71 |

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| 192 | 2021-05-13 23:45 | NA | NA | 48.62 | 10.18 | 6.56 |
| 193 | 2021-05-14 00:00 | NA | NA | NA | NA | NA |
| 194 | Prescribed Standards | 0 - 100 | 0 - 60 | 0 - 80 | 0 - 180 | 0 - 80 |
| 195 | Maximum Value | 21.5 | 15.81 | 49.82 | 16.15 | 27.33 |
| 196 | Maximum Value At | 2021-05-12 11:15 | 2021-05-12 11:15 | 2021-05-12 03:30 | 2021-05-13 16:15 | 2021-05-13 00:45 |
| 197 | Minimum Value | 1.25 | 4.02 | 46.8 | 8.88 | 2.65 |
| 198 | Minimum Value At | 2021-05-12 12:15 | 2021-05-12 05:15 | 2021-05-13 04:15 | 2021-05-12 03:45 | 2021-05-13 14:00 |
| 199 | Geometric Mean | 11.36 | 10.29 | 48.28 | 11.34 | 10.7 |
| 200 | Median | 10 | 8.95 | 48.3 | 10.68 | 9.6 |
| 201 | Standard Deviation | 4.82 | 3.66 | 0.64 | 1.81 | 6 |
| 202 | Valid Data Points | 50 | 50 | 170 | 170 | 170 |
| 203 | Total Data Points | 193 | 193 | 193 | 193 | 193 |
| 204 | Data Availability % | 25.91 | 25.91 | 88.08 | 88.08 | 88.08 |