

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 95/2018**

IN THE MATTER OF:-

ARYAVART FOUNDATION

APPLICANT

VS.

M/s VAPI GREEN ENVIRO LTD. & ORS.

RESPONDENT(S)

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PLACE: DELHI

DATE: 06.02.2020

REPORT OF JOINT COMMITTEE (CPCB & GPCB)

IN ORIGINAL APPLICATION NO. 95 OF 2018
IN THE MATTER OF
ARYAVART FOUNDATION VS M/S VAPI GREEN ENVIRO
LTD. (CETP, VAPI) & ORS

AS PER ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL (NGT),
PRINCIPAL BENCH, NEW DELHI DATED 28.08.2019

Prepared
By



CENTRAL POLLUTION CONTROL BOARD
Regional Directorate (West), Vadodara



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Regional Office, Vapi

FOR SUBMISSION TO

HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

FEBRUARY 2020

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REPORT OF JOINT COMMITTEE (CPCB & GPCB) AS PER ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL (NGT), PRINCIPAL BENCH, NEW DELHI DATED 28.08.2019 IN ORIGINAL APPLICATION NO. 95 OF 2018 IN THE MATTER OF ARYAVART FOUNDATION Vs M/S VAPI GREEN ENVIRO LTD. (CETP, VAPI) & ORS

1.0 BACKGROUND:

Hon'ble National Green Tribunal, Principal Bench, New Delhi passed order on 11.01.2019 in Original Application (OA) NO. 95 of 2018 in the matter of Aryavart Foundation Vs. M/s Vapi Green Enviro Ltd. (CETP, Vapi) &Ors (**Annexure-A**)

The matter was regarding discharge of untreated/partially treated trade effluent by more than 500 industrial units in Vapi industrial cluster into River Damanganga which meets Arabian Sea at Daman, pollution in River Damanganga, non-compliances of discharge standards by industries & CETP Vapi.

In the said matter vide order dated 11.01.2019 various committees were constituted for execution of the order in para no. 55. In accordance with one of the order in para no. 55 (i), five member committee was constituted comprising representatives/nominees of Central Pollution Control Board (CPCB), Indian Institute of Management (IIM) Ahmedabad, Indian Institute of Technology (IIT) Gandhinagar, National Environmental Engineering Research Institute (NEERI) Nagpur and Gujarat Pollution Control Board (GPCB) to assess the extent of damage and cost of restoration of the environment and individual accountability & liability of CETP and polluting industrial units.

The committee prepared report titled – “REPORT ON DAMAGE ASSESSMENT OF RIVER DAMANGANGA, COST OF RESTORATION, ACCOUNTABILITY & LIABILITIES OF INDUSTRIES & CETP, VAPI, GUJARAT” and submitted to CPCB which in turn filed through e-mail to Hon'ble NGT on 09.05.2019 and also uploaded on CPCB website. The report considered for hearing on 13.05.2019 and after due submissions and considerations, Hon'ble NGT directed vide order dated 13.05.2019 to make fresh calculations and to assess the

compensation and give its revised report considering the following points as in para 31 in the Honorable NGT order 13.05.2019 (**Annexure-B**).

1. Fresh calculation based on the actual period of five years preceding 26.02.2018, the date on which this application was filed .i.e. from 26.02.2013 till the date of calculation. Accordingly, GPCB was directed to furnish list all polluting industries to the committee in addition to 44 industries considered in the first report
2. Correlation between the compensation to be recovered with the cost of restoration to act as a deterrent.
3. Consideration of extent of pollution by category of the industry concerned as red, orange and green.

Accordingly, some changes/revisions have been made considering the concern mentioned in the order dated 13.05.2019, hearing of industries, representation of M/s VGEL (CETP) Vapi in the committee report submitted in May 2019 with title as mentioned above and revised report is prepared with title- "REPORT ON DAMAGE ASSESSMENT OF RIVER DAMANGANGA, COST OF RESTORATION, ACCOUNTABILITY & LIABILITIES OF INDUSTRIES & CETP, VAPI, GUJARAT" Revised Report (July 2019).

The Revised Report (July 2019) filed to Hon'ble NGT.Hon'ble NGT heard the matter on 19.08.2019 & 28.08.2019 and passed further order dated 28.08.2019(**Annexure- C**) with following directions:

- i Re-assessment of Environmental Compensation calculated by the Expert Committee in light of submission made by the learned counsel for the Applicant (para 12)
- ii The joint Committee to take action in terms of reduction in load to ensure compliance of norms of inlet in CETP so as to ensure that inlet and outlet of CETP are as per norms(para 17 (i), para 10).
- iii With regard to the past violations, compensation as assessed by the Committee in respect of individual units as well as CETP is liable to be recovered as interim compensation on 'Polluter Pays' principle. Further action may be taken jointly by GPCB and CPCB (para 17 (ii), para 10).

2.0 ACTIONS TAKEN BY CPCB & GPCB:

2.1 Regarding Compliance of Inlet and Outlet Norms by CETP Vapi:

As a compliance of the order dated 28.08.2019, CPCB held meetings along-with GPCB to implement the order on 10.10.2019 and GPCB & CPCB held meetings along with other concerned departments- GIDC, Vapi Municipality and M/s VGEL (CETP) on 19.10.2019 and 25.11.2019. GPCB & CPCB convened meeting along with Vapi Industries Association and Defaulting industries at Vapi on 25.11.2019. Minutes of the Meetings held on 10.10.2019, 19.10.2019 & 25.11.2019 (two meetings) are placed as **Annexure-D** (MoM-10.10.2019), **Annexure-E** (MoM-19.10.2019), **Annexure-F** (MoM-25.11.2019-with GIDC, Vapi Municipality & VGEL) and **Annexure-G** (MoM-25.11.2019- with VIA & defaulting industries) respectively. Further, no subsequent review meeting took place due to stay order by Hon'ble Supreme Court dated 04.12.2019 in CA No.9398 of 2019 (Aryavart Foundation Vs VGEL &Ors).

The Action points and progress made by GIDC and M/s VGEL (CETP) Vapi based on **review in the meeting convened on 25.11.2019** as well as decisions taken to comply the order, are reproduced in following Table:

| Sr. No. | Action Point | Agency | Status/Further Actions (Note: Annexures-II, III mentioned in the Tables are provided in Annexure- F of this Report) |
|---------|--|-------------------------------|---|
| 1. | Review of Action Plan of VGEL (CETP) wrtdirection issued by GPCB | CPCB & GPCB – Joint Committee | M/s VGEL (CETP) submitted Action Plan to GPCB which is reviewed and It is observed that the implementation of action is under progress. The Status of action plan on 24.11.2019 submitted by VGEL (CETP) is provided at Annexure-II . |
| 2. | <p>To provide above-surface/over-ground discharge line from the individual industries to the intermediate collection chambers and sumps</p> <p>The underground existing pipeline shall also be replaced with new over ground pipeline to carry effluent from industries/intermediate collection sumps to CETP, wherever technically feasible</p> | GIDC | <p>GPCB issued direction to GIDC on dated 18.10.2019 to GIDC Notified Area Authority regarding above surface/over ground discharge line and storm water drainage as per recommendations of the NGT expert Committee in its Revised Report of July 2019.</p> <p>Action Taken Report by GIDC is provided at Annexure-III.</p> <p>GIDC official informed- regarding over ground discharge line from the individual industries to the intermediate collection chambers and sumps- notices were issued to five units for making arrangements as per sketch (provided at Annexure-II) inside factory premises i.e. HDPE Tank, treated wastewater storage tank etc on or before 30.11.2019. It is mentioned in the letter issued by GIDC to units that after 30.11.2019 your new above ground drainage connection will be installed by GIDC outside the factory premises and old underground drainage connection will be disconnected.</p> <p>He further informed that 1st set (five units) will be completed by 30.11.2019 and after approval and checking by GPCB, installation of chambers & pipelines work in all the other industries will be finished within 4 months.</p> <p>Regarding over ground pipeline wherever technically feasible in the estate, it is informed that consultant to be hired to survey physical and hydraulic survey of the entire U/G drainage system and based on the outcomes of report further action will be</p> |

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| | | | <p>initiated in this matter. It is asked to expedite the matters for the compliance.</p> |
| 3. | To explore the illegal connection in the Vapi GIDC area and to disconnect/remove the same, remove all the underground discharge line of industries who are not member of CETP or who are not generating any effluent or who are adopting ZLD system with the help of VGEL & VIA | GIDC | <p>GIDC official informed that total 266 ZLD units were disconnected in the past and further it is informed that after the over ground pipeline for discharges, mostly there will be no any chance of any illegal connection in the GIDC area. He added that connections will be disconnected based on the information received from VGEL/GPCB.</p> <p>As per information provided by VGEL (CETP), recently 125 ZLD units list has been provided for drainage disconnection and accordingly, GIDC has sealed drainage connection of all 125 units (92 members & 33 non-members of CETP). It is informed that VGEL monitor units twice in a year to confirm drainage status.</p> |
| 4 | To provide One-Single water supply connection and One-single drainage line connection for one Consent/ CCA issued to an industry by GPCB. The premises of other units and/or sister concern units should not be used for illegal discharges in to GIDC network leading to CETP. The illegal connections in plot of closed units, ZLD units etc should be inspected and sealed by GIDC & VGEL | GIDC VGEL | <p>GIDC Official informed that Notices have been issued to make arrangements (precast septic & soak pit system) for disposal of domestic wastewater and after 15.12.2019 their drainage connection would be disconnected without any further Notice. (Annexure-III). GIDC was asked to submit status on single water supply, also.</p> <p>Further, there should be vigil and inspection by GIDC & VGEL for illegal drainage discharge and connections and these connections should be sealed. The status should be provided to GPCB time to time for further necessary actions against the unit.</p> |
| 5 | Torevamp/repair/install the storm water drain lines in the GIDC area as per recommendation in the NGT Committee Revised Report (July 2019) | GIDC | <p>It is informed by GIDC official that total length of road at Vapi industrial estate is 85 km, out of which 25 km of road is in housing area. Therefore, out of 60 km of road in industrial area, Storm Water Drains (SWD) of 17 km is up-graded as RCC Open drain SWD. Further, 8 km of RCC Open drain SWD will be constructed where there is RCC pipeline SWD. However,</p> |

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| | | | <p>complete SWD km (RCC Open and/or RCC pipeline) in relation to road length in industrial area, to be provided.</p> <p>It is emphasized that as per recommendation of the Expert Committee there should be proper design and construction of stormwater drains particularly in low laying areas, where in rainy season contaminated water is accumulated, to prevent stagnation of storm water and to prevent entry into natural drains. The action points in this regard should also to be incorporated in Action Plan.</p> |
| 6 | Sewerage Network, STPs & MSW | GIDC/ Vapi Municipality | <p>It is informed by concerned officials that the status of the progress made in Sewerage Network, STPs & MSW at GIDC area and Vapi town shall be provided shortly.</p> <p>It was asked to provide the status of actions taken based on directions issued (dtd 18.10.2019) by the GPCB in this regard by 31.12.2019 and also to expedite the work.</p> |
| 7 | To provide a Bar chart for the time bound action plan for implementation of recommendations made in the said report by 30.11.2019 | GIDC | It was asked to provide the Bar chart for the time bound action plan and inform the progress to GPCB/ CPCB from time to time. |
| 8 | Synchronization and up-dation of information of GIDC & VGEL regarding member industries, their connection to GIDC network, discharge to CETP, ZLD Status, and list of member industries of CETP etc. | GIDC/ VGEL/ GPCB | The list of industries with synchronization & up-dation of information as on 01.12.2019 (Dec 2019) duly checked by GPCB should be provided to GPCB & CPCB committee by 31.12.2019. |
| 9 | To take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line | GIDC VGEL | It is informed that GIDC and VGEL has taken the note and shall take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line |
| 10 | To carry out inventory for treatment | VGEL | Director, VGEL informed that they have completed inventory of |

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| | <p>system of member industries of CETP-Vapi and should submit its inventory to the committee of GPCB and CPCB by 30.11.2019</p> | | <p>@107 industries and will take more time to complete the same as there are over 500 member industries. Finally, it is decided to complete inventory of industries those are attached to Pumping Station 3 and 6 on priority, considering the pollution potential and submit by 31.12.2019. The overall inventory to be completed by 15.01.2019.</p> <p>After verifying the data of the inventory, some corrections are suggested in the preliminary/draft inventory format as already mentioned in minutes of meeting dated 19.10.2019.</p> |
| 11 | <p>To provide the list of defaulting industries to GPCB & CPCB</p> <p>VGEL shall also provide rational for making list of defaulting industries, along with Surveillance/Monitoring and Charging Methodology to CPCB & GPCB by 30.11.2019</p> | VGEL | <p>It is directed vide GPCB direction to provide the list of defaulting industries to GPCB. It was also asked to provide rational for making list of defaulting industries, along with surveillance/monitoring and Charging methodology to CPCB & GPCB by 30.11.2019.</p> <p>However, VGEL not provided the list and informed that since last three months there were no any defaulting industries and accordingly VGEL will reply. It is also mentioned that results of CETP has improved.</p> |
| 12 | <p>To implement SCADA system for quantity and quality of effluent of the member industries and other recommendations given in the NGT Expert Committee Revised Report July 2019.</p> <p>To provide a time bound action plan for the implementation of the SCADA system</p> | VGEL | <p>There is nothing much happened in this regard. VGEL is not yet clear about who will install the SCADA system for quantity and quality of effluent of the member industries.</p> <p>However, CPCB official informed that as per recommendations given in the NGT Expert Committee Revised Report July 2019, VGEL (CETP) to implement the system with the help of member industries/Vapi Industrial Association and therefore, time bound action plan for the implementation of the SCADA system to be provided by 31.12.2019.</p> |

GPCB has issued closure direction under section-33 (A) of the Water (P & CP) Act 1974 vide letter dated 24.05.2019 to M/s VGEL (CETP) Vapi and amended further on 11.06.2019 which subsequently revoked from time to time with latest revocation order on 23.12.2019 which is valid up to three month from date of issue of order i.e. up to 23.03.2020. The copies of the directions are provided at **Annexure-H**.

GPCB has also issued letters dated 18.10.2019 regarding compliance of directions passed in Hon'ble NGT order dated 28.08.2019 to GIDC Vapi and Vapi Municipality based on the recommendations of the Expert Committee (Revised Report – July 2019). The copies of letters are provided at **Annexure-I & Annexure-J**.

As per the para no. 55 (iv) of the order dated 11.01.2019, it was directed to CPCB to undertake jointly with GPCB extensive surveillance and monitoring of CETP at regular interval of three months and submit its report to this Tribunal. Till now, four rounds of quarterly monitoring dated 11.02.2019, 08.05.2019, 14.08.2019 and 15.11.2019 have been conducted by the Joint Committee of GPCB and CPCB and the reports have already been filed to the Hon'ble NGT. The monitoring results of these four rounds of monitoring are given in **Annexure-K**.

It is observed from the results that CETP is found improved its performance and with latest monitoring on 15.11.2019 by CPCB & GPCB, where outlet meets with norms of TSS (72 mg/l Std:100 mg/l), COD (249 mg/l Std:250 mg/l), NH₃-N (20.79 mg/l Std:50 mg/l), Phenols (0.25mg/l Std:1.0mg/l), Sulphide (0.47 mg/l Std:2 mg/l), Cyanide (0.057 mg/l Std:0.2mg/l), O & G(0.91 mg/l Std:10 mg/l) and marginally exceedance of BOD (35 mg/l Std:30 mg/l and substantial exceedance of FDS (7820 mg/l Std:2100 mg/l). However, inlet norms are not meeting with standards for TSS, FDS, BOD, COD, Phenols, & Sulphide. Hence, these needs to be further controlled/regulated at individual member industries with strict monitoring, action mechanism and, also by providing Auto sampler & SCADA System at individual industry outlet for quantity and quality monitoring.

GPCB regularly monitors CETP Vapi and the results of monitoring are provided at **Annexure-L**. It is revealed from the analysis results that **Inlet of CETP Vapi** is found complied with parameter- BOD, COD, NH₃-N, pH & SS in all samplings since June 2019 to December 2019 except COD on 01.10.2019, 17.10.2019, 11.11.2019, 22.11.2019, 20.12.2019, 25.12.2019, 27.12.2019, 29.12.2019 and NH₃-N on 17.10.2019. There was non-compliance of Inlet as well as Out of CETP for COD in the month of May 2019 and NH₃-N for sampling on 08.05.2019.

It is revealed from the analysis results that INLET AS WELL AS OUTLET OF CETP Vapi is found complied with parameter- BOD, COD, NH₃-N, pH & SS in all samplings (23 time) since June 2019 to December 2019 except Inlet at COD on 8 times.

There is improvement in Inlet as well as out let of CETP due to under implementation of Short and long term action plans by M/s VGEL (CETP), Vapi. Action points/measures are summarized below-

Broad action points under implementation to improve Inlet to CETP in Short Term Action Plan (status and details are given in Annexure-F)

- Installation of Common MEE and Common Spray Dryers (additional Spray Dryer: 8000 kg/hr Spray Dryer System is over and it is in operation) which are useful for treatment of segregated streams of refractory COD and High TDS from member units which will reduce load in CETP Inlet.
- Vigorous monitoring of member industries by VGEL and information to GPCB for appropriate action for unauthorised discharge (acidic discharge and discharge on open drain) by non-member industries and member industries.
- Joint Vigilance Night monitoring along with GPCB to identify and take appropriate action against violations
- Wastewater through tankers from defaulting industries-repeated defaulting industries will be asked to send their effluent through dedicated road tankers under control of CETP

- Monitoring/Auditing of ZLD units and sealing their wastewater & domestic water connections to prevent unauthorised discharge by ZLD units
- Installation of reducer in outlet line of potentially defaulting units to ensure that the industry cannot discharge their effluent in short time and for better monitoring.
- Disconnection of outlet of all electroplating units (members & non-members)
- Ground penetration radar study which will help in identification and elimination of any ghost line/illegal lin in GIDC. Study has already been done through IIT Gandhinagar.

Measures to improve the performance of CETP to meet Outlet of CETPin Short Term Action Plan:

- 3 no of 30 HP aspirator type Jet Aerators have been installed in Aeration tank and 11 nos. have been under installation which are useful in additional air supply in Aeration tanks to enhance COD , BOD reduction and increased DO in final treated effluent
- 10 Nos of 15 HP jet mixers have been installed in equalisation tanks (5 each in equalisation tank -1 & 2 and shall further installed 10 numbers 15 HP jet mixers to enhance better mixing and uniform characterisation of waste for subsequent biological process.
- Appointed Technical Consultant and Expert for augmentation, evaluation for effective performance of CETP.

Under the Long Term Action Plan M/s VGEL following actions are under implementation (status and details are given in Annexure-F)

- Installation of Solar Sludge Drying System to reduce moisture from CETP sludge so that it can be co-processed in cement kiln.
- Implementation of Modifications suggested by Technical Expert (BPC- Israel) after treatability studies for improvement of CETP to meet prescribed norms all the time. VGEL will also explore other technologies Advanced oxidation with Fenton Catalytic Reactor (FCR) and Mechanical Vapor Recompression (MVR) Technology to take care of more quantity of non-biodegradable COD waste water, MVR Technology to treat and

dispose the concentrated non-biodegradable COD waste water and high TDS waste water. Pilot plant installation was going on.

2.2 Regarding Recovery of Interim Compensation:

As per order of Hon'ble NGT dated 28.08.2019, para 17 (ii) With regard to the past violations, compensation as assessed by the Committee in respect of individual units as well as CETP is liable to be recovered as interim compensation on 'Polluter Pays' principle. Accordingly, CPCB has asked GPCB to recover the interim compensation as calculated by the Expert Committee as mentioned in the minutes of the meeting held on 10.10.2019 (**Annexure-D**). However, no further development has taken place, and also there is stay of the impugned order (dated 28.08.2019 of the Hon'ble NGT) by the Hon'ble Supreme Court in the Civil Application No. 9398 of 2019 (VGEL Vs Aryavart Foundation & Ors) vide order dated 04.12.2019.

3.0 CONCLUSION:

In compliance of the order dated 28.08.2019, CPCB & GPCB reviewed compliance through various meetings with other concerned departments- GIDC, VGEL-CETP to implement the order. Further, there is stay of the impugned order (dated 28.08.2019 of the Hon'ble NGT) by the Hon'ble Supreme Court in Civil Application No. 9398 of 2019 vide order dated 04.12.2019, therefore, no further activities been carried out by joint committee.

GPCB has issued closure direction under section-33 (A) of the Water (P & CP) Act 1974 vide letter dated 24.05.2019 to M/s VGEL (CETP) Vapi and amended further on 11.06.2019 which subsequently revoked from time to time with latest revocation order on 23.12.2019 which is valid up to three month from date of issue of order i.e. up to 23.03.2020. GPCB has also issued letters dated 18.10.2019 to GIDC, Vapi Municipality for the compliance of directions passed in Hon'ble NGT order dated 28.08.2019 based on the recommendations of the Expert Committee (Revised Report – July 2019).

As per the various meetings with VGEL (CETP) to review the status of implementation of Action plan submitted by CETP, joint quarterly monitoring of CPCB & GPCB and sporadic monthly monitoring of GPCB, it is observed that CETP is found improved its performance.

As per latest monitoring on 15.11.2019 of joint committee (CPCB & GPCB), outlet of CETP meets with norms of TSS, COD, NH₃-N, Phenols, Sulphide, Cyanide, O & G, and marginally exceeds BOD and substantially for FDS. However, inlet norms are not meeting with standards for TSS, FDS, BOD, COD, Phenols, & Sulphide.

It is revealed from the analysis results of GPCB monitoring **INLET AS WELL AS OUTLET OF CETP Vapi is found complied with parameter- BOD, COD, NH₃-N, pH & SS in all samplings (23 time) since June 2019 to December 2019 except Inlet at COD on 8 times.**

The inlet needs to be further controlled/regulated at individual member industries with strict monitoring and action mechanism as per Action Plan devised which is under implementation. Due to non-compliance of some parameters with reference to prescribed outlet parameters and for continual compliance with standards, there is need to expedite the actions as per Action Plan with reference to strengthening of the treatment system and provision of Auto sampler & SCADA System at individual industry outlet for quantity & quality monitoring.



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Item No. 05

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 95/2018
(M.A. No. 1029/2018)

Aryavart Foundation

Versus

Applicant(s)

M/s Vapi Green Enviro Ltd. & Ors.

Respondent(s)

Date of hearing: 11.01.2019

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

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Mr. Shlok Chandra with Mr. Ritesh Kumar
Sharma, Advocates for CPCB
Mr. Dhruv Pal, Advocate for GPCB

ORDER

1. The issue for consideration in this matter is discharge of untreated/partially treated trade effluents by more than 500 industrial units in Vapi Industrial Cluster into Daman Ganga River in District Valsad in Gujrat which meets the Arabian Sea. The effluents comprise of untreated coloured chemical liquids. Apart from Daman Ganga River, the other water body in which effluents are discharged is the *Bill Khadi* (a drain) which also falls into the Arabian Sea.
2. Case of the Applicant is that Common Effluent Treatment Plant (CETP) is being operated in the area by Respondent No. 1, M/s. Vapi Green Enviro Limited (Old name - Vapi Waste & Effluent Management Co. Ltd.) reportedly since 01.01.1997. The impact of discharge is serious threat to the aquatic life in the river as well as in the sea.

3. A study was carried out in February 2017 by the National Environmental Engineering Research Institute (NEERI). It was found that:

"The fish bioassay study on the final treated effluent sample discharged from Vapi CETP into the river indicates 100% mortality at 50, 75 and 100% waste water concentrations within 24 h exposure time (Plate 4.56). The experimental results presented in Table 9.6 reveal toxic nature of the treated effluent from Vapi CETP. Thus, it can be concluded from the fish bioassay study that the final treated effluent from Vapi CETP with high colour intensity, organic and inorganic matters is having toxic effect on aquatic life of Daman Ganga River. Therefore, Vapi CETP effluent must be treated adequately to remove the pollution parameters before discharging into Daman Ganga River."

"The final treated effluent discharge from the existing Vapi CETP (D-11A) has not only caused deterioration of the river water quality with respect to the colour and recalcitrant parameters but also has imparted toxic effect on aquatic life of Daman Ganga River (segment-II). Therefore, Vapi CETP must be scientifically upgraded for colour and recalcitrant pollutants removal including reject management with a final aim of achieving zero liquid effluent discharge as delineated under Section 11.0. This will result in recovery of good quality water, which can be reused as process water by the industries, leading to fresh water conservation."

4. Further case set out in the application is that Respondent No. 2, Gujarat Pollution Control Board (GPCB), carried out inspection and tested the water quality from P-Equalization Tank (Inlet) on 25.10.2017 and found that the same was not meeting the standards. Samples were also taken from overflow of primary clarifier (Inlet) and the storage tank and similar results were noticed. Tests were also carried out on 06.11.2017, 28.11.2017, 07.12.2017, 27.12.2017, 30.12.2017, 23.01.2018, 29.01.2018, 31.01.2018 and 05.02.2018 and same results were found. From the final outlet also similar results were seen on 27.12.2017, 30.12.2017, 23.01.2018 and 29.01.2018.
5. GPCB issued show cause notice dated 25.10.2017 and 01.11.2017 and direction under Section 33A of the Water (Prevention and Control

of Pollution) Act, 1974 requiring steps to be taken so that inlet and outlet norms are maintained. Applicants have annexed letter of the GPCB dated 23.12.2013 under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 to the CETP unit for renewing consent to operate for the CETP for the period upto 06.09.2018, subject to the norms laid down therein being maintained. The letter specifies the standards of inlet to be met by the units as well as outlet for which CETP is responsible. Various steps/reports from October 2017 onwards, however, show that the prescribed norms were not maintained.

6. The applicant accordingly seeks direction for taking appropriate steps, including up-gradation of CETP, restraining the CETP from receiving effluents from member units not conforming to the norms, recovering cost of damage to the environment.
7. The application was filed before this Tribunal on 26.02.2018 and notice was issued.
8. The parties appeared before the Tribunal including the CETP operator, GPCB, MoEF&CC, Gujarat Industrial Development Corporation (GIDC) and the Central Pollution Control Board (CPCB). Due opportunity has been given to file pleadings.
9. The Respondent No. 1, CETP operator for the industrial area of Vapi has stated that the CETP was commissioned in the year 1997. By 2001, all waste water generated in the industrial area was linked to the CETP. It also caters to the domestic sewage. It has complied with the earlier directions of NGT, Pune Bench in O.A. No. 109/2014, order dated 01.04.2014 to lay pipeline from existing discharge point to downstream 4.5 km. It is maintaining discharge norms. The

discharge was on the higher side as tanks had not been cleaned for many years.

10. The GPCB has referred to the order of the NGT dated 01.04.2014 in O.A. No. 34/2013 directing the Respondent no. 1 to maintain the laid down standards of effluent discharge. The industrial units were directed to set up/up-grade treatment plants. The GPCB was directed to use Bank Guarantee regime for improvement in pollution control systems.
11. The GPCB further submitted that the Vapi industrial estate is spread over 1117 hectares and is largest industrial area in Asia. It has industrial units of small, medium and large size in diverse sectors, such as Chemicals, Pharmaceuticals, Pesticides, Dyes & Dyes Intermediate and Pulp & Paper. There is substantial consumption of water in the production processes and resultantly there is discharge of effluents. The CETP was set up in the year 1997 and is operated by Respondent No. 1. The industrial units are required to do basic treatment of their effluents in their own premises which refers to Primary Effluent Treatment Plant (PETP). The Respondent No. 1 collects effluents through underground pipeline network and after primary, secondary and tertiary treatment at CETP, discharges effluents into Daman Ganga River at designated place. Each member industry is to provide basic treatment facilities to meet CETP inlet norms. Five hundred and nineteen (519) industrial units are members of CETP. Due to unsatisfactory treatment of effluents by CETP, and also based on Comprehensive Environmental Pollution Index (CEPI), Vapi industrial cluster was declared critically polluted Area on 13.01.2010. Major up-gradation was undertaken by the CETP by investing Rs. 464 Crores which led to improvement in the quality of effluent discharge. Accordingly, vide order dated 25.11.2016, the MoEF&CC lifted the moratorium on setting up of new

industries and expansion of existing industries. Certain industries have been identified as generating high COD. Common spray dryers have been developed in March 2018.

12. On earlier hearing, the Tribunal had before it the Order dated 01.04.2014 in O.A. No. 34/2013 of this Tribunal which showed that the CETP was not satisfactorily working.¹ There was need to take innovative enforcement measures by the GPCB.² It was held therein that though the Pollution Control Board could not apply the of "Polluter Pays" Principle as a punitive measure, it could take Bank Guarantee for non-compliance for ensuring improvement since the CETP was continuously not meeting the norms and such norms could not be relaxed.³ The CPCB in its reply dated 25.04.2018 stated that average value of inlet and outlet were not as per norms.⁴

13. In view of above, on 29.08.2018, the Tribunal directed the GPCB to take appropriate action in accordance with law in the matter for failure of mandatory requirements laid down by the Hon'ble Supreme Court in *Paryavaran Suraksha Samiti and Ors. vs. Union of India (UOI) and Ors.*⁵, for operational and effective ETPs. CPCB was to oversee the compliance of the order and action taken report was required to be filed.

14. In compliance of above order, the GPCB and the CPCB have filed their reports. The GPCB in its report dated 28.09.2018 states as follows:

"It is observed that Inlet quality - COD, NH₃-N and TSS are not meeting with inlet norms whereas COD and TSS at outlet of CETP are not meeting with Outlet norms.

CPCB, RD, Vadodara carry out quarterly monitoring of CETP, Vapi. The latest monitoring carried out on 11.08.2018 and results are provided at Annexure-III. It is observed that Inlet quality - TSS, FDS, BOD, COD and NH₃-N are not meeting

¹ Para 5

² Para 23

³ Para 32 & 33

⁴ Para 10

⁵ (2017) 5 SCC 326

with inlet norms whereas TSS, FD, COD, NH₃-N & Phenols at outlet of CETP are not meeting with outlet norms.

M/s VGEL (CETP) reportedly takes internal actions among the defaulting member units as per M/s VGEL monitoring but so far not provided the list of defaulting industries to GPCB though it is expected as per the Hon'ble NGT Order dated 29.08.2018, and also as per notices of direction issued by GPCB.

M/s VGEL (CETP) has not provided any action plan to comply with both inlet as well as outlet norms during the above review.”

15. GPCB has also stated that it has issued notice under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 for up-gradation of the CETP to achieve the standard of discharge and till then to take preventive action.
16. There is also a report dated 10.01.2019 of inspection carried out on 03.01.2019. The inspection team at the time of inspection comprised Regional Director, CPCB,-; Scientist-D, CPCB,-; Unit Head-Vapi, GPCB,-; Regional Officer, GPCB,-; AEE, GPCB, -; AGM, (Process) and CEO, VGEL(CETP) Vapi, -; three Directors of VGEL, Vapi and President Director, VIA, VGEL, Vapi
17. The frequency of compliance and non-compliance in the context of BOD, COD, NH₃N and TSS are as follows:

| BOD | | | |
|-------------------|-----------------------|-------------------|-----------------------|
| <i>Inlet</i> | | <i>Outlet</i> | |
| <i>Compliance</i> | <i>Non-compliance</i> | <i>Compliance</i> | <i>Non-compliance</i> |
| 12 | 1 | 6 | 7 |
| COD | | | |
| <i>Inlet</i> | | <i>Outlet</i> | |
| <i>Compliance</i> | <i>Non-compliance</i> | <i>Compliance</i> | <i>Non-compliance</i> |
| 0 | 13 | 3 | 10 |
| NH3-N | | | |
| <i>Inlet</i> | | <i>Outlet</i> | |
| <i>Compliance</i> | <i>Non-compliance</i> | <i>Compliance</i> | <i>Non-compliance</i> |
| 0 | 13 | 9 | 4 |
| TSS | | | |
| <i>Inlet</i> | | <i>Outlet</i> | |
| <i>Compliance</i> | <i>Non-compliance</i> | <i>Compliance</i> | <i>Non-compliance</i> |
| 4 | 9 | 6 | 7 |

18. As noted earlier, notice under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 was issued to the CETP while internal action is to be taken by the CETP itself.
19. We have heard the learned Counsel for the parties.
20. Learned Counsel for the applicant submitted that discharge of untreated effluents is beyond any doubt from the reports to which not only CPCB and GPCB but also the representatives of the CETP are party. The CETP operator, the polluting units and the GPCB may be made accountable for preventive and remedial steps, including punitive action and recovery of damages for restoration of the environment and by way of deterrent action.
21. Learned Counsel for Respondent No. 1 submitted that the operator of CETP is taking all such steps as are possible and no direction is called for. Learned Counsel for GPCB has not disputed the inspection reports which clearly demonstrates that the standards are not being met. On that basis, the GPCB has already issued notice to the CETP as well as to some of the industrial units for remedial actions. Thus, the GPCB has done its job. Learned Counsel for CPCB submitted that in view of the report of inspection carried out on 03.01.2019, CETP as well as the industrial units are clearly proved to be non-compliant with the laid down parameters for which appropriate directions may be issued by this Tribunal. There is continued failure of enforcement of law.
22. The questions that arise for consideration are as follows:
 - i. Whether the CETP operator and its member units have failed to comply with the conditions of consent and norms of environment and caused pollution? If so, the manner in which they are to be held accountable?

- ii. Does the functioning of CETP in the present case and of CETPs in general in the country calls for review and modification?
- iii. Whether the State Pollution Control Board in the present case and regulatory authorities have not performed their duties as per the expectation and if so, what are the steps necessary to achieve the objects for which the Pollution Control Boards/Committees have been constituted under the Water Air and the Air Act?
- iv. What are the conclusions and what are the directions required to be issued by this Tribunal?

23. We now proceed to deal with the questions for consideration seriatim.

Re (i): Whether the CETP operator and its member units have failed to comply with the conditions of consent and caused pollution? If so, the manner in which they are to be held accountable?

24. We have reproduced the reports of inspections dated 28.09.2018 and 10.01.2019 clearly showing the CETP as well as the industrial units to be non-compliant. In support of the said reports, test reports have also been annexed. There is no reason to doubt the veracity of reports of inspections conducted by the joint team of representatives of CPCB, GPCB and the CETP operators. Thus, it is concluded that the CETP operator and the member units generally have failed to comply with the environmental norms for which they are held to be accountable.

25. Though, there are observations in order dated 01.04.2014 by the two-member Pune Bench of this Tribunal referred to earlier, that "Polluter Pays" principle cannot be invoked as a punitive measure and only 'Precautionary Principle' of requiring Bank Guarantee can be applied, the said view is in ignorance of the binding legal precedents in the judgment of the Hon'ble Supreme Court⁶ which lay down that

⁶ Indian Council for Enviro Legal Action & Ors. v. Union of India & Ors. (1996) 3 SCC 212 Para 16, Vellore Citizens Welfare Forum v. Union of India & Ors. (1996)5SCC647 Para 12 to 18 - holding that 'Polluter Pay' principle is

'Polluter Pays' principle is ingrained in the environmental jurisprudence of the country as well as statutory mandate under Section 20 of the NGT Act, 2010. This was considered in the recent order of the Tribunal (by four Member Bench) in *Paryavaran Suraksha Samiti and Anr. Vs. Union of India & Ors.*⁷, *Parveen Kakar & Ors. Vs. Ministry of Environment & Forests & Ors.*⁸ and in *News Item published in "The Asian Age" Authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"*⁹ wherein this Tribunal held that:

"11. Needless to say that it will be open to the SPCBs/Committees and CPCB to take coercive measures including recovery of compensation for the damage to the environment on 'Polluter Pays' principle as well as also to direct taking of such precautionary measures as may be necessary on the basis of 'Precautionary principle'."

26. This Tribunal has to follow principles of natural justice if it is to finally assess the damages. The Tribunal can also require the statutory authorities to perform their duty in the matter. We have heard the CETP operators but we have not heard the individual industrial units though CETP represents such units. The reports indicate deficiency in inlet as well as outlet which is evidence of failure of CETP operators as well as individual industrial cluster. Thus, there is objective material available to act against both- CETP operator and individual units. While on proved facts, interim arrangement is proposed, statutory authorities may finally determine the extent of accountability of the industrial units and such units may be given opportunity of hearing by the SPCB and the CPCB. To enable this to be done, we propose to constitute a Committee to hear

accepted principle and part of environmental law of the country, even without specific statute. *M.C. Mehta v. Union of India & Ors.*, W.P.(C) No. 13029/2015 order dated 24.10.2017 of Supreme Court of India

⁷ O.A. No. 593/2017 Order dated 03.08.2018: The Tribunal directed CPCB to take penal action against those accountable for failure in setting up CETPs/ETPs/STPs and to recover compensation for damage to the environment.

⁸ O.A. No. 661/2018, Order dated 08.01.2019: The Tribunal stated that the Pollution Control Board had failed to perform its duties in taking statutorily mandated coercive measures under Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 and 33B of the Water (Prevention and Control of Pollution) Act, 1974 or initiating prosecution. This Tribunal directed CPCB to exercise its statutory powers to determine and recover damages for violation of environmental norms by the respondent therein.

⁹ O.A. No. 1038/2018, Order dated 13.12.2018.

individual polluting units not meeting the norms and to quantify the amount of liability on "Polluter Pays" principle which can clearly be invoked by the regulatory body to enforce pollution norms not only as a 'Precautionary Principle' but also as remedial action if the unit is found to be polluting and not meeting the prescribed norms. Any other interpretation would grant immunity to the polluters and will not be conducive to the protection of the environment. We answer the question accordingly.

Re(ii): Does the functioning of CETP in the present case and of CETPs in general in the country calls for review and modification?

27. CETP Scheme was developed primarily to meet specific objectives under the Environment (Protection) Rules, 1986. It has, however, been found that inspite of setting up of CETPs, the environmental norms have not been maintained at several places in the country. The MoEF&CC itself imposed a moratorium for grant of permissions for setting up of industries in critically polluted areas/industrial clusters identified by the CPCB as shown by letter dated 25.11.2016. Time bound action plans were required to be prepared for improvement of environment quality in such clusters/areas. Moratorium was, thereafter, lifted in respect of certain clusters from time to time based on CEPI score subject to certain conditions.
28. The recent experience shows that situation at several places in the country is far from being satisfactory. This Tribunal has taken cognizance of the serious pollution caused on account of failure of CETPs vide order dated 13.12.2018 in *News Item published in "The Asian Age" Authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"*. It was noted that 43 industrial clusters in 16 States were identified as Critically Polluted Areas and 32 industrial clusters were categorized as Seriously Polluted Areas. In 2017-18, the number of identified polluted industrial clusters went

upto 100. Accordingly, the Tribunal directed the State Pollution Control Board to finalize time bound action plan to restore the environmental quality as per norms laid down by the CPCB and directed CPCB and SPCBs /PCCs to take coercive measures against the violators on the basis of 'Precautionary Principle' and 'Polluter Pays' principle.

29. This apart, in *Arvind Pundalik Mhatre v. Ministry of Environment, Forest and Climate Change & Ors.*¹⁰ the CETP was found not fully functional and effluents were being discharged at Taloja in the river *Kasaradi*. This Tribunal directed imposition of an amount of Rs. 5 Crores for severe impact on environment on account of non-functioning of the CETP resulting in imminent danger to the life of local population.
30. In *Rashid Ali Warsi Vs. UPSIDC & Ors.*¹¹, the Tribunal dealt with discharge of untreated effluents by textile units in Tronica City, Ghaziabad. CETP was not functional to the extent of requisite capacity and operating without valid consent. Member industries of CETP were directed to comply with PETP standards as prescribed by UPPCB.
31. In *Sidhgarbyang Kalyan Sewa Samiti, Sitargang, District – Udham Singh Nagar Vs. State of Uttarakhand & Ors.*¹², the Tribunal dealt with was pollution in Sitarganj by industries. The STPs/CETP were not functional and untreated effluents and hazardous chemical were being discharged in open drain. It was noted that CETP was working without valid Consent to Operate (CTO). CPCB was directed to carry out fresh inspection of the CETP and the industries. The State PCB

¹⁰ O.A. No. 125/2018 Order dated 11.07.2018

¹¹ O.A. No. 317/2015 Order dated 13.11.2018

¹² O.A. No. 123/2018 Order dated 13.11.2018

was directed to take appropriate legal action against CETP and erring industries.

32. In *Indian Council for Enviro-Legal Action & Ors. Vs. Jammu and Kashmir State Pollution Control Board & Ors.*¹³, the Tribunal considered discharge of effluents by industries in river Basantar, Jammu. The industries were operating without valid consent. There was delay in establishment of CETP and STP. As a result, untreated sewage waste and effluents were discharged in the river. The SIDCO and Municipal Council were held liable to pay compensation for restoration of environment and failure in installing STPs respectively.
33. In *Paryavaran Suraksha Samiti and Anr. Vs. Union of India & Ors.*¹⁴, the Tribunal dealt with the issue of establishment and functioning of CETPs/ETPs/STPs in all the States and the question whether the effluents were treated as per prescribed limits or not. This Tribunal noted the requirements of continuous monitoring of CETPs/ETPs/STPs by the statutory authorities and directed that CPCB to take penal action against those accountable for failure in setting up CETPs/ETPs/STPs and to recover compensation for damage to the environment.
34. In *Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case) and Yogender Kumar*¹⁵, the matter dealt with River Ghaggar which had turned into a polluted water body on account of discharge of effluents. The Tribunal noted failure of authorities in taking action against persons responsible for violation of law and directed to constitute Special Task Force to submit action taken report. The Tribunal directed that an action plan be prepared for preventing

¹³ O.A. No. 483/2016 Order dated 22.11.2018

¹⁴ O.A. No. 593/2017 Order dated 03.08.2018

¹⁵ O.A. No. 138/2016 (Case No. 559/19/11/14) and O.A. No. 139/2016 (Case No. 600/19/11/14) (TNHRC) Order dated 07.08.2018

discharge of untreated effluents in the river by setting up CETPs/ETPs/STPs.

35. In *Hero Motocorp Limited Vs. Union of India & Ors.*¹⁶, the Tribunal directed the Uttarakhand Pollution Control Board to regularly monitor the appellant unit for discharge of effluents.
36. From the above, it is clear that there is a large-scale failure of the CETP which calls for an extensive review regarding the functioning of CETPs in the country, reasons for its failure in meeting the prescribed norms and possible solutions to rectify the problems by the MoEF&CC and the CPCB. In the light of this, Expert Committee may be constituted for the purpose and be asked to submit its report in six months. Question No. (ii) is answered accordingly.

Re(iii): Whether the State Pollution Control Board in the present case and regulatory authorities have not performed their duties as per the expected norms and if so, what are the steps necessary to achieve the objects for which the Pollution Control Boards/Committees have been constituted under the Water Air and the Air Act?

37. The test reports compiled by a joint inspection team clearly shows the non-compliance by the CETP and industrial units as already noticed. We have also noted frequent failure of CETP mechanism while considering Question No. (ii). The SPCB has not shown that it took any stringent action as required which can act as deterrent against violation of pollution norms. Simply issuing notice has not brought about the desired results. No closures have been ordered, nor prosecution launched nor other adequate preventive and remedial measures, including assessment and recovery of damages taken. In this respect, there is failure of GPCB. We may only observe that even a regulatory authority may be held accountable if it colludes with polluters by being required to pay damages or errant officers being held liable for action, including prosecution. Frequent failures of

¹⁶ Appeal No. 55/2018 Order dated 27.09.2018

regulatory bodies need to be remedied for meaningful enforcement of environmental norms. This Tribunal in *Threat to life arising out of coal mining in South Garo Hills district Vs. State of Meghalaya & Ors.*¹⁷, held that State machinery is also required to compensate for their negligence and failure which may act as deterrent against the officers who neglected their basic duty of protecting the environment or colluded with the polluters and law violators. The polluters as well as colluding officers are to be made accountable not only by prosecution or closure of industry but also by assessing and recovering such damages for loss to the environment as it may not only compensate the environment or victims but also act as deterrent to prevent further damage.

38. It is well acknowledged that there is serious threat to the environment in this country. Studies show huge number of pollution related deaths and diseases¹⁸. Any violation of laid down environmental norms has to be seriously viewed and sternly dealt with.
39. It was in the year 1974 that the Water (Prevention and Control of Pollution) Act, 1974 was enacted after noticing that problem of pollution of rivers and streams had assumed considerable importance and urgency on account of growth of industries, threatening the sources of drinking water, the aquatic life and sources of irrigation. After considering the Expert Committee reports on the subject, the statutory framework was adopted giving enormous powers to the Pollution Control Boards (PCBs) for closure, prohibition or regulation of any industries operation or process as well as filing of complaints for prosecution. Minimum sentences have been laid down for violation

¹⁷ O.A. No. 110(THC)/2012 Order dated 04.01.2019 para 28-29

¹⁸ https://niti.gov.in/writereaddata/files/new_initiatives/presentation-on-CWMI.pdf: India ranks 120th in 122 countries in Water Quality Index as per Niti Ayog Report, <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranked-no-1-in-pollution-related-deaths-report/article19887858.ece>: Most pollution-linked deaths occur in India, <https://www.hindustantimes.com/india-news/delhi-world-s-most-polluted-city-mumbai-worse-than-beijing-who/story-m4JFT063r7x4Ti8ZbHF7mM.html>: Delhi's most polluted city, Mumbai worse than Beijing as per WHO; http://www.un.org/waterforlifedecade/pdf/global_drinking_water_quality_index.pdf: WHO Water Quality Index.

of the norms. Polluter Pays Principle is an accepted norm within the purview of regulatory regime. The statutory functions of the PCBs, include programs for prevention, abatement and control of pollution and exercise all incidental powers. The CPCB has powers to issue directions to the State Boards. Needless to say, that similar provisions have been made for protection of air quality under the Air (Prevention and Control of Pollution) Act, 1981 as well as for other environmental issues under the Environment (Protection) Act, 1986.

40. As already noted, the SPCB is equally accountable for its failure and in appropriate cases can be prosecuted for conspiracy or collusion with other offenders causing pollution. The pollution cannot be allowed to be profitable activity and deterrent action must be taken wherever pollution is found so as to render causing of pollution unprofitable and unacceptable to prevent damage to the health and lives of the citizens. Any polluter must be subjected to heavy and deterrent economic sanctions. Unfortunately, this is not happening as expected for which failure the regulatory authority cannot disown their responsibility.
41. We note that the State of Environment in the country, even as per official figures, is alarming. As many as 351 river stretches have been declared to be polluted by the CPCB. Vide order dated 20.09.2018 in *Original Application No. 673/2018, News item published in 'The Hindu' authored by Shri. Jacob Koshy Titled "More river stretches are now critically polluted: CPCB"*, this Tribunal considered the issue of such polluted stretches and noticed the directions of the Hon'ble Supreme Court from time to time for stopping discharge of untreated sewage and effluents in water bodies. Such discharge causes serious diseases, including Cholera and Typhoid. Sewage treatment capacity was disproportionate to the sewage generated. As per some studies noted in the order, 75 to 80% water is polluted in India. Pollution of

River Yamuna¹⁹, Ganga²⁰, Hindon²¹, Ghaggar²², Sutlej and Beas²³, Son²⁴, Subarnarekha²⁵, Ami²⁶ were also noted. The States were directed to prepare action plans to make the water of the polluted river stretches atleast fit for bathing within six months from the dates of preparation of approved action plans. When the matter was reviewed on 19.12.2018, it was found that only 16 States had prepared action plans, most of which were not complete. The direction was issued for payment of environmental compensation per month by every State/UT for failure to prepare action plan and also to furnish Performance Guarantees for execution of the action plans within the stipulated time.

42. This Tribunal in *News Item Published in "The Times of India" Authored by Shri Vishwa Mohan Titled "NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15"*²⁷ has dealt with the issue of 102 air polluted cities identified by the CPCB. Taking into account eminent threat to human health as a result of air pollution, this Tribunal directed all the States/UTs with non-attainment cities to prepare action plans for bringing down the standards of air quality within the prescribed norms within six months. The Tribunal further constituted the Air Quality Monitoring Committee to ensure implementation of such action plans. The CPCB and the SPCBs were entrusted with the responsibility to design a robust nation-wide ambient air quality monitoring program to strengthen the existing monitoring network.

¹⁹ Manoj Mishra Vs. Union Of India O.A. No. 6/2012 order dated 26.07.2018

²⁰ M.C. Mehta vs. Union of India O.A. No. 200/2014 order dated 06.08.2018

²¹ Doaba Paryavaran Samiti vs. State of U.P. and Ors. O. A. No. 231/2014 Order dated 08.08.2018

²² Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case) and Yogender Kumar O.A. No. 138/2016 Order dated 07.08.2018

²³ Sobha Singh and Ors. Vs. State of Punjab and Ors. O.A. No. 916/2018 Order dated 14.11.2018

²⁴ Amarshakti vs. State of Bihar and Ors. O.A. No. 596/2016 Order dated 24.08.2018

²⁵ Sudarsan das vs. State of West Bengal and Ors. O.A. No. 173/2018 Order dated 04.09.2018

²⁶ Meera Shukla vs. Municipal Corporation, Gorakhpur and Ors. O.A. No. 116/2014 Order dated 25.10.2018

²⁷ Original Application No. 681/2018 Order dated 08.10.2018

43. In re: *Compliance of Municipal Solid Waste Management Rules, 2016*²⁸, the Tribunal directed preparation of action plans for solid waste management consistent with the Solid Waste Management Rules, 2016 in view of the fact that as per annual report of the CPCB prepared in April 2018, most of the States were not complying with the statutory rules.
44. As already noted earlier, this Tribunal considered the matter of polluted industrial clusters in *News Item published in "The Asian Age" Authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"* vide order dated 13.12.2018. It was noted that 43 industrial clusters in 16 States were identified as Critically Polluted Areas and 32 industrial clusters were categorized as Seriously Polluted Areas. In 2017-18, the number of identified polluted industrial clusters went upto 100. Accordingly, the Tribunal directed the State Pollution Control Board to finalize time bound action plan to restore the environmental quality as per the norms laid down by the CPCB and directed CPCB and SPCBs to take coercive measures against the violators on the basis of 'Precautionary Principle' and 'Polluter Pays Principle'.
45. In *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*²⁹, the Hon'ble Supreme Court noted that the State Pollution Control Boards (SPCBs) continued to be manned by persons not having expertise or

²⁸ Original Application No. 606/2018 Order dated 31.08.2018

²⁹ (2018) 11 SCC 734 para 3-4, 28-34: The judgment takes into consideration various Committees appointed laying down guidelines for the functioning of SPCBs viz.,

- (a) Bhattacharya Committee (1984) proposed that the structural organization of SPCBs should consist of technical services, scientific services, planning, legal services, administrative services, accounts, training cell and research and development.
- (b) The Belliappa Committee (1990) - Recommended (i) introducing elaborate monitoring, reporting and organizational systems at the national level along with four regional centres and one training cell in each Board, (ii) effecting suitable changes in the Boards recruitment policy to enable them induct persons with suitable academic qualifications, and (iii) ensuring that the Chairman and Member-Secretary are appointed for a minimum of three years.
- (c) The Administrative Staff College of India (1994) - Recommended, inter alia, that (i) the SPCBs be reoriented for implementing the instrument mix of legislation and regulation, fiscal incentives, voluntary agreements, information campaigns and educational programmes.
- (d) The Menon Committee - Recommending that the State Governments should not interfere with recruitment policies of the SPCBs, especially where the Boards are making efforts to equip their institutions with more and better trained engineering and scientific staff.

professional experience. The State Governments were not able to appoint qualified, impartial, and politically neutral persons of high standing to the crucial regulatory posts. Political appointments were being made in blatant violation of Apex Court guidelines to debar favorable persons being appointed.³⁰ The appointments being made did not inspire the confidence of the people. The Hon'ble Supreme Court directed all the States to frame guidelines and recruitment rules within six months. It may be pertinent to lay emphasis on the following observations of the Hon'ble Supreme Court in the aforesaid judgment:

“Unless corrective measures are taken at the earliest, the State Governments should not be surprised if petitions are filed against the State for the issuance of a writ of quo warranto in respect of the appointment of the Chairperson and members of the SPCBs. We make it clear that it is left open to public spirited individuals to move the appropriate High Court for the issuance of a writ of quo warranto if any person who does not meet the statutory or constitutional requirements is appointed as a Chairperson or a member of any SPCB or is presently continuing as such.”

46. In addition to this, the Parliamentary Standing Committee on Science and Technology, Environment and Forest, August 2012 in its recommendations on the working of the SPCBs was perturbed to note that the SPCBs were not performing their duties vigilantly and recommended that MoEF&CC must ensure proper and effective coordination between the CPCB and SPCBs and take necessary steps to make the Pollution Control Boards functional and ensure that the discharge their duties effectively and efficiently.³¹

³⁰ *Ibid.* The judgment notes the report of the Tata Institute of Social Sciences published in 2013 titled “Environmental Regulatory Authorities in India: An Assessment of State Pollution Control Boards” which stated about the appointments to the SPCBs that time and again across state governments have not been able to choose a qualified, impartial, and politically neutral person of high standing to this crucial regulatory post. The recent appointments of chairpersons of various State Pollution Control Boards are in blatant violation of the Apex Court guidelines. The primary lacuna with this kind of appointment was that it did not evoke any trust in the people that decisions taken by an ex-official of the State or a former political leader, appointed to this regulatory post through what appeared to be a totally non-transparent unilateral decision. Many senior environmental scientists and other officers of various State Pollution Control Boards have expressed their concern for appointing bureaucrats and political leader as Chairpersons who they feel not able to create a favourable atmosphere and an effective work culture in the functioning of the Board.

³¹ Accessible at:
<http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20S%20and%20T,%20Env.%20and%20Forests/230.pdf>

47. During the hearing it was stated by the learned Counsel for the GPCB that guidelines in terms of *Techi Tagi Tara* (supra) have been issued and thus, the judgment has been complied with. However, he has not been able to dispute that the persons appointed are not having technical or professional qualifications or background as expected.
48. This Tribunal, on 20.07.2018, in *Satish Kumar vs. U.O.I & Ors.*³² also observed that persons of judicial background may be required in key position in PCBs as several functions of the SPCBs are quasi-judicial.
49. The order of this Tribunal dated 07.08.2018 in *Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case)*³³ noted that a task force must be constituted in every district and State to give reports on the environmental issues which should be published on the websites.
50. The Tribunal in the order on 08.08.2018 in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*³⁴ noted that statutory authorities had miserably failed and were required to be held accountable for their failure.
51. In view of the fact clean environment, apart from other statutory provisions, is a mandate of Article 21 of the Constitution, causing of pollution having serious implications on health of the citizens cannot be accepted and no responsible authority could simply throw its hands in despair.³⁵
52. Thus, there being far from satisfactory governance on the part of the SPCBs, as depicted by the compiled data, resulting in large number of deaths and diseases in the country, remedial measures are required. Lack of effective governance in the present case is patent from absence of steps for prosecution of the guilty persons or recovery of

³² O.A No. 56 (THC) of 2013

³³ O.A. No. 138/2016 (T_{NHRC})

³⁴ O.A. No. 231/2014

³⁵ *Supra* note 18

damages for restoration of the environment which is primary responsibility of the SPCB. Appointment process does contribute to such ineffectiveness.

53. There is, thus, urgent need to review the qualification and appointment procedure so as to realistically comply with the mandate of the judgment of the Hon'ble Supreme Court. There is also need to carry out performance audit of functioning of all the Pollution Control Boards and Pollution Control Committees in the country and to identify remedial steps required in manning and functioning of SPCBs and PCCs or otherwise. Unless strong effective regulatory regime is in place, and shortcomings identified and remedied to expect clean environment would be unrealistic and merely a dream.

Re(iv): What are the conclusions and what are the directions required to be issued by this Tribunal?

54. The above observations lead us to conclude as follows:
- i. CETP operator and the concerned industrial units have failed to comply with the pollution norms and are required to be made accountable for their failure within the framework of the regulatory regime with the assistance of experts making the CPCB as nodal agency to determine the extent of damage caused to the environment and cost of restoration.
 - ii. The CETP and polluting industrial units must be required to deposit an interim amount for damage to the environment and for the cost of restoration pending further orders to be passed in the light of Expert Committee Report proposed to be constituted.
 - iii. Functioning of CETP in the country generally calls for review in view of the fact that there are large number of failures in the existing CETP mechanism, as earlier noted. The abovementioned cases cannot be taken to be only isolated

cases. As many as 100 industrial clusters have been identified by the CPCB itself as critically polluted which supports the need for review.

- iv. The regulatory regime in the form of SPCBs has not been as effective as expected as noted by the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.* (supra). This is partly on account of appointments not being upto the mark as well as absence of audit of performance and monitoring mechanism. This needs to be remedied in light of performance audit and study by an Expert Committee.

55. Accordingly, we direct as follows:

- (i) We direct constitution of following Committee to assess the extent of damage and cost of restoration of the environment and individual accountability of CETP and polluting industrial units:
- a) Representative of CPCB.
 - b) Representative of IIM, Ahmadabad.
 - c) Nominee of IIT, Ahmadabad.
 - d) Scientist nominated by NEERI.
 - e) Representative of GPCB.
- (i.a) The Committee may give its report within three months. The Committee will be entitled to take any factual or technical inputs in the manner found necessary. CPCB will be the nodal agency for the purpose. The Committee may also suggest steps for restoration of the environment.
- (i.b) The Committee may give hearing to the CETP operator and the units identified as polluting by the GPCB for which list will be furnished by the GPCB to the Committee indicating the period and nature of default within one month.

- (i.c) The GPCB may inform the defaulting units for compliance of this order.
- (i.d) The Committee may also consider data already available with it since the affidavit filed by the CPCB does indicate availability of such data with the CPCB.
- (i.e) The GPCB may also consider exercise of its statutory powers of prosecution which power is coupled with duty.
- (ii) Having regard to entirety of factual situation in the present case, we direct that except the green and white categories of industries, other category of defaulting industries connected to the CETP must make deposit with the CPCB, towards interim compensation within one month as follows:
 - a) Large Industries – Rs. 1 Crore each.
 - b) Medium Industries – Rs. 50 Lakhs each.
 - c) Small Industries – Rs. 25 Lakhs each.
- (ii.a) The CETP may deposit a sum of Rs. 10 Crores with the CPCB towards interim compensation within one month.
- (iii) The amount may be utilized by the CPCB for restoration of the environment.
- (iv) The CPCB shall undertake jointly with GPCB extensive surveillance and monitoring of CETPs and at regular interval of three months and submit its report to this Tribunal.
- (v) We direct constitution of following Committee to review the functioning of the CETP in the country and to suggest modifications, if necessary:
 - a) Representative of the MoEF&CC.
 - b) Representative of the CPCB.

- c) Representative of NEERI.
- (v.a) The representative of the CPCB will be the nodal agency. The report may be furnished within three months.
- (vi) The CPCB may conduct Performance Audit of all the SPCBs and Pollution Control Committees (PCCs) within six months by constituting appropriate expert inspection teams and furnish a report to this Tribunal. The CPCB may consider making Performance Audit at suitable intervals a regular feature of its working.
- (vii) We direct the MoEF&CC to constitute a three-member Expert Committee to consider steps to be taken to comply with the mandate of directions of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors. (supra)* and suggestions for improvement, if any to remedy the existing deficiencies in the effective functioning of the regulatory bodies for meaningful protection of the environment.
- (vii.a) The Committee may suggest guidelines for functioning of the SPCBs and broad steps required for bringing air and water quality in polluted stretches and cities and industrial clusters and coastal/eco-sensitive zones within the prescribed norms and measures to be adopted, including recovery of damages, prosecution of offenders, restitution of contaminated and degraded environmental sites.
- (vii.b) The report of the Committee may be furnished before the next date.
- (viii) The CPCB may consider issuing appropriate directions in exercise of its statutory powers in the light of expert studies which may be carried out.

56. Copy of the order may be sent to CPCB by email and all reports in pursuance of the above directions be sent to this Tribunal at filing.ngt@gmail.com

List for further consideration on 19.08.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

January 11, 2019
Original Application No. 95/2018
DV



Item No.03

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 95/2018
(M.A. No. 1029/2018, I.A. Nos. 176/2019 to 187/2019,
I.A. Nos. 190/2019 to 207/2019,
I.A. Nos. 227/2019 to 238/2019,
I.A. No. 263/2019 & I.A. No. 326/2019)

Aryavart Foundation

Applicant(s)

Versus

M/s Vapi Green Enviro Ltd. &Ors.

Respondent(s)

Date of hearing: 13.05.2019

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant (s): Mr. Raj Pangwani, Sr. Advocate, Dr. Surender
S. Hooda, Mr. Jitender Singh, Advocates

For Respondent(s): Mr. Dhruv Pal for GPCB
Mr. Shlok Chandra
Mr. Pinaki Mishra, Sr. Advocate, Mr. Mandeep
Kalra, Mr. Sandeep Mishra, Advocates for
Industries
Mr. Gopal Jain, Sr. Advocate, Mr. Nishant
Shankar, Mr. Nitesh Srivastva, Mr. Mandeep
Kalra, Advocates for CETP

ORDER

INTRODUCTION:

1. The remedial measures against pollution of river Daman Ganga and drain *Bill Khadi* in District Valsad in Gujarat and action against polluting industries and the non-compliant CETP, respondent No.1, is the question for consideration.

BACKGROUND

2. According to the applicant, pollution is being caused by discharge of untreated polluting industrial effluents by more than 500 industrial units in Vapi Industrial Cluster. The CETP operator, Respondent No. 1, M/s. Vapi Green Enviro Limited (Old name – Vapi Waste & Effluent Management Co. Ltd.) and the defaulting individual industrial unit are liable to be rendered accountable by way of prohibitory and remedial measures. The river and the drain in question are required to be restored. The applicant has referred to a study carried out in February, 2017 by NEERI finding huge water pollution in the river as follows:-

“The fish bioassay study on the final treated effluent sample discharged from Vapi CETP into the river indicates 100% mortality at 50, 75 and 100% waste water concentrations within 24 h exposure time (Plate 4.56). The experimental results presented in Table 9.6 reveal toxic nature of the treated effluent from Vapi CETP. Thus, it can be concluded from the fish bioassay study that the final treated effluent from Vapi CETP with high colour intensity, organic and inorganic matters is having toxic effect on aquatic life of Daman Ganga River. Therefore, Vapi CETP effluent must be treated adequately to remove the pollution parameters before discharging into Daman Ganga River.

The final treated effluent discharge from the existing Vapi CETP (D-11A) has not only caused deterioration of the river water quality with respect to the colour and recalcitrant parameters but also has imparted toxic

effect on aquatic life of Daman Ganga River (segment-II). Therefore, Vapi CETP must be scientifically upgraded for colour and recalcitrant pollutants removal including reject management with a final aim of achieving zero liquid effluent discharge as delineated under Section 11.0. This will result in recovery of good quality water, which can be reused as process water by the industries, leading to fresh water conservation.”

3. The Gujarat Pollution Control Board (GPCB) carried out inspection on several dates which confirmed pollution. Notices were issued under Sections 33A and 25 of the Water (Prevention and Control of Pollution) Act, 1974 (Water Act) and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (Air Act) to the erring parties but no satisfactory result was received and pollution beyond statutory norms continues.

EARLIER PROCEEDINGS:

4. This Tribunal reviewed the matter at length vide order dated 11.01.2019 for preventive and remedial measures in the matter. The Tribunal heard the applicant, the CETP Operator, the CPCB, the GPCB and also some of the polluting units who were before the Tribunal. Following questions were framed vide order of this Tribunal dated 11.01.2019:

- “i. Whether the CETP operator and its member units have failed to comply with the conditions of consent and norms of environment and caused pollution? If so, the manner in which they are to be held accountable?*
- ii. Does the functioning of CETP in the present case and of CETPs in general in the country calls for review and modification?*

- iii. *Whether the State Pollution Control Board in the present case and regulatory authorities have not performed their duties as per the expectation and if so, what are the steps necessary to achieve the objects for which the Pollution Control Boards/Committees have been constituted under the Water Air and the Air Act?*
- iv. *What are the conclusions and what are the directions required to be issued by this Tribunal?"*

5. With reference to question no. 1, it was held that CETP operators and member units had failed to comply with the conditions of consent in view of inspection reports dated 28.09.2018 and 10.01.2019 and in the circumstances 'Polluter Pays' principle can be invoked by the statutory regulatory authorities to determine the extent of accountability of the industrial units. The report dated 28.09.2018 showed:-

"It is observed that Inlet quality - COD, NH3-N and TSS are not meeting with inlet norms whereas COD and TSS at outlet of CETP are not meeting with Outlet norms.

CPCB, RD, Vadodara carry out quarterly monitoring of CETP, Vapi. The latest monitoring carried out on 11.08.2018 and results are provided at Annexure-III. It is observed that Inlet quality - TSS, FDS, BOD, COD and NH3-N are not meeting with inlet norms whereas TSS, FD, COD, NH3-N & Phenols at outlet of CETP are not meeting with outlet norms.

M/s VGEL (CETP) reportedly takes internal actions among the defaulting member units as per M/s VGEL monitoring but so far not provided the list of defaulting industries to GPCB though it is expected as per the Hon'ble NGT Order dated 29.08.2018, and also as per notices of direction issued by GPCB.

M/s VGEL (CETP) has not provided any action plan to comply with both inlet as well as outlet norms during the above review."

6. Report dated 10.01.2019 also confirmed non-compliance at frequencies noted in the report with reference to the relevant parameters. The fact that untreated effluents were being discharged into the water bodies was not only reported by CPCB and GPCB but also accepted by the CETP operator. The stand of GPCB was that Notice has been issued to CETP operator as well as defaulting industrial units for remedial action.

Accordingly, a Committee was constituted to hear the individual polluting units and to quantify the amount of liability.

7. Under the issue no. 2, after referring to several cases considered by the Tribunal, it was held that there was large scale failure of CETP systems in general in the light of observations of the Tribunal, an Expert Committee was required to review the same.
8. Under issue no. 3, the Tribunal found failure of mechanism of Pollution Control Boards in ensuring pollution free environment which is the mandate of the Constitution and the object of Water Act, Air Act, the Environment (Protection) Act, 1986 and other such laws. The fact that 351 river stretches are identified as polluted by the CPCB, 102 cities in terms of air quality are identified as non-attainment cities and 100 industrial clusters have been identified as polluted is clear evidence of failure of compliance of environment

norms and ineffectiveness of the present statutory bodies constituted with that mandate. Proceedings in the present case established the failure of Gujarat State Pollution Board in performing its duty of preventing pollution and taking adequate remedial action against polluters. In spite of severe pollution, no conviction was reported. Polluters were not shown to have been prosecuted. It was noted that the Hon'ble Supreme Court in *TechiTagi Tara Vs. Rajendra Singh Bhandari&Ors.*¹and also the Parliamentary Standing Committee on Science and Technology, Environment and Forest had found the failure of pollution boards. Still, adequate remedial measures were not being taken by the concerned authorities by way of legislative or executive intervention. Clean Environment being part of Fundamental Right and 'Sustainable Development', 'Precautionary principle' and 'Polluter Pays principle' being statutorily required to be enforced by this Tribunal under Section 20 of the National Green Tribunal Act, 2010 (NGT Act), to prevent and remedy the acknowledged level of high pollution in the country resulting in death and diseases, the Tribunal held that there was need for Performance Audit being conducted in respect of functioning of all the PCCs and PCBs of the Country and in the light of such findings, further action was required. The directions issued vide order dated 11.01.2019 include that constitution of a Committee to review functioning of CETPs comprising representatives of MoEF&CC, CPCB and NEERI and Performance Audits by CPCB of all the SPCBs and PCCs,

¹ (2018) 11 SCC 734

constitution of a three Member Expert Committee by the MoEF&CC to consider compliance of mandate of the law laid down by the Hon'ble Supreme Court in *Techi Tegi Tara (supra)*, to suggest guidelines for effective working of SPCBs to bring air and water quality within norms.

9. Under issue no. 4, it was concluded that the CETP operator and the concerned units had failed to comply with the environmental norms and were required to be made accountable within the framework of the regulatory regime. The Regulatory regime provides for preventive as well as remedial action of prohibiting polluting activities, including closure, prosecution as well as recovery of compensation on 'Polluter Pays' principle. Pending such action, interim amount of damage for the pollution already caused so as to recover cost of restoration based on *prima-facie* opinion could be recovered. CETP mechanism was required to be reviewed and so was the functioning of the regulatory regime in the form of SPCBs. Accordingly, the Tribunal directed constitution of a Committee to assess the extent of damages, payment of interim compensation by CETP operator as well as erring industries which was to be utilized by the CPCB for restoration. The Tribunal directed performance audit of all the SPCBs/PCCs and also directed to review of regulatory mechanism in the light of observations of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors., (2018) 11 SCC 734*.

ORDERS OF HON'BLE SUPREME COURT:

10. Vide order dated 22.02.2019 in C.A No.002399 of 2019 (Diary No. 5264/2019), the Hon'ble Supreme Court permitted the defaulting industries which were required to pay interim compensation, in the category of small industrial units, and were unable to pay Rs. 25 Lakhs because of financial crisis to approach this Tribunal for seeking waiver of the direction which was to be considered by this Tribunal. The Hon'ble Supreme Court suspended the direction for payment for two weeks to enable the Tribunal to consider the matter. The Hon'ble Supreme Court did not express any opinion on merits. In view of order of the Hon'ble Supreme Court, this Tribunal, vide order dated 09.04.2019, directed *status quo* about the requirement of deposit granted by the Hon'ble Supreme Court to continue till hearing so that the Tribunal could consider the matter.

PRESENT PROCEEDINGS:

A. SUMMARY OF REPORT DATED 09.05.2019:

11. The report of the Committee has been furnished vide email dated 09.05.2019 as is also available on the website of the Central Pollution Control Board (CPCB) and with the parties before the Tribunal.
12. We may make a brief reference to the report of the Committee. The details of the industries of the Vapi industrial area are given in Chapter 2. 78% industries are red category industries while the remaining 22% are orange and green category industries and category and scale wise breakup is as follows:

“

| Category | Small | Medium | Large | Total |
|----------|-------|--------|-------|-------|
| Red | 522 | 41 | 64 | 627 |
| Orange | 125 | 3 | 1 | 129 |
| Green | 133 | 1 | 3 | 137 |
| Total | 780 | 45 | 68 | 893 |

”

13. Sector wise distribution of industries is as follows:

“

| Different Sectors | Number |
|---------------------------|--------|
| Chemicals | 290 |
| Dyes & Dyes Intermediates | 113 |
| Textile | 57 |
| Pulp & Paper | 40 |
| Pharmaceuticals | 30 |
| Pesticides | 16 |
| Others | 347 |

”

14. As regards CETP performance, the Committee noted as follows:

“The yearly average inlet COD data over the last five years is far above the permissible inlet limit (1000 mg/l) except for the year of 2016 (Figure 3.1). Similarly, average outlet COD data over the last five years are above the permissible limit (250 mg/l). Figure 3.2 shows that in 2016 when inlet COD level is below the prescribed limit (as per GPCB data), CETP was able to maintain the discharge quality i.e, outlet COD (260 mg/l) very close norm (250 mg/l). Though, there is an improvement over the years, CETP could not maintain the discharge norm continuously. Thus, it is imperative that CETP should strictly maintain its inlet COD norm well below prescribed inlet norm 1000 mg/l.”

15. With regard to damage to the river water body, it was observed:

**“4.1.4 DAMAGE TO RIVER WATER QUALITY-
PHYSICOCHEMICAL ENVIRONMENT (BASED ON
PHYSICOCHEMICAL CHARACTERISTICS OF RIVER
WATER)**

□ As shown in the Table 4.1, the pH, and D.O., BOD ranged between 7.2-7.8, 4.1 - 6.1 mg/l, 2.0 -3.0 mg/L respectively.

□ TDS of the river water ranged from 678 mg/l near Jari causeway to 12,890 mg/l at Daman Jetty. The TDS concentration below the bridge near CETP outlet is 680 mg/l among the sampling points. The river TDS is anticipated to increase in salinity concentrations from riverine zone to estuarine zone and then sea.

□ The concentration of COD was higher below the bridge near CETP outlet (33 mg/l) which reduces to 23 mg/l near Jari causeway and 27 mg/l near the Daman Jetty. This is attributed to the CETP final treated effluent discharge, as the concentration of COD at Upstream side i.e. GIDC weir is 10 mg/l.

□ The colour of the river samples collected ranged between dark brown (1500 HU) at the CETP outlet to pale yellow (75 HU) near the Daman Jetty based on CSIR-NEERI's report. Other parameters from the same report are as follows.

- Ammonia (N), fluoride, nitrate and phenols concentrations are in the range of BDL-3.9 mg/l, 0.007-0.35 mg/l, 0.06-27.03 mg/l and 0.1- 12.87mg/l respectively.
- Total Kjeldhal Nitrogen (TKN) and total Phosphates are in the range of 9.53-67.32 and 0.07-29.89 mg/l respectively.
- Concentrations of sodium ions at sampling point ranges between 96 (Jerry Causeway) - 3200 mg/l (Daman Jetty) with near CETP outlet concentrations of Sodium at 312 mg/L.

- Concentrations of chlorides at sampling point ranges between 312• (Near CETP outlet) - 8807 mg/l (Daman Jetty). Concentration at Jerry Causeway of Chlorides is 313 mg/L. This closely follows higher concentrations near the CETP outlet and decreasing downwards. The sodium and chlorides concentrations are expected to increase near the estuarine/Marine zone.
This is a clear indication of industrial pollution positively due to CETP Vapi.

As observed from results of CPCB, GPCB (Appendix 6A , 6 B), there is increase in concentration of pollutants after CETP discharge at Namdha and Jari Causeway along the Damanganga river with respect to water quality at GIDC weir (which can be considered as almost river water without effect of pollution). This shows that there is damage to water quality of River Damanganga.

Polluted river stretches have been divided in five priority categories i.e. I, II, III, IV & V depending upon the levels of BOD. As per CPCB Report - "River Stretches for Restoration of Water Quality", CPCB, Sept 2018 and February 2015, river stretch- Kachigaon to Vapi (GIDC weir to Jari Causeway) of river Damanganga is Priority-IV where as it was Priority-II as per CPCB Report in 2010 (Priority - I being most polluted and Priority -V being best rating). This means, the river stretch is improving over time, but still there are pollutants as evident from the above data."

16. The Committee also noted that the local community was not undertaking fishing activity downstream the CETP discharge. There was no fishing catch in the stretch. Fish mortality was observed at 75% and 100% wastewater concentration. After an exposure of 72 h, the recorded fish mortality was 20% for the sample with 75% wastewater, whereas 100% fish mortality was recorded during 96 h

of exposure. In 100% wastewater concentration fish mortality registered was 20%, 80% and 100% within exposure time of 48, 72 and 96 h respectively. Fish mortality rate was very high at 100% compared to 75% wastewater concentration indicating presence of toxic constituents in the CETP discharge. Presence of pollutants discharged from the CETP outlet affected the biological environment.

17. On the subject of evaluation of damages, the Committee considered the direct benefit transfer method and shadow cost of Pollution Load and Benefit Transfer Method. The Committee opted to go by the shadow cost of Pollution Load and Benefit Transfer Method and assessed the cost of damages per year and assessed the damages as follows:

“Table 4.10: total Yearly Damages from Each Pollutant

| Year | Damage Cost in Crore (expressed in 2018 Rs) | | | | |
|--|--|------|------|-------|-------|
| | COD | BOD | TSS | N | Total |
| 2013 | 5.08 | 0.26 | 0.07 | 10.31 | 15.72 |
| 2014 | 4.85 | 0.42 | 0.06 | 13.44 | 18.77 |
| 2015 | 2.72 | 0.00 | 0.00 | 0.51 | 3.23 |
| 2016 | 0.52 | 0.00 | 0.00 | 2.55 | 3.07 |
| 2017 | 0.52 | 0.01 | 0.00 | 13.23 | 13.76 |
| 2018 | 0.53 | 0.01 | 0.00 | 11.91 | 12.45 |
| Total in Last 6 years in Rs. Crore | | | | | 67.00 |
| Average damage in each year (due to excess discharge) in | | | | | 11.17 |

Therefore using Approach II, (Table 4.10) a cumulative damage of Rs. 67.00 Crore has been estimated due to excess discharge of pollutants in the river ecosystem in last six years between 2013- 2018. Yearly damages range from Rs. 3.07 Cr/yr to 18.77 Cr/yr with an average of Rs. 11.17 Crore damage to environment in each year.”

18. The cost of restoration of the river was assessed to be between Rs. 731 to 751 Crores. Liability of the defaulting industries was made in respect of 44 defaulting industries of which list was given to the Committee to the GPCB. Contribution of the said 44 industries was found to be miniscule as out of 55 MLD of CETP, the said industries were contributing only 2.2 MLD (about 5%). Thus, for industries contributing 95% of pollution, no assessment of damage has been made. The Committee followed the following formula:

$$EC = (PI \times N \times R \times S \times LF)$$

Where, EC is Environmental Compensation in ₹

PI = Pollution Index of industrial sector

N = Number of days of violation took place

R = A factor in Rupees (Rs) for EC

S = Factor for scale of operation

LF = Location factor

19. For applying the above formula, variables were taken as follows:

N = Number of days of violation took place for which violation took place is the period between the day of violation observed and the day of compliance verified by PCB/SPCB/PCC

R = A factor in Rupees (Rs) which is a minimum of 100 to maximum of 500. R is considered as Rs 100 for small industries, Rs 300 for medium and Rs 500 for large scale industries including CETP

S = Factor for scale of operation. For small S = 0.5, For medium S = 1 and larger unit S = 1.5

LF = Location factor.

20. The conclusion of the Committee was that there is increase in concentration of pollutants:

“As observed from results of CPCB, GPCB and NEERI, there is increase in the concentration of pollutants post CETP discharge at Namdha and Jari Causeway along the Damanganga river vis-a-vis river water quality at GIDC weir (which can be considered as river water without effect of pollution). Aesthetically, the impact of pollution in the river Damanganga is observed for about 13 km from Vapi weir. This is supported by the CSIR-NEERI Report (2016-2017). The report also stresses on the toxicity of the CETP wastewater on the to fish. Based on the Interactions with local community and Fisheries Department of UT of Daman & Diu, it was conveyed that fishing is not carried out on the stretch downstream of CETP discharge due to river pollution. However data on marine fish catch in the sea near Daman is available.

Also based on the historical data of CPCB, the quantum of pollution load indicated decreasing trend of major pollutants such as COD and BOD over the years. This is in line with the improvement in the quality of treated effluent of CETP though CETP is not meeting with outlet standards for parameter COD, TDS, and Colour. Hence, upgradation of CETP treatment scheme

is paramount to reduce pollution reaching the river Damanganga. There is improvement in the river water quality as per priority categorisation from Priority - II (2010) to Priority - IV (2015 & 2018) as inferred from CPCB report for the river stretch: Kachigaon to Vapi (GIDC weir to Jari Causeway (Priority - I being most polluted and Priority -V being best rating). Though, river stretch falls under Priority IV (based on BOD), presence of other pollutants discharged from the CETP outlet affected the biological and physicochemical environment of the river.

The impact on the coastal marine environment (4 beaches- Tadgam, Jampore, Devka and Tithal) due to industrial discharges through rivers/drains in the area assessed by National Institute of Oceanography (NIO) (2018) and report has stated that there is no evidence of significant deterioration of environmental quality of the beachfront environment. The waters of these 4 beaches contained high load of fecal coliform (FC) in water and sediment suggesting contamination by sewage. The study conducted by CSIR-NEERI also indicated pesticides concentrations at levels below the detectable levels of instrument analysis.

In view of the consideration of the steps for the restoration of the environment of river Damanganga suggested based on treatment of pollutants and discharge as per environmental norms, the cost of restoration comes about Rs. 751 crore for over ground pipeline network from industries to GIDC manhole/sump, quality & quantity monitoring SCADA system, upgradation of CETP, construction of STPs, management of MSW in the area.

As there are many methods for environment damage estimation and all of them use reasonable assumptions, the committee has used two different approaches to calculate the damage. While Approach - I is based on the economic valuation of eco-services rendered by the river considering a representative critical pollutant (COD) for damage estimation. Approach-II is based on the CETP discharge outlet norms for the pollutants: COD, NH₃-N, TSS, and BOD, independent of river water quality. Using two alternative methods the cumulative economic damages are estimated to be in a comparable range (**INR 41.61 Cr for the Approach-I and INR 67.00 Cr for Approach-II during the year 2013 to 2018**).

Using the recent six years (2013-2018) data and employing two alternate methods, the yearly average economic damages are estimated to be in the comparable range of **INR 6.93 Cr/year (Approach-I) and INR 11.17 cr/Year (Approach-II).**"

21. As regards individual polluting units, the compensation was assessed at Rs. 4.44 Crores as per details in Appendix-3 and Appendix-8. A brief reference to Appendix-8 shows that in respect of Amardeep Chemical Industries Pvt. Limited the period of default has been taken to be 23 days, taking the date of inspection when pollution is detected as the starting point and the date of alleged compliance as the end point.

B. CONSIDERATION OF THE REPORT:

22. Learned Counsel for the applicant submits that the approach of assessing damages only for the period after inspection permits

ignoring the pollution for entire period by an erroneous presumption that no pollution was caused till inspection was done. There is fundamental error in Committee presuming that date of inspection is the starting point for liability and not the entire period of pollution. The 'Polluter Pays' principle requires the polluter to pay for the entire period of pollution which needs to be assessed in every individual case in the light of circumstantial evidence and the probabilities. Reliance has been placed on order of this Tribunal dated 29.04.2019 in *O.A. No. 116/2014, Meera Shukla Vs. Municipal Corporation, Gorakhpur & Ors.* wherein it was observed:

"9. The UPSPCB may assess the amount of compensation applying the formula laid down by the CPCB not only for the days mentioned in the report of the CPCB but for the actual days of violation from the beginning but not beyond five years from the date of calculation."

23. As regards the scale laid down by the CPCB, it was submitted that the same is tentative and subject to the rider that the cost of restoration is not. It does not change the basic norm that compensation for damage to environment has to be enough to meet the cost of restoration and has to be deterrent. Polluter cannot profit at the cost of victim. Victim is not to bear the cost of restoration. It is to be borne by the polluter. In this case the cost of restoration is going to be huge and it cannot be said that the polluter is to bear only Rs. 4.44 Crore and rest is to be borne by the victims. This will be perversity and travesty of justice. Non-payment of interim compensation should lead to detention of

owners/directors in civil prison under Section 25 of the NGT Act read with Section 51 of C.P.C.

24. Learned Counsel for the applicant also points out that the Committee has not factored in the level of pollution based on category of industries as red, orange and green which depends on pollution protentional. Even a small industry may be causing more pollution than large industry. Merely categorization large, small and medium without considering the extent of pollution on account of nature of activity of such industry is not correct application of the 'Polluter Pays' principle. The cost of restoration having been found to be more than Rs. 750 Crores which includes multiple of factors. The cost estimate for River Restoration Programme which includes CETP upgradation, STP and MSW facility. The Committee has undertaken economic valuation and damage assessment by two methods. By following 'shadow cost of pollution load and benefit transfer method' the cumulative damage of Rs. 67.00 Crores has been estimated due to excess discharge of pollutants in river ecosystem in last six years between 2013-18 with average damage of Rs. 11.17 Crores each year to the environment. However, by following 'Direct Benefit Method' which is based on The Economics of Ecosystem and Biodiversity (TEEB) project set up in 2007 and led by United Nations Environment Programme (UNEP) the damage that can be attributed to pollution from CETP in excess of stipulated standard of COD comes to Rs. 41.61 Crores for six years. Right application of the 'Polluter Pays' principle requires that the polluter should be required

to pay the cost of restoration. The compensation to be recovered should be deterrent. In the present case, compensation has been based on a formula worked out by the CPCB which cannot be universally applied without reference to cost of restoration and may be deficient in the present case having regard to the high cost of restoration. The amount of compensation should on account of wide spread pollution broadly also correspond to the cost of restoration which has not been done.

25. The Committee has assessed compensation only for 44 units while the number of polluting units is more than 500. GPCB failed to give list of all the polluting units. GPCB has not acted on 'Precautionary' principles by closing the polluting units. Reliance has been placed on the order of this Tribunal dated 09.04.2019 in O.A. No. 125/2018, *Arvind Pundalik Mhatre Vs. Ministry of Environment and Forest & Climate Change & Ors.*, wherein this Tribunal in similar circumstances directed closure of polluting units to uphold the mandate of the Water (Prevention and Control of Pollution) Act, 1974. It was observed as follows:

"14. Accordingly, we direct the MPCB to forthwith suspend the Consent to Operate to the industries in the area not meeting the norms and permit them to operate only after remedial steps are taken. Steps in this direction be taken within two weeks from today. Whether a particular industry is complying or not complying with the norms is the matter to be decided by the MPCB in accordance with law. Action taken report be furnished to the Committee and the Committee may take a final call in the matter, in case of any surviving issue."

26. In the present case in spite of acknowledged pollution, the polluting units are continuing. There is no material to show launching of

prosecution. The approach of the GPCB is, thus, patently soft towards the violators of law which itself shows failure of the regulator to protect and restore the environment.

27. Learned Counsel for the GPCB, CETP operators and the industrial units have not been able to show any justification for the approach of applying the 'Polluter Pays' principle only to the period post inspection as can be seen from Para 21 above nor they are able to show justification for not including all polluters or to justify grossly disproportionate compensation. There is no rebuttal to the contentions raised on behalf of the applicant.
28. Question for consideration is whether report of the Committee to the extent compensation is assessed only for the post inspection default and not for the entire period of pollution and to the extent the same is not deterrent and unrelated to the cost of restoration needs to be reconsidered.
29. Answer has to be in the positive. We find merit in the submissions of the learned Counsel for the applicant. It is well known that there is online monitoring mechanism and water qualities are recorded which can be the basis for liability irrespective of the physical inspection. In the present case, the pollution is taken only from 28.02.2018 which was the date of next inspection and ended on 22.03.2018, it is assumed that the pollution without any study of the actual period of pollution. Similar is the error in respect of calculation of compensation with respect to all the units. We are

also informed that except one year, period of pollution in the last five years has been totally ignored, contrary to the order of this Tribunal. Quantum assessed has no correlation to the cost of restoration.

30. We find merit in the submissions that the compensation to be recovered should be deterrent and should have some correlation with the cost of restoration.
31. Accordingly, we direct the Committee to make fresh calculation based on actual period of pollution during five years preceding 26.02.2018, the date on which this application was filed i.e. from 26.02.2013 till the date of calculation. The Committee has only gone by the category of large, small and medium industry and not by the extent of pollution by the category of the industry concerned as red, orange and green. The Committee may also keep in mind the need to correlate the compensation to be recovered to the cost of restoration in the facts of the present case. The GPCB should furnish list of all the polluting units. We find that the approach of the GPCB has been too soft and adequate action has not been taken against the law violators by way of prosecution and closure of polluting activities which is a failure of the regulator. If cost of restoration is not recovered from polluters, the regulator and not the victim should be responsible for the loss.
32. In view of the material on record appearing from the report extracted above, *prima facie*, direction to deposit interim compensation in terms of order dated 11.01.2019 is fully justified and needs no

change. It is patent that the interim amount fixed by this Tribunal may not only be inadequate to meet the loss caused by pollution and the cost of restoration. The prayer for waiving the requirement of interim deposits has no merit and is dismissed. I.A. Nos.176/2019 to 187/2019, I.A. Nos. 190/2019 to 207/2019, I.A. Nos. 227/2019 to 238/2019, I.A. No. 263/2019 said to be for variation of order dated 11.01.2019 will stand dismissed.

33. Fresh report of the Committee may be furnished within two months by e-mail at ngt.filing@gmail.com. Any further submissions of the parties may be given to the Committee through CPCB. We also add a representative of MoEF&CC to the Committee for making the assessment.
34. GPCB may furnish list of all the polluting units in addition to list of 44 units earlier given and online data as may be necessary to determine damages for period from 13.02.2013 till date to the Committee and perform its duties as regulator in respect of CETP as well as all defaulting units by way of closure to stop polluting activities and prosecution for the violation of law which had already done.
35. In terms of order dated 11.01.2019 and the above order, following steps may be completed:

- i. Report be submitted for review of functioning of CETPs in the country as per direction in Para 55 (v) in order dated 11.01.2019. CPCB may coordinate.
- ii. Performance audit of SPCBs/PCCs may be completed as per para 55 (vi) in order dated 11.01.2019.
- iii. MoEF&CC may give status of report of steps to revamp the regulatory bodies as directed in para 55 (vii) and (vii.a) in order dated 11.01.2019.
- iv. Compliance of requirement of deposits be made in terms of para 55 (ii) of order dated 11.01.2019 forthwith to the extent not made.
- v. The Committee to assess the compensation and give its revised report within two months. MoEF&CC may nominate its representative as part of Committee constituted in terms of para 55 (i) vide order dated 11.01.2019.

A copy of this order be sent to the MoEF&CC by e-mail for compliance on its part. In case of non-compliance, the concerned Joint Secretary, MoEF&CC may remain present in person on the next date.

List for further consideration on 19.08.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

May 13, 2019

Original Application No. 95/2018

(M.A. No. 1029/2018, I.A. Nos. 176/2019 to 187/2019,

I.A. Nos. 190/2019 to 207/2019,

I.A. Nos. 227/2019 to 238/2019,

I.A. No. 263/2019 & I.A. No. 326/2019)

AK&A



Item No. 01

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**Original Application No. 95/2018
(M.A. No. 1029/2018 & I.A. No. 326/2019)

Aryavart Foundation

Applicant(s)

Versus

M/s Vapi Green Enviro Ltd. & Ors.

Respondent(s)

Date of hearing: 28.08.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s): Mr. Raj Panjwani, Sr. Advocate with Mr. Jitendar Singh, Advocate

For Respondent (s): Mr. Gopal Jain, Sr. Advocate, Mr. M.S Kalra, Mr. Sandeep Mishra, Advocates for R-1
Ms. Nidhi Jaswal, Advocate for GPCB
Mr. Ritvij Bhatt, Advocate for R-6
Mr. Shlok Chandra, Advocate for CPCB**ORDER**

1. The question for consideration is remedial measures against pollution of river Daman Ganga and drain *Bill Khadi* in District Valsad in Gujarat on account of discharge of effluents by industries and CETP in Vapi Industrial Cluster.
2. The matter was earlier reviewed vide order dated 13.05.2019. It will be appropriate to refer to the relevant part of the said order:

“BACKGROUND

2. According to the applicant, pollution is being caused by discharge of untreated polluting industrial effluents by more than 500 industrial units in Vapi Industrial Cluster. The CETP operator, Respondent No. 1, M/s. Vapi Green Enviro Limited (Old name – Vapi Waste & Effluent Management Co. Ltd.) and the defaulting individual industrial unit are liable to be rendered accountable by way of prohibitory and remedial measures. The river and the drain in question are required to be restored. The applicant has referred to a study carried out in February, 2017 by NEERI finding huge water pollution in the river as follows:-

“The fish bioassay study on the final treated effluent sample discharged from Vapi CETP into the river indicates 100% mortality at 50, 75 and 100% waste water concentrations within 24 h exposure time (Plate 4.56). The experimental results presented in Table 9.6 reveal toxic nature of the treated effluent from Vapi CETP. Thus, it can be concluded from the fish bioassay study that the final treated effluent from Vapi CETP with high colour intensity, organic and inorganic matters is having toxic effect on aquatic life of Daman Ganga River. Therefore, Vapi CETP effluent must be treated adequately to remove the pollution parameters before discharging into Daman Ganga River.

The final treated effluent discharge from the existing Vapi CETP (D-11A) has not only caused deterioration of the river water quality with respect to the colour and recalcitrant parameters but also has imparted toxic effect on aquatic life of Daman Ganga River (segment-II). Therefore, Vapi CETP must be scientifically upgraded for colour and recalcitrant pollutants removal including reject management with a final aim of achieving zero liquid effluent discharge as delineated under Section 11.0. This will result in recovery of good quality water, which can be reused as process water by the industries, leading to fresh water conservation.”

3. The Gujarat Pollution Control Board (GPCB) carried out inspection on several dates which confirmed pollution. Notices were issued under Sections 33A and 25 of the Water (Prevention and Control of Pollution) Act, 1974 (Water Act) and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (Air Act) to the erring parties but no satisfactory result was received and pollution beyond statutory norms continues.

EARLIER PROCEEDINGS:

4. This Tribunal reviewed the matter at length vide order dated 11.01.2019 for preventive and remedial measures in the matter.

The Tribunal heard the applicant, the CETP Operator, the CPCB, the GPCB and also some of the polluting units who were before the Tribunal. Following questions were framed vide order of this Tribunal dated 11.01.2019:

- i. Whether the CETP operator and its member units have failed to comply with the conditions of consent and norms of environment and caused pollution? If so, the manner in which they are to be held accountable?**
- ii. Does the functioning of CETP in the present case and of CETPs in general in the country calls for review and modification?**
- iii. Whether the State Pollution Control Board in the present case and regulatory authorities have not performed their duties as per the expectation and if so, what are the steps necessary to achieve the objects for which the Pollution Control Boards/Committees have been constituted under the Water Air and the Air Act?**
- iv. What are the conclusions and what are the directions required to be issued by this Tribunal?"**

5. With reference to question no. 1, it was held that CETP operators and member units had failed to comply with the conditions of consent in view of inspection reports dated 28.09.2018 and 10.01.2019 and in the circumstances 'Polluter Pays' principle can be invoked by the statutory regulatory authorities to determine the extent of accountability of the industrial units. The report dated 28.09.2018 showed:-

"It is observed that Inlet quality - COD, NH3-N and TSS are not meeting with inlet norms whereas COD and TSS at outlet of CETP are not meeting with Outlet norms.

CPCB, RD, Vadodara carry out quarterly monitoring of CETP, Vapi. The latest monitoring carried out on 11.08.2018 and results are provided at Annexure-III. It is observed that Inlet quality - TSS, FDS, BOD, COD and NH3-N are not meeting with inlet norms whereas TSS, FD, COD, NH3-N & Phenols at outlet of CETP are not meeting with outlet norms.

M/s VGEL (CETP) reportedly takes internal actions among the defaulting member units as per M/s VGEL monitoring but so far not provided the list of defaulting industries to GPCB though it is expected as per the Hon'ble NGT Order dated 29.08.2018, and also as per notices of direction issued by GPCB.

M/s VGEL (CETP) has not provided any action plan to comply with both inlet as well as outlet norms during the above review."

6. Report dated 10.01.2019 also confirmed non-compliance at frequencies noted in the report with reference to the relevant parameters. The fact that untreated effluents were being discharged into the water bodies was not only reported by CPCB and GPCB but also accepted by the CETP operator. The stand of GPCB was that Notice has been issued to CETP operator as well as defaulting industrial units for remedial action.

Accordingly, a Committee was constituted to hear the individual polluting units and to quantify the amount of liability.

7. Under the issue no. 2, after referring to several cases considered by the Tribunal, it was held that there was large scale failure of CETP systems in general in the light of observations of the Tribunal, an Expert Committee was required to review the same.

8. Under issue no. 3, the Tribunal found failure of mechanism of Pollution Control Boards in ensuring pollution free environment which is the mandate of the Constitution and the object of Water Act, Air Act, the Environment (Protection) Act, 1986 and other such laws. The fact that 351 river stretches are identified as polluted by the CPCB, 102 cities in terms of air quality are identified as non-attainment cities and 100 industrial clusters have been identified as polluted is clear evidence of failure of compliance of environment norms and ineffectiveness of the present statutory bodies constituted with that mandate. Proceedings in the present case established the failure of Gujarat State Pollution Board in performing its duty of preventing pollution and taking adequate remedial action against polluters. In spite of severe pollution, no conviction was reported. Polluters were not shown to have been prosecuted. It was noted that the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*¹ and also the Parliamentary Standing Committee on Science and Technology, Environment and Forest had found the failure of pollution boards. Still, adequate remedial measures were not being taken by the concerned authorities by way of legislative or executive intervention. Clean Environment being part of Fundamental Right and 'Sustainable Development', 'Precautionary principle' and 'Polluter Pays principle' being statutorily required to be enforced by this Tribunal under Section 20 of the National Green Tribunal Act, 2010 (NGT Act), to prevent and remedy the acknowledged level of high pollution in the country resulting in death and diseases, the Tribunal held that there was need for Performance Audit being conducted in respect of functioning of all the PCCs and PCBs of the Country and in the light of such findings, further action was required. The directions issued vide order dated 11.01.2019 include that constitution of a Committee to review functioning of CETPs comprising

¹ (2018) 11 SCC 734

representatives of MoEF&CC, CPCB and NEERI and Performance Audits by CPCB of all the SPCBs and PCCs, constitution of a three Member Expert Committee by the MoEF&CC to consider compliance of mandate of the law laid down by the Hon'ble Supreme Court in *Techi Tegi Tara* (supra), to suggest guidelines for effective working of SPCBs to bring air and water quality within norms.

9. Under issue no. 4, it was concluded that the CETP operator and the concerned units had failed to comply with the environmental norms and were required to be made accountable within the framework of the regulatory regime. The Regulatory regime provides for preventive as well as remedial action of prohibiting polluting activities, including closure, prosecution as well as recovery of compensation on 'Polluter Pays' principle. Pending such action, interim amount of damage for the pollution already caused so as to recover cost of restoration based on prima-facie opinion could be recovered. CETP mechanism was required to be reviewed and so was the functioning of the regulatory regime in the form of SPCBs. Accordingly, the Tribunal directed constitution of a Committee to assess the extent of damages, payment of interim compensation by CETP operator as well as erring industries which was to be utilized by the CPCB for restoration. **The Tribunal directed performance audit of all the SPCBs/PCCs and also directed to review of regulatory mechanism in the light of observations of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*, (2018) 11 SCC 734."**

3. The above background shows that based on objective data it was clearly established that the CETP in question was operating in environmental norms and the pollution caused was required to be controlled by stopping the polluting activity and making the polluters accountable on the 'Polluter Pays' principle. Conscious of the fact that large number of industries are connected to the CETP which may be required to be made accountable for causing pollution, the Tribunal made it clear that statutory authorities may give hearing to the affected parties and perform their duties consistent with the principles of *natural justice*. For giving a direction to the statutory authorities in the light of clear evidence of pollution, it was not necessary for the Tribunal to hear individual industries in view of the

fact that such hearing is to be given by the regulatory authority. Since the pollution control board had failed to perform its duty, this Tribunal was required to consider the remedial steps necessary including compliance of observations in the judgement of the Hon'ble Supreme Court with regard to the manning of the regulatory bodies.

4. The Tribunal, in its hearing on 13.05.2019, considered the report dated 09.05.2019 submitted by the joint Committee with regard to the status of compliance of environmental norms by the CETPs as well as individual industrial units. It was observed:

"20. The conclusion of the Committee was that there is increase in concentration of pollutants:

"As observed from results of CPCB, GPCB and NEERI, there is increase in the concentration of pollutants post CETP discharge at Namdha and Jari Causeway along the Damanganga river vis-a-vis river water quality at GIDC weir (which can be considered as river water without effect of pollution). Aesthetically, the impact of pollution in the river Damanganga is observed for about 13 km from Vapi weir. This is supported by the CSIR-NEERI Report (2016-2017). The report also stresses on the toxicity of the CETP wastewater on the to fish. Based on the Interactions with local community and Fisheries Department of UT of Daman & Diu, it was conveyed that fishing is not carried out on the stretch downstream of CETP discharge due to river pollution. However data on marine fish catch in the sea near Daman is available.

Also based on the historical data of CPCB, the quantum of pollution load indicated decreasing trend of major pollutants such as COD and BOD over the years. This is in line with the improvement in the quality of treated effluent of CETP though CETP is not meeting with outlet standards for parameter COD, TDS, and Colour. Hence, upgradation of CETP treatment scheme is paramount to reduce pollution reaching the river Daman Ganga. There is improvement in the river water quality as per priority categorisation from Priority - II (2010) to Priority - IV (2015 & 2018) as inferred from CPCB report for the river stretch: Kachigaon to Vapi (GIDC weir to Jari Causeway (Priority - I being most polluted and Priority -V being best rating). Though, river stretch falls under Priority IV (based

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In view of the consideration of the steps for the restoration of the environment of river Damanganga suggested based on treatment of pollutants and discharge as per environmental norms, the cost of restoration comes about Rs. 751 crore for over ground pipeline network from industries to GIDC manhole/sump, quality & quantity monitoring SCADA system, upgradation of CETP, construction of STPs, management of MSW in the area.

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Using the recent six years (2013-2018) data and employing two alternate methods, the yearly average economic damages are estimated to be in the comparable range of **INR 6.93 Cr/year (Approach-I) and INR 11.17 cr/Year (Approach-II).**"

24. Learned Counsel for the applicant also points out that the Committee has not factored in the level of pollution based on category of industries as red, orange and green which depends on pollution protentional. Even a small industry may be causing more pollution than large industry. Merely categorization large, small and medium without considering the extent of pollution on account of nature of activity of such industry is not correct application of the 'Polluter Pays' principle. The cost of restoration having been found to be more than Rs. 750 Crores which includes multiple of factors. The cost estimate for River

Restoration Programme which includes CETP upgradation, STP and MSW facility. The Committee has undertaken economic valuation and damage assessment by two methods. By following 'shadow cost of pollution load and benefit transfer method' the cumulative damage of Rs. 67.00 Crores has been estimated due to excess discharge of pollutants in river ecosystem in last six years between 2013-18 with average damage of Rs. 11.17 Crores each year to the environment. However, by following 'Direct Benefit Method' which is based on The Economics of Ecosystem and Biodiversity (TEEB) project set up in 2007 and led by United Nations Environment Programme (UNEP) the damage that can be attributed to pollution from CETP in excess of stipulated standard of COD comes to Rs. 41.61 Crores for six years. Right application of the 'Polluter Pays' principle requires that the polluter should be required to pay the cost of restoration. The compensation to be recovered should be deterrent. In the present case, compensation has been based on a formula worked out by the CPCB which cannot be universally applied without reference to cost of restoration and may be deficient in the present case having regard to the high cost of restoration. The amount of compensation should on account of wide spread pollution broadly also correspond to the cost of restoration which has not been done.

25. The Committee has assessed compensation only for 44 units while the number of polluting units is more than 500. GPCB failed to give list of all the polluting units. GPCB has not acted on 'Precautionary' principles by closing the polluting units. Reliance has been placed on the order of this Tribunal dated 09.04.2019 in O.A. No. 125/2018, Arvind Pundalik Mhatre Vs. Ministry of Environment and Forest & Climate Change & Ors., wherein this Tribunal in similar circumstances directed closure of polluting units to uphold the mandate of the Water (Prevention and Control of Pollution) Act, 1974. It was observed as follows:

"14. Accordingly, we direct the MPCB to forthwith suspend the Consent to Operate to the industries in the area not meeting the norms and permit them to operate only after remedial steps are taken. Steps in this direction be taken within two weeks from today. Whether a particular industry is complying or not complying with the norms is the matter to be decided by the MPCB in accordance with law. Action taken report be furnished to the Committee and the Committee may take a final call in the matter, in case of any surviving issue."

26. In the present case in spite of acknowledged pollution, the polluting units are continuing. There is no material to show launching of prosecution. The approach of the GPCB is, thus, patently soft towards the violators of law which itself shows failure of the regulator to protect and restore the environment.

31. **Accordingly, we direct the Committee to make fresh calculation based on actual period of pollution during five years preceding 26.02.2018, the date on which this application was filed i.e. from 26.02.2013 till the date of calculation.** The Committee has only gone by the category of large, small and medium industry and not by the extent of pollution by the category of the industry concerned as red, orange and green. The Committee may also keep in mind the need to correlate the compensation to be recovered to the cost of restoration in the facts of the present case. The GPCB should furnish list of all the polluting units. We find that the approach of the GPCB has been too soft and adequate action has not been taken against the law violators by way of prosecution and closure of polluting activities which is a failure of the regulator. If cost of restoration is not recovered from polluters, the regulator and not the victim should be responsible for the loss.

32. **In view of the material on record appearing from the report extracted above, prima facie, direction to deposit interim compensation in terms of order dated 11.01.2019 is fully justified and needs no change.** It is patent that the interim amount fixed by this Tribunal may not only be inadequate to meet the loss caused by pollution and the cost of restoration. The prayer for waiving the requirement of interim deposits has no merit and is dismissed. I.A. Nos.176/2019 to 187/2019, I.A. Nos. 190/2019 to 207/2019, I.A. Nos. 227/2019 to 238/2019, I.A. No. 263/2019 said to be for variation of order dated 11.01.2019 will stand dismissed.

33. Fresh report of the Committee may be furnished within two months by e-mail at ngt.filing@gmail.com. Any further submissions of the parties may be given to the Committee through CPCB. We also add a representative of MoEF&CC to the Committee for making the assessment.

34. GPCB may furnish list of all the polluting units in addition to list of 44 units earlier given and online data as may be necessary to determine damages for period from 13.02.2013 till date to the Committee and perform its duties as regulator in respect of CETP as well as all defaulting units by way of closure to stop polluting activities and prosecution for the violation of law which had already done.

35. **In terms of order dated 11.01.2019 and the above order, following steps may be completed:**

- i. **Report be submitted for review of functioning of CETPs in the country as per direction in Para 55 (v) in order dated 11.01.2019. CPCB may coordinate.**
- ii. **Performance audit of SPCBs/PCCs may be completed as per para 55 (vi) in order dated 11.01.2019.**

- iii. *MoEF&CC may give status of report of steps to revamp the regulatory bodies as directed in para 55 (vii) and (vii.a) in order dated 11.01.2019.*
- iv. *Compliance of requirement of deposits be made in terms of para 55 (ii) of order dated 11.01.2019 forthwith to the extent not made.*
- v. *The Committee to assess the compensation and give its revised report within two months. MoEF&CC may nominate its representative as part of Committee constituted in terms of para 55 (i) vide order dated 11.01.2019."*

Proceedings before the Tribunal on 19.08.2019

5. In the light of the above background we took up the matter on 19.08.2019. After considering the above report dated 14.08.2019 received from the Committee on the subject of performance of CETP, the Tribunal sought information about the units responsible for discharging effluents beyond norms in CETP inlet resulting in CETP outlet not being as per standards. The Tribunal completed the hearing on all other aspects.

Today's Proceedings before the Tribunal

6. Written submissions have been filed in the course of hearing today on behalf of Respondent No.1 with regard to identification of individual contributors to pollution of inlets in the CETP. It is stated that the effluents of the individual are collected in a common drain. CETP has no opportunity to assess the inlet norms of the individual industries. At the same time, list of defaulting industries furnished by the CETP to the GPCB on 01.02.2019 has been filed as an annexure to the written submissions containing names of the following industries:

1. Chemodist Industries
2. Dalmia Poly Pro Industries Pvt. Ltd.
3. Haatkesh Chem & Engind
4. Jayshiv Chemicals Pvt. Ltd.
5. Nylo Speciality Colours
6. Pearl Colour Industries

7. Praveen Industries
8. Rainbow Chemicals
9. Ratna Products
10. Skyline Polycats Pvt. Ltd.

7. No other submissions have been advanced even though the written submissions purport to raise certain objections. We may need to mention that as is clear from the background referred to earlier the grievance being considered by this Tribunal is violation of environmental norms resulting in damage *inter alia* to river and drain and the public health. We have already noted earlier that this Tribunal has to enforce the ‘Sustainable Development’, ‘Precautionary’ and ‘Polluter Pays’ principles under Section 20 of the NGT Act. In the course of such enforcement, the Tribunal can require the statutory bodies to perform their duties after verifying the data and complying with the natural justice. An aggrieved party has statutory remedies against orders of the statutory regulatory bodies. The reports which have been furnished to the Tribunal can certainly be taken into account in absence of meaningful objection thereto.
8. We now proceed to deal with following reports which have been filed in pursuance of earlier consideration and directions by the Tribunal, as noted above:
 - I. Report dated 14.08.2019 from CPCB in respect of performance of CETP;
 - II. Report dated 05.08.2019 furnished by the CPCB on behalf of the joint Committee with regard to payment of compensation by the polluting industries;
 - III. Report dated 10.07.2019 from the CPCB on the subject of performance audit of the State PCBs/PCCs; and

IV. Report dated 17.08.2019 from the MoEF&CC on the subject of compliance of judgment of the Hon'ble Supreme Court *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*²

I. Report dated 14.08.2019

9. The report dated 14.08.2019 shows that on analyzing the samples the influent to CETP is not meeting parameters. Final outlet is not meeting the standards for TSS, FDS, COD and BOD parameters. Accordingly, remedial action has been recommended as follows:

“3. RECOMMENDATIONS:

- *CETP should up-grade treatment system/put more efforts in operation for meeting with outlet norms.*
- *The CETP needs to regulate the discharge of member units to meet the inlet standard, especially concentration of FDS parameters is more than 3.5 times than the prescribed standard.*
- *Proper calibration and continual maintenance of OCEMS needs to be done to ensure reliable results of monitored parameters.*
- *List of defaulting industries should be regularly (monthly) share with GPCB for taking suitable action against these industries.*
- *CETP should regularly send the sludge and salt (generated from Common Spray Dryer) to CHWTSDF for proper disposal.”*

10. Thus, there is need to reduce the load of inlet so as to ensure that inlet parameters are complied with by contributing industries. This may require closing identified source of such inlets or reducing the corresponding pollution load of the identified member units. It is not difficult to identify polluting units because there exists monitoring mechanism of outlets of individual units. Moreover, CETP itself claims to have given a list in this regard to the GPCB as already noted. The joint Committee of CPCB and GPCB can determine the

² (2018) 11 SCC 734

source of polluting inlets and take further action to correspondingly reduce the pollution load by issuing appropriate directions. Further, the CETP needs to be upgraded and till such upgradation is done, the inlet quantity and load needs to be reduced as to match the current capacity of the CETP. The same Committee can also determine the manner in which the CETP may reduce its intake so that its outlet complies with the parameters pending steps for further upgradation. The joint Committee may accordingly take appropriate further action in the matter and file a compliance report before this Tribunal before the next date.

II. Report dated 05.08.2019

11. Report dated 05.08.2019 furnished by the CPCB on behalf of the joint Committee refers to visit to CETP and river DamanGanga, sampling of CETP Vapi and different locations of river Damanganga, Information/Data collection from CETP operators, GPCB, CPCB, other departments, reports of NEERI, NIO, hearing to defaulting industrial units and CETP operators. It is found that CETP was not able to meet the outlet norms as some of the member units are discharging effluents without proper treatment. CETP is unable to treat refractory COD & colour on account of high salt concentration. Impact of pollution is observed for about 13 km from Vapi weir. There is toxicity of CETP waste water affecting the fish. The water from the river is not consumed downstream of GIDC weir either for drinking or irrigation. The pollution load. Upgradation of CETP is necessary. Compensation to be recovered from individual industry members has been assessed to be Rs. 25.36 crore and from CETP Rs. 92.36 crore as against the cost of restoration being assessed at Rs. 728.72 crore

which includes laying of pipelines, MSW management, sewage collection system. The relevant part of the report is reproduced below:

“The CETP was commissioned in the year 1997 and has made several upgradations in unit treatment and process operations over the years. Recently, the CETP augmented with Common Multiple Effect Evaporator & Common Spray Dryer for High COD & High TDS wastewater. It was observed from the results of analysis of the inlet and outlet wastewaters from multiple data sets of CPCB, GPCB & VGEL that there was an improvement over the years in treated wastewater quality which is significant in 2016. However, the CETP was not able to meet outlet norms broadly for COD, FDS, Chlorides, Sulphates and Color. Major reasons for the non-compliance of GPCB norms are briefly presented hereunder:

- 1. Some of the member units are discharging without proper treatment to their process wastewaters prior to discharge into the CETP. Failure to adhere to the CETP Inlet quality norms is one of the reasons for the CETP not meeting the final treated effluent quality.*
- 2. The presence of refractory COD & Colour in the presence of high salt concentration becomes difficult to treat and meet statutory norms under the existing treatment scheme.*

Restoration of the environment of river Damanganga requires following broad steps which are suggested based on treatment of pollutants and discharge into river Damanganga as per environmental norms:

- Improvement/up-gradation in the wastewater collection through surface/over ground pipeline from industries to manhole/sump of GIDC drainage network and to remove all underground discharge line of industrial unit to manhole of underground GIDC drainage. Further, it is recommended to lay surface pipeline conveyance system up to CETP, wherever technically feasible by removing underground existing pipeline.*
- Restoration of existing & construction of new storm water drain to prevent entry of wastewater into the natural drains in the industrial estate.*
- Monitoring and analysis of all industries including all streams of wastewater, product wise and shall identify High COD/High TDS (refractory COD) Stream for identification of any discrepancies which will be helpful in taking actions.*
- Quality & Quantity Monitoring with SCADA-PLC system for controlling quantity & quality of the effluent discharged by each of the member units.*
- Proper operation, maintenance and up-gradation of CETP to meet the norms prescribed by GPCB*
- Strict vigilance, identification and action against defaulting industries.*

- Proper design and construction of stormwater drains and sewerage network, STP within the local bodies
- STPs shall be designed to reuse of treated sewage for industrial reuse/ landscaping / firefighting and agriculture purpose.
- Prevent dumping of solid waste from towns and villages on the banks of river.
- Minimum environmental flow of Damanganga river for release of water from the Madhuban Dam.
- Afforestation
- River front development
- Agricultural and farm yard management surrounding the river path.

In view of the consideration of the steps for the restoration of the environment of river Damanganga suggested based on treatment of pollutants and discharge as per environmental norms, the cost of restoration including the projects from concerned departments comes about Rs. 731 - 751 crore for over ground pipeline network from industries to GIDC manhole/sump, quality & quantity monitoring SCADA system, upgradation of CETP, construction of STPs, management of MSW in the area by concerned agencies.

Table 8.1: Compensation and estimated cost of projects from concerns agencies for restoration of Damanganga:

| No. | Agency | Amount (in crore) |
|-----|---|-------------------|
| | Compensation amount from industries and CETP | |
| 1 | Compensation from individual industry members (As per Table 7.4, 161 industries) | 25.36 |
| 2 | Compensation from Vapi CETP | 92.36 |
| | Cost of the other projects of concern Agencies/Departments | |
| 3 | Overground pipe line by GIDC (GIDC Vapi) | 95.00 |
| 4 | MSW Management (Vapi Municipal Council for Vapi Town) | 11.00 |
| 5 | STP Plant & Sewage Collection system in Vapi Area - 60 MLD (Vapi Municipal Council) | 233.00 |
| 6 | STP Plant & Sewage Collection system in Daman area - 70 MLD (Daman Municipal Council) | 272.00 |
| | Total | 728.72 |

The above table shows correlation with cost of restoration in consideration of the nature of work and the source of the fund for restoration of river Damanganga is Rs. 728.72 Crore against the total cost of restoration estimated Rs. 731 - 751 Crore (mentioned in Chapter 6, Table 6.1). The total Environmental Compensation from individual industries and CETP (Vapi) is calculated to be Rs. 117.72 Cr (25.36 Cr + 92.36 Cr).

As per the interim order dated 11.01.2019 & 13.05.2019, 41 defaulting industries as per earlier list and CETP has already

paid the interim environment compensation, whereas 3 industries have not submitted the interim environment compensation for whom GPCB have already issued the closure directions. Based on the Hon'ble NGT directives, various actions have been identified to restore the river Damanganga and reduce environmental damage in the future. Few agencies such as GIDC, VGEL CETP, GPCB, CPCB, Municipality/local bodies are identified which are in concern for restoration. **The committee's major recommendations are summarized below (as detailed given in section 5.1.1 to 5.1.4 Chapter - 5).**

ACTIONS TO BE UNDERTAKEN BY GIDC/NOTIFIED AREA AUTHORITY

- It is recommended to provide the surface/over ground pipeline from industries to CETP for proper conveyance of effluent wherever technically feasible by removing existing underground pipeline.
- Restoration of any damaged stormwater drains to prevent entry of wastewater into the natural drains in the industrial estate and prevention of entry of industrial wastewater in Bill khadi and its flow downstream to GIDC estate.
- Proper design and construction of stormwater drains within the industrial estate where it is not provided particularly in low lying areas to (i) prevent stagnation of storm water contaminated with industrial wastes (ii) to prevent indiscriminate entry of contaminated storm water into natural drains.

ACTIONS TO BE UNDERTAKEN AT CETP LEVEL

- CETP shall carry out monitoring and analysis of all industries including all streams of wastewater, product wise and shall identify High COD/High TDS (refractory COD Stream). Based on that, CETP shall monitor the inlet quantity to CMEE/Spray dryer industry wise and shall submit data to GPCB monthly for identification of any discrepancies which will be helpful in taking actions.
- All the member units have to provide a system for the quantity and quality of the effluent discharge through SCADA-PLC system and shall observe discharge schedule and permitted volume.
- All the sump rooms shall be equipped with auto samplers for controlling the quality of effluent discharged by members, which can be accessible by VGEL. If require, it should also be accessible for GPCB.
- Proper operation, maintenance and up-gradation of CETP to meet the norms as prescribed in **Chapter 6 (Table 6.1)** or equivalent advanced technology related to effluent profile.

ACTIONS TO BE TAKEN AT REGULATORY LEVEL

- Continuous strict vigilance, identification and action against defaulting industries.
- Vapi GIDC to ensure that the process wastewaters from industries do not enter the storm water drains. It may be

achieved through the construction of dykes or tanks by Industry to collect and introduce into the wastewater treatment scheme.

ACTIONS TO BE TAKEN BY LOCAL BODIES (MUNICIPAL COUNCIL)

- Proper design and construction of stormwater drains and sewerage network within the local bodies where it is not provided particularly (i) in low lying areas to prevent stagnation of storm water contaminated with wastes (ii) to prevent indiscriminate entry of contaminated storm water into natural drains and finally river Damanganga.
- Control domestic/commercial wastewater (sewage) discharges into the River through proper collection and treatment from residential and commercial areas and treatment through STPs. The STPs shall be designed to reuse of treated sewage for industrial reuse/ landscaping / firefighting and agriculture purpose.
- Prevent dumping of solid waste from towns and villages on the banks of river.
- Identification of plots for solid waste landfill development.
- The appropriate authority should take care of their concern projects for restoring the environment.”

12. Learned Counsel or the applicant has referred to the report of the Committee to point out that the Committee has given hearing to the CETP and all individual units and discussed the individual cases for determining the amount of compensation. However, the period for which the compensation has been assessed is not the entire period for which the pollution continued but reckoned only with respect to the date of inspection. It cannot be presumed that there was no pollution earlier. The polluter is to prove the period during which no pollution was being caused. Whatever be the “best judgement assessment” for the past, presumption of no pollution is not justified. The compensation assessed may thus need to be enhanced. We are of the view that this aspect can be revisited by the joint Committee in light of the submission made by the Learned Counsel for the applicant. Till such consideration, the amount assessed can be collected as an interim compensation. Further action may accordingly

be taken jointly by GPCB and CPCB. Compliance report in this regard may be filed before the next date.

III. Report dated 10.07.2019

13. Report dated 10.07.2019 filed by the CPCB is on the subject of performance audit of the State PCBs/PCCs. The report merely ranks the PCBs/PCCs, without proper assessment of the functioning.
14. What is expected is performance audit on issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup/mechanisms, staffing both technical and scientific manpower, scientific equipments, logistics support, competence etc. rather than ranking the States. Let the same be done and state-wise reports submitted based on thorough analysis in terms of statutory functions. CPCB may devise an appropriate mechanism for the purpose. We also direct that all vacant positions in the SPCBs/PCCs may be filled up at the within four months and the Chief Secretaries of the States/UTs may ensure that there is no embargo in doing so, so that effective steps for protection of environment can be taken. It is also necessary to direct that the laboratories established by the SPCBs/PCCs, at headquarters as well as regional centers, are duly recognized for purposed of enforcement of environmental laws. The concerned authorities may take further steps accordingly. The CPCB may compile a report and file before the next date. SPCBs/PCCs may utilize the funds available with them, under EC/Consents or other heads instead of approaching other authorities and on that pretext not performing their essential function. The MoEF&CC may consider constituting an appropriate authority for the purpose with

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representatives from Central and State authorities on the pattern of Compensatory Afforestation Fund Management and Planning Authority (CAMPA) or otherwise. A compliance report be filed by the MoEF&CC before the next date.

IV. Report dated 17.08.2019

15. Report furnished on 17.08.2019 by the MoEF&CC is on the subject of compliance of judgment of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*³. The report shows that further action is required for compliance of judgement of Hon'ble Supreme Court.
16. Let further follow up action be taken by the MoEF&CC to monitor compliance of judgment of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.* and report furnished to this Tribunal before the next date after ascertaining that uniformity in terms of qualifications, experience and special skill sets is adhered to especially with regard to key position of Chairman and Member Secretary of SPCBs/PCCs.
17. In view of the above discussion our directions are summed up as follows:
 - (i) Let the joint Committee take action in terms of para 10 above on the subject of corresponding reduction in load to ensure compliance of norms of inlet in CETP so as to ensure that inlet and outlet of CETP are as per norms and file compliance report before the next date.

³ (2018) 11 SCC 734

- (ii) With regard to the past violations, compensation as assessed by the Committee in respect of individual units as well as CETP is liable to be recovered as interim compensation on 'Polluter Pays' principle. Further action may be taken jointly by GPCB and CPCB. Compliance report in this regard may be filed before the next date.
- (iii) Performance audit be done with reference to issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup/mechanisms, staffing both technical and scientific manpower, adequacy of laboratories and scientific equipments, logistics support, competence etc. rather than ranking the States and state-wise reports submitted along with recommendations based on thorough analysis in terms of statutory functions before the next date. CPCB may devise an appropriate mechanism for the purpose. CPCB and MoEF&CC may file a compliance report with reference to observations in para 14 above.
- (iv) Let further follow up action be taken by the MoEF&CC to monitor compliance of judgment of the Hon'ble Supreme Court in *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.* and report furnished to this Tribunal before the next date.

List for further consideration on 11.02.2020.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

August 28, 2019
Original Application No. 95/2018
DV



Minutes of Meeting held on 10.10.2019 Under the Chairmanship of Member Secretary, Gujarat Pollution Control Board with reference of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.) at Gujarat Pollution Control Board, Gandhinagar.

A meeting was convened on 10.10.2019 to discuss various actions to be jointly taken by CPCB and GPCB as per order of Hon'ble NGT dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.). The meeting was attended by officials of CPCB and GPCB. The list of participants is attached as **Annexure-I**.

The officials discussed the recent order dated 28.08.2019 of the Hon'ble NGT and also reviewed the action taken so far in case of previous orders dated 11.01.2019 & 13.05.2019. Some of the relevant Paras No. 10, 12 & 17, pertaining specifically to directions to CPCB & GPCB in the order dated 28.08.2019, for Vapi area are, attached as **Annexure-II** for kind ready reference.

Points discussed and decisions taken in the meeting on 10.10.2019 to comply the said order of Hon'ble NGT (28.08.2019) are as below:

I. Action shall be initiated by joint committee (CPCB & GPCB) to ensure the compliance of inlet norms of CETP and Outlet norms of CETP by way of :

- Identification of sources of polluting/defaulting industries-
 - Based on the data available with GPCB,
 - List of defaulting industries from M/S VGEL (CETP)
 - It is suggested to carry out inventory for treatment system of member industries of CETP- Vapi (i.e. general characteristics of Inlet and Outlet of ETP of member industries and name of specific treatment units provided in ETP). M/s VGEL (CETP) shall be asked to submit its inventory to the committee of GPCB and CPCB. Industrial sector wise (i.e. Dyes and Dye intermediates, Pharmaceuticals, Pesticides and Chemicals etc.) inventory shall be reviewed separately to find out pollution potential industries. Further based on the inventory of potential polluting/defaulting industries, strengthening of surveillance mechanism may be further worked out. Joint Committee of CPCB and GPCB shall assess optimum hydraulic load and inlet quality of CETP to comply the Outlet norms.

- Appropriate action for reducing the pollution load by issuing necessary directions to the polluting/defaulting industries shall be done by GPCB.
- GPCB has issued closure direction under section-33 (A) of the Water (P & CP) Act 1974 vide letter dated 24.05.2019 to M/s VGEL (CETP) Vapi and amended further on 11.06.2019 which subsequently revoked from time to time with latest revocation order on 23.09.2019 which is valid up to three month from date of issue of order i.e. 22.12.2019.

In compliance of the closure direction, M/s. VGEL (Vapi- CETP) has submitted Action Plan. Joint Committee of CPCB and GPCB will review the status of directions issued by GPCB so far including action plan in next meeting along with M/s VGEL (CETP). The meeting may be arranged on 19.09.2019 at CPCB, Vadodara.

II. Collection/recovery of Environmental Compensation assessed by the Committee (Revised Report July 2019)

- As per order dated 11.01.2019, Para 55 (ii) GPCB has already asked to deposit an interim compensation (Rs. 25 Lakhs for Small Scale, Rs. 50 lakhs for Medium Scale and Rs. 1 Crore for large scale) to 44 defaulting industries [as per para 55 (i) (c) *the GPCB may inform the defaulting units for compliance of this order*]. Out of 44 industries, 41 industries have already deposited interim compensations. It is informed that remaining 3 industries are closed and yet not deposited interim compensation. Out of these 3 industries, M/s. Orient Organics has requested GPCB to consider interim compensation amount, which is mentioned in the Revised Committee Report (July 2019) instead of interim compensation mentioned in Para 55(ii) of Hon'ble NGT Order dated 11.01.2019. It was discussed that these three defaulting units should also comply with Hon'ble NGT Order dated 11.01.2019 for depositing interim compensation and then after only revocation shall be considered by GPCB. Moreover, above mentioned request of the unit regarding change in interim compensation may only be considered by Hon'ble NGT.
- As per para 12 and para 17 (ii) of order dated 28.08.2019, it is mentioned that the amount assessed (by the Committee in Revised

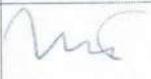
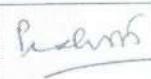
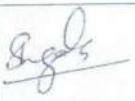
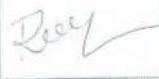
Report July 2019) can be collected as an interim compensation. In this regard, GPCB shall inform the defaulting industries (other than earlier 44) and CETP operator to deposit the interim compensation as mentioned in the Revised Report (July 2019). As per Committee's Revised Report (July 2019), environmental compensation of total 191 defaulting industries identified during last six years based on closure directions issued by GPCB (44 industries- as per order 11.01.2019 for a year 2018 and 147 industries 2013-2017) were assessed as per subsequent order dated 13.05.2019.

- III. GPCB officials opined that Legal Officer, GPCB shall take opinion of Ms. Ruchi Kohli, advocate of GPCB for Hon'ble NGT matters regarding prosecution against defaulting industries referring revised report of July, 2019, in addition to earlier 44 defaulting industries. (Total defaulting industries 191, as provided by GPCB to the Committee).
- IV. CPCB & GPCB is regularly carrying out inspection-cum-monitoring of CETP to comply with the Para 55 (iv) of Hon'ble NGT Order dated 11.01.2019. Till now, three monitoring carried out in Feb 2019, May 2019 and August 2019, and reports of two monitoring (Feb 2019 & May 2019) have been submitted to the Hon'ble NGT through CPCB, Delhi.
- V. GIDC, Vapi Notified Area and Vapi Nagarpalika shall be directed by GPCB regarding compliance of recommendations of given in Revised Report (July 2019) of the Committee (which are also mentioned in the order of Hon'ble NGT dated 28.08.2019) regarding over-ground pipeline, storm water drainage system, STP etc.. Similarly, Daman Municipal Council/Pollution Control Committee (PCC), Daman shall be informed/ directed by CPCB for necessary action.
- VI. The Committee formed vide order dated 11.01.2019 shall meet at CPCB Vadodara to revisit the aspect of environmental compensation calculation in light of submission made by the learned counsel for the Applicant as per Para 12 of Hon'ble NGT Order dated 28.08.2019. The date of meeting shall be finalized in consultation with the members.

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Annexure-I

Meeting dated 10/10/2019 with reference of Hon'ble NGT Order dated 28/08/2019 in the matter of O.A. No. 95/2018, Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors. at Head Office, Gujarat Pollution Control Board, Gandhinagar

| Sr. No. | Name & Designation of Person | Organization Name | Signature |
|---------|---|--------------------|---|
| 1. | Shree Prason Gargava Regional Director | Cpcb - Vadodara |  |
| 2. | Shree N.M. Tabhani Member Secretary | Gepcb |  |
| 3. | Shree Pratik Bhalne | Cpcb - Vadodara |  |
| 4. | Shree Sushil Vegda SEE | Gepcb (UH-Vapi) |  |
| 5. | Shree B.R. Gajjar SEE | Gepcb (RA-Vapi) |  |
| 6. | Shree Jaimin Rana AEE | Gepcb |  |
| 7. | Shree Vivek Thivedi AEE | Gepcb |  |
| 8. | Preeti Patel AEE | Gepcb | Preeti |
| 9. | Pawan Sharma AEE | Gepcb |  |
| 10. | R. R. Panchal Law Officer | Gepcb |  |
| 11. | | | |
| 12. | | | |
| 13. | | | |

ANNEXURE-II

Some of the relevant Paras 10, 12 & 17 (directions to CPCB & GPCB) of the order dated 28.08.2019 in OA No. 95 of 2018, in case of Vapi area

Para 10

10. *Thus, there is need to reduce the load of inlet so as to ensure that inlet parameters are complied with by contributing industries. This may require closing identified source of such inlets or reducing the corresponding pollution load of the identified member units. It is not difficult to identify polluting units because there exists monitoring mechanism of outlets of individual units. Moreover, CETP itself claims to have given a list in this regard to the GPCB as already noted. The joint Committee of CPCB and GPCB can determine the source of polluting inlets and take further action to correspondingly reduce the pollution load by issuing appropriate directions. Further, the CETP needs to be upgraded and till such upgradation is done, the inlet quantity and load needs to be reduced as to match the current capacity of the CETP. The same Committee can also determine the manner in which the CETP may reduce its intake so that its outlet complies with the parameters pending steps for further upgradation. The joint Committee may accordingly take appropriate further action in the matter and file a compliance report before this Tribunal before the next date.*

Para 12

12. *Learned Counsel or the applicant has referred to the report of the Committee to point out that the Committee has given hearing to the CETP and all individual units and discussed the individual cases for determining the amount of compensation. However, the period for which the compensation has been assessed is not the entire period for which the pollution continued but reckoned only with respect to the date of inspection. It cannot be presumed that there was no pollution earlier. The polluter is to prove the period during which no pollution was being caused. Whatever be the "best judgement assessment" for the past, presumption of no pollution is not justified. The compensation assessed may thus need to be enhanced. We are of the view that this aspect can be revisited by the joint Committee in light of the submission made by the Learned Counsel for the applicant. Till such consideration, the amount assessed can be collected as an interim compensation. Further action may accordingly be taken jointly by GPCB and CPCB. Compliance report in this regard may be filed before the next date.*

Para 17

17 (i) *Let the joint Committee take action in terms of para 10 above on the subject of corresponding reduction in load to ensure compliance of norms of inlet in CETP so as to ensure that inlet and outlet of CETP are as per norms and file compliance report before the next date.*

(ii) *With regard to the past violations, compensation as assessed by the Committee in respect of individual units as well as CETP is liable to be recovered as interim compensation on 'Polluter Pays' principle. Further action may be taken jointly by GPCB and CPCB. Compliance report in this regard may be filed before the next date.*

Minutes of Meeting held on 19.10.2019 with reference of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.) at CPCB, Regional Directorate, Vadodara

A meeting was convened on 19.10.2019 to discuss various actions to be taken by various organization & authorities (stakeholders) for the compliance of order of Hon'ble NGT dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.). The meeting was attended by officials of CPCB, GPCB, GIDC Vapi, VIA & VGEL (CETP) Vapi. The list of participants is attached as **Annexure**.

The directions vide order dated 28.08.2019 of the Hon'ble NGT were discussed and decisions taken to comply the order are as given below:

- GPCB has issued closure direction under section-33 (A) of the Water (P & CP) Act 1974 vide letter dated 24.05.2019 to M/s VGEL (CETP) Vapi and amended further on 11.06.2019 which subsequently revoked from time to time with latest revocation order on 23.09.2019 which is valid up to three month from date of issue of order i.e. 22.12.2019.
In compliance of the closure direction, M/s. VGEL (Vapi- CETP) has submitted Action Plan. M/s VGEL (CETP) was asked to take necessary steps required for implementation of Action Plan, achieve & maintain Inlet and Outlet norms prescribed by GPCB. Joint Committee of CPCB and GPCB will review the status of directions issued by GPCB so far including action plan.
- GPCB has issued directions dated 18.10.2019 to GIDC Notified Area Authority and Vapi Nagar Palika regarding compliance of the directions passed in Hon'ble NGT order dated 28.08.2019. Suggestion/recommendations of the NGT Expert Committee elaborated in the Revised Report (July 2019) shall be implemented by concerned department/organizations.
- GIDC was asked to provide above-surface/over-ground discharge line from the individual industries to the intermediate collection chambers and sumps. The intermediate chamber should be designed to cater for the collection of discharge from 4 to 5 member industries. The underground existing pipeline shall also be replaced with new over ground pipeline to carry effluent from industries/intermediate collection sumps to CETP, wherever technically feasible.
- GIDC was asked to explore the illegal connection in the Vapi GIDC area and to disconnect/remove the same, remove all the underground discharge line of industries who are not member of CETP or who are not generating any effluent or who are adopting

ZLD system with the help of VGEL & VIA. GIDC was asked to provide One-Single water supply connection and One-single drainage line connection for one Consent/ CCA issued to an industry by GPCB. The premises of other units and/or sister concern units should not be used for illegal discharges in to GIDC network leading to CETP. The illegal connections in plot of closed units, ZLD units etc should be inspected and sealed by GIDC & VGEL.

GIDC was asked to revamp/repair/install the storm water drain lines in the GIDC area as per recommendation in the NGT Committee Revised Report (July 2019).

GIDC was asked to provide a Bar chart for the time bound action plan for implementation of recommendations made in the said report by 30.11.2019.

- There should be synchronization and up-dation of information of GIDC & VGEL regarding member industries, their connection to GIDC network, discharge to CETP, ZLD Status, and list of member industries of CETP etc.
- GIDC & VGEL was asked to take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line.
- It is suggested to carry out inventory for treatment system of member industries of CETP-Vapi (i.e. general characteristics of Inlet and Outlet of ETP of member industries and name of specific treatment units provided in ETP). Accordingly, M/s VGEL (CETP) should submit its inventory to the committee of GPCB and CPCB by 30.11.2019.
- VGEL was asked to provide the list of defaulting industries to GPCB & CPCB. VGEL shall also provide rational for making list defaulting industries, along with Surveillance/Monitoring and Charging Methodology to CPCB & GPCB by 30.11.2019.
- VGEL & VIA was asked to implement SCADA system for quantity and quality of effluent of the member industries and other recommendations given in the NGT Expert Committee Revised Report July 2019. VGEL was asked to provide a time bound action plan for the implementation of the SCADA system.
- VGEL shall provide latest implementation status of action plan submitted to GPCB wrt direction issued by GPCB by 30.11.2019.
- It was decided that the review meeting shall be conducted every month to review the status of the actions for the compliance of the Hon'ble NGT order dated: 28.08.2019.

The meeting ended with thanks.

Annxure

**CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE (WEST) VADODARA**

Attendance sheet for meeting wrt compliance of Hon'ble NGT order dated 28.08.2019 in the
matter of OA.NO. 95 /2018 (Aryavart Foundation Vs M/s VGEL (CETP) Vapi & Ors ^{Dtd} (19-10-2019))

| Sr. No. | Name & Designation | Organization | Signature |
|---------|---|--------------------------|-----------|
| 01. | Prasen Gangara Regional Director | CPCB, RD(W) Vadodara | |
| 02. | Pratik Bhasne S.E. | CPCB, RD(W), Vadodara | |
| 03. | S. PRADEEP RAJ SCIENTIST-D | CPCB, RD(W), VADODARA | |
| 04. | Kanvhita S. Ganiwadi Dy. Sp. Engr | GIDC, Vapi | |
| 05. | Jeyu B. Chaudhari P.E. Dy. Vapi GIDC | GIDC, Vapi | |
| 06. | Vivek Shrivedi AEE - Vapi unit | GPCB, Gandhinagar | |
| 07. | Jaimin C. Rance AEE - R.Vapi | GPCB, RD - Vapi | |
| 08. | B. R. Mehta Advisor | VGEL | |
| 09. | KAMLESH V. PATIL MANAGER F&A | Vapi Green Enviro Ltd, | |
| 10. | Jigur. S. Dasai AGM - Process | VAEL | |
| 11. | R. GYANA SENGARAN CEO | VAEL | |
| 12. | Chetan Chandrakant | VAEL, DIR. | |
| 13. | S.H. Vegda | GPCB, Gandhinagar | |
| 14. | B.R. Gajjar | R.V. GPCB, Vapi | |

Minutes of Meeting held on 25.11.2019 with reference of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.) at CETP, GIDC, Vapi.

A meeting was convened on 25.11.2019 to discuss various actions taken and to be taken by various organization & authorities (stakeholders) for the compliance of order of Hon'ble NGT dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.) in continuation to meeting held on 19.10.2019 at CPCB Vadodara. The meeting was attended by officials of CPCB, GPCB, GIDC Vapi, VIA & VGEL (CETP) Vapi. The list of participants is attached as **Annexure -I**.

The directions vide order dated 28.08.2019 of the Hon'ble NGT, and the actions decided for the concerned departments/organizations in the meeting on 19.10.2019 at CPCB, Vadodara were discussed.

The status of various actions as well as decisions taken to comply the order, are as given below:

| Sr. No. | Action Point | Agency | Status/Further Actions |
|---------|--|-------------------------------|---|
| 1. | Review of Action Plan of VGEL (CETP) wrt direction issued by GPCB | CPCB & GPCB – Joint Committee | M/s VGEL (CETP) submitted Action Plan to GPCB which is reviewed and It is observed that the implementation of action is under progress. The Status of action plan on 24.11.2019 submitted by VGEL (CETP) is provided at Annexure-II . |
| 2. | <p>To provide above-surface/over-ground discharge line from the individual industries to the intermediate collection chambers and sumps</p> <p>The underground existing pipeline shall also be replaced with new over ground pipeline to carry effluent from industries/intermediate collection sumps to CETP, wherever technically feasible</p> | GIDC | <p>GPCB issued direction to GIDC on dated 18.10.2019 to GIDC Notified Area Authority regarding above surface/over ground discharge line and storm water drainage as per recommendations of the NGT expert Committee in its Revised Report of July 2019.</p> <p>Action Taken Report by GIDC is provided at Annexure-III.</p> <p>GIDC official informed- regarding over ground discharge line from the individual industries to the intermediate collection chambers and sumps- notices were issued to five units for making arrangements as per sketch (provided at Annexure-III) inside factory premises i.e. HDPE Tank, treated wastewater storage tank etc on or before 30.11.2019. It is mentioned in the letter issued by GIDC to units that after 30.11.2019 your new above ground drainage connection will be installed by GIDC outside the factory premises and old underground drainage connection will be disconnected.</p> <p>He further informed that 1st set (five units) will be completed by 30.11.2019 and after approval and checking by GPCB, installation of chambers & pipelines work in all the other industries will be finished within 4 months.</p> <p>Regarding over ground pipeline wherever technically feasible in the estate, it is informed that consultant to be hired to survey physical and hydraulic survey of the entire U/G drainage system and based on the outcomes of report further action will be initiated in this matter.</p> |

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|----|---|--------------|---|
| | | | It is asked to expedite the matters for the compliance. |
| 3. | To explore the illegal connection in the Vapi GIDC area and to disconnect/remove the same, remove all the underground discharge line of industries who are not member of CETP or who are not generating any effluent or who are adopting ZLD system with the help of VGEL & VIA | GIDC | <p>GIDC official informed that total 266 ZLD units were disconnected in the past and further it is informed that after the over ground pipeline for discharges, mostly there will be no any chance of any illegal connection in the GIDC area. He added that connections will be disconnected based on the information received from VGEL/GPCB.</p> <p>As per information provided by VGEL (CETP), recently 125 ZLD units list has been provided for drainage disconnection and accordingly, GIDC has sealed drainage connection of all 125 units (92 members & 33 non-members of CETP). It is informed that VGEL monitor units twice in a year to confirm drainage status.</p> |
| 4 | To provide One-Single water supply connection and One-single drainage line connection for one Consent/CCA issued to an industry by GPCB. The premises of other units and/or sister concern units should not be used for illegal discharges in to GIDC network leading to CETP. The illegal connections in plot of closed units, ZLD units etc should be inspected and sealed by GIDC & VGEL | GIDC VGEL | <p>GIDC Official informed that Notices have been issued to make arrangements (precast septic & soak pit system) for disposal of domestic wastewater and after 15.12.2019 their drainage connection would be disconnected without any further Notice. (Annexure-III). GIDC was asked to submit status on single water supply, also.</p> <p>Further, there should be vigil and inspection by GIDC & VGEL for illegal drainage discharge and connections and these connections should be sealed. The status should be provided to GPCB time to time for further necessary actions against the unit.</p> |
| 5 | To revamp/repair/install the storm water drain lines in the GIDC area as per recommendation in the NGT Committee Revised Report (July 2019) | GIDC | <p>It is informed by GIDC official that total length of road at Vapi industrial estate is 85 km, out of which 25 km of road is in housing area. Therefore, out of 60 km of road in industrial area, Storm Water Drains (SWD) of 17 km is up-graded as RCC Open drain SWD. Further, 8 km of RCC Open drain SWD will be constructed where there is RCC pipeline SWD. However, complete SWD km (RCC Open and/or RCC pipeline) in relation to road length in industrial area, to be provided.</p> |

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| | | | It is emphasized that as per recommendation of the Expert Committee there should be proper design and construction of stormwater drains particularly in low laying areas, where in rainy season contaminated water is accumulated, to prevent stagnation of storm water and to prevent entry into natural drains. The action points in this regard should also to be incorporated in Action Plan. |
| 6 | Sewerage Network, STPs & MSW | GIDC/ Vapi Municipality | It is informed by concerned officials that the status of the progress made in Sewerage Network, STPs & MSW at GIDC area and Vapi town shall be provided shortly. It was asked to provide the status of actions taken based on directions issued (dtd 18.10.2019) by the GPCB in this regard by 31.12.2019 and also to expedite the work. |
| 7 | To provide a Bar chart for the time bound action plan for implementation of recommendations made in the said report by 30.11.2019 | GIDC | It was asked to provide the Bar chart for the time bound action plan and inform the progress to GPCB/ CPCB from time to time. |
| 8 | Synchronization and up-dation of information of GIDC & VGEL regarding member industries, their connection to GIDC network, discharge to CETP, ZLD Status, and list of member industries of CETP etc. | GIDC/ VGEL/ GPCB | The list of industries with synchronization & up-dation of information as on 01.12.2019 (Dec 2019) duly checked by GPCB should be provided to GPCB & CPCB committee by 31.12.2019. |
| 9 | To take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line | GIDC VGEL | It is informed that GIDC and VGEL has taken the note and shall take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line |

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|----|--|------|--|
| 10 | To carry out inventory for treatment system of member industries of CETP- Vapi and should submit its inventory to the committee of GPCB and CPCB by 30.11.2019 | VGEL | <p>Director, VGEL informed that they have completed inventory of @107 industries and will take more time to complete the same as there are over 500 member industries. Finally, it is decided to complete inventory of industries those are attached to Pumping Station 3 and 6 on priority, considering the pollution potential and submit by 31.12.2019. The overall inventory to be completed by 15.01.2019.</p> <p>After verifying the data of the inventory, some corrections are suggested in the preliminary/draft inventory format as already mentioned in minutes of meeting dated 19.10.2019.</p> |
| 11 | <p>To provide the list of defaulting industries to GPCB & CPCB</p> <p>VGEL shall also provide rational for making list defaulting industries, along with Surveillance/Monitoring and Charging Methodology to CPCB & GPCB by 30.11.2019</p> | VGEL | <p>It is directed vide GPCB direction to provide the list of defaulting industries to GPCB. It was also asked to provide rational for making list of defaulting industries, along with surveillance/monitoring and Charging methodology to CPCB & GPCB by 30.11.2019.</p> <p>However, VGEL not provided the list and informed that since last three months there were no any defaulting industries and accordingly VGEL will reply. It is also mentioned that results of CETP has improved.</p> |
| 12 | <p>To implement SCADA system for quantity and quality of effluent of the member industries and other recommendations given in the NGT Expert Committee Revised Report July 2019.</p> <p>To provide a time bound action plan for the implementation of the SCADA system</p> | VGEL | <p>There is nothing much happened in this regard. VGEL is not yet clear about who will install the SCADA system for quantity and quality of effluent of the member industries.</p> <p>However, CPCB official informed that as per recommendations given in the NGT Expert Committee Revised Report July 2019, VGEL (CETP) to implement the system with the help of member industries/Vapi Industrial Association and therefore, time bound action plan for the implementation of the SCADA system to be provided by 31.12.2019.</p> |

The meeting ends with vote of thanks.

ATTENDANCE SHEET

Attendance sheet for meeting wrt compliance of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A. 95/2018 (Aryavart Foundation Vs. M/s. VGEL (CETP) Vapi & Ors.), held on dated 25.11.2019 at CETP of VGEL located at 1st Phase, GIDC, Vapi.

| Sr. No. | Name & Designation | Organization/Industry | Contact Details | E-mail Address | Signature |
|---------|--------------------------------------|------------------------|-----------------|---------------------------|-----------|
| 01 | Praseon Gargava Regional Director | CPCB, RD(W) | 9429806489 | praseon.cpcb@nic.in | |
| 02 | Pratik Bhaene Regional Director | CPCB, RD(W) Vadodra | 9428167876 | pratikcpcb@rediffmail.com | |
| 03 | Kanshik S. Ganiat | GIDC | 9824192893 | kanshik-ganiat@gidc.org | |
| 04 | V. H. Thakkar Regional Manager | CGDC | 9879110008 | | |
| 05 | Prakash Bhadri | VIA | 9025255255 | info@via.vapi.org | |
| 06 | Jigeev S. Desai | VGEL | 9714008126 | ic.process@vgel.vapi.com | |
| 07 | Rajendra Chokhani | VGEL | 9714722199 | | |
| 08 | Sanjay T. Jha | Vapi Municipality | 9727774586 | vapimun@yahoocom | |
| 09 | R. Giranna Segaram CEO | VGEL | 971400201 | ceo@vgel.vapi.com | |

| Sr. No. | Name & Designation | Organization/Industry | Contact Details | E-mail Address | Signature |
|---------|--------------------|-----------------------|-----------------|----------------|---|
| 10 | Chetan Patel | VGEL, DIR. | 9099887777 | |  |
| 11 | B. R. Gajjar | R.O. GPCB Vapi | 7574927435 | |  |
| 12. | Darpan Uza | Vapi Municipality. | 9712128193. | |  |
| 13 | Sushil Vagla | GPCB HQ QMR | 9825507492 | |  |
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Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|--|--|----------------|-----------|--------------------|--|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| 1 | VGEL has started Vigorous monitoring of member units, VGEL will immediately inform GPCB Regional Office about unauthorized discharge (Acidic discharge, Hosepipe discharge and discharge in open drain) by non-member industries and violating member industries for appropriate action. | Improvement and Control of CETP Inlet. | --- | Immediate | Continuous Process | <p>Intensified monitoring is on and there is drastic improvement in CETP Inlet & Outlet COD and Ammoniacal Nitrogen. (Annexure- 01, for CETP Inlet & Outlet results with graphs).</p> <p>Captive MEE members are monitored by separate monitoring team on daily basis, some units are sending MEE concentrate to CMEE/CSD at CETP. Rest will dispose their MEE concentrate in new spray dryer system at CETP.</p> |
| 2 | VGEL will request GPCB for Night time joint vigilance monitoring by VGEL & GPCB teams. | To identify and to take appropriate action against violators to improve CETP inlet quality. | --- | Immediate | Continuous Process | <p>Joint monitoring has been implemented from 07th June 2019.</p> <p>(Annexure – 02 units jointly visited by GPCB & VGEL).</p> |
| 3 | Wastewater through tankers from defaulting industries. | Repeat defaulting industries will be asked to send their effluent through dedicated road tanker under control of CETP. Final discharge outlet and domestic discharge outlet if any will be disconnected to prevent unauthorised discharge by such units. Manholes in | ---- | Immediate | Continuous Process | <p>After submission of Action plan on 3.6.2019, we have done rigorous monitoring of industries. We have not found any defaulting unit. As a result, the inlet norms have improved and the inlet COD is consistently under control by and large.</p> <p>VGEL was very active as specially in monsoon season, whenever we found any logging, leakage, rupture, seepage immediately it is addressed and pump out</p> |

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Annexure - 01

Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|--|--|----------------|----------|--------------|--|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| | | vicinity of such units will also be sealed. | | | | into nearby pumping station for final treatment in to CETP. (Annexure-03) . |
| 4 | Monitoring/ Auditing of ZLD units and sealing their wastewater & Domestic water connections. | Out let connection for waste water and domestic for all ZLD units will be disconnected to prevent unauthorised discharge by ZLD units. | --- | 31/07/19 | 89% | <p>Total – 125 ZLD units list has been provided to GIDC for drainage disconnection out of these GIDC has sealed drainage connections of all 125 Units including 92 members and 33 non-members. (List is attached as Annexure – 04).</p> <p>VGEL will regularly monitor (twice in a year) these units to confirm drainage status.</p> <p>VGEL has also issued notice to 28 member industries whose CCA is not available with VGEL due to various reasons (Close/Sold/Name Change etc..) for submitting their status with valid CCA.</p> <p>Out of these 28 units 6 units are having CCA with name change and out of these 6 units 4 units are ZLD and 2 units have discharge permission.</p> <p>Out of 26 units 10 units do not have drainage connections and drainage connections of remaining 16 units needs to be disconnected. VGEL will inform GPCB/GIDC to seal drainage connection of these 16 units.</p> <p>(Annexure – 05 – Status of 28 member industries and list of 16 units for drainage disconnection).</p> |

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Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|--|--|----------------|----------|--------------|--|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| 5 | Installation of Floating Type mixers in Equalization tanks. | To avoid settlement of suspended solids and proper homogenization of incoming wastewater to reduce shock loads to subsequent Biological treatment units of CETP. | 1.00 | 31/07/19 | 50% | <p>VGEL has issued Purchase Order to M/s Euro Detox for supply of 15 HP Floating Mixers.</p> <p>Total 10 numbers of 15 HP Jet Aerators have been installed in equalization tanks (5 each in equalization tank – 1 & 2).</p> <p>VGEL will further install 10 numbers 15 HP Jet Mixers in equalization Tank – 03 by December-2019.</p> <p>(Photographs are attached)</p> |
| 6 | Procurement of Floating Type Jet Aerators to convert existing UASB Reactors in to completely mix activated sludge. | By converting UASB to aeration system, HRT of ASP will be increased which will reduce COD, BOD and Ammonical nitrogen in CETP Outlet. | 2.00 | 31/07/19 | 27% | <p>VGEL has issued Purchase Order to M/s Euro Detox for supply of 11 numbers of 30 HP Floating Jet type Aerators.</p> <p>Three numbers of 30 HP jet aerators have been installed in aeration tank and remaining will be supply by December 2019.</p> <p>(Photographs are attached)</p> |
| 7 | Installation of additional Spray Dryer of 8000 Kg/hr at CETP. | Treatment of segregated streams of refractory COD and high TDS from member units which will reduce load in CETP inlet. | 8.00 | 31/08/19 | 100% | <p>Fire trials in Hot Air Generator has been started on 24/11/2019.</p> <p>(Photographs are attached)</p> |

Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|---|---|----------------|----------|--------------|--|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| 8 | Appoint Consultant for Bio Augmentation of CETP. | Evaluation of CETP's effectiveness and performance by site and Lab studies and suggest modifications for Upgradation of CETP to meet prescribed outlet norms all the time. Work order has been issued to Bio Petro Clean (Israel Technology) for this work. | 0.10 | 31/07/19 | 75% | <p>The Lab Scale trials have been conducted with the CETP inlet waste water and now under Techno-economic evaluation for a full-fledged retrofit treatment facility with necessary automation and can control as being under active consideration and evaluation as per Israel patented technology.</p> <p>VGEL will also explore other technologies like:</p> <ol style="list-style-type: none"> 1. Advanced oxidation with Fenton Catalytic Reactor (FCR) – Pilot plant trails will be started by 10th December. 2. Mechanical Vapor Recompression (MVR) Technology: To take care of more quantity of non-biodegradable COD waste water, MVR Technology to treat and dispose the concentrated non-biodegradable COD waste water and high TDS waste water. Pilot plant installation is going on and it will be functioning by 25/11/2019. <p>VGEL will finalize the technology based on merit.</p> |
| 9 | Appointment of Technical Expert from National level reputed institutes like IIT for evaluation of VGEL effectiveness & performance. | To carryout adequacy studies to evaluate performance of CETP and suggest for improvement. | 0.10 | 31/07/19 | 90% | <p>VGEL has appointed Shree B.R.Naidu (ex – Regional Director – CPCB) as a technical adviser.</p> <p>VGEL has also engaged Dr. Deepak Kantawala – renowned environmental consultant for technical assistance in project evaluation at VGEL.</p> <p>Appointment of IIT Bombay is under final stage of approval. Work order will be issued on approval.</p> |

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Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|---|---|----------------|----------|--------------|---|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| 10 | Installation of reducers in outlet line of potentially defaulting units. | This will ensure that the industry cannot discharge their effluent in short time. It will enable better monitoring. | --- | 31/08/19 | 44% | <p>Notices have been given to all (241) industries connected to pumping station no 3 & 6 for installation of reducers. During monsoon due to flooding some of the units have removed the reducer which are being installed.</p> <p>Total 107 units have installed the reducer at their discharge line work will be completed by Nov-19. (Annexure – 06: list of units with reducer).</p> |
| 11 | Disconnection outlet of all electroplating units (members and non-members). | Since they have small discharge but of acidic nature. | --- | 31/07/19 | 55% | <p>GPCB R.O has provided list of 65 Pickling & Electroplating industries. All 65 units have been visited by VGEL.</p> <p>Drainage connections of 36 – Non-Member units need to be disconnected. As these units are not VGEL members VGEL will request GPCB to direct GIDC for drainage disconnection. It will be completed by November-2019.</p> <p>(Annexure – 07: Status of all 65 units and List of 36 units for Drainage disconnection).</p> |
| 12 | Ground penetration radar study. | This study has already been done by IIT Gandhinagar (through an agency). Will help in identification and elimination of any ghost line in GIDC. | 0.05 | 31/07/19 | 100% | <p>A study was organised by VGEL with help of start-up company from IIT Gandhinagar using ground penetration radar machine. Final report has been received.</p> <p>This is on the principle of cavity identification so in this report all utilities line like water, gas lines, drainage line, telephone lines etc are detected and it</p> |

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Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Short Term/Immediate Action plan for Inlet & Outlet Control | | | | | | |
|---|--------------------|-----------|----------------|------|--------------|---|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | % Compliance | Current Status as on 24.11.2019 |
| | | | | | | is difficult to identify ghost line and because of which the report could not be made use of. |

| Long Term Action plan for Inlet & Outlet Control | | | | | | |
|--|---|--|----------------|----------|-----|---|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | | Current Status as on 24.11.2019 |
| 1 | Installation of Solar Sludge Drying System. | To reduce moisture from CETP sludge so that it can be co-processed in cement kiln. Tenders have been issued. | 10.00 | 31/12/19 | 50% | <p>M/S Nature Tech Surat has been given work order of Rs 10 crore & 10% advance also paid.</p> <p>Detail designing work is going on by M/s Nature Tech – Palsana.</p> <p>Civil construction work will be started in first week of December-2019. As per the Bar chat the project will be commissioned by Mid of March-2020.</p> <p>(Annexure – 08 Bar Chart). (Photographs are attached)</p> |
| 2 | Implementation of Modifications suggested by Technical Expert (BPC- Israel) after treatability studies. | Improvement of CETP to meet prescribed norms all the time. | --- | 31/12/19 | 15% | BPC has conducted Lab Scale trials with the CETP inlet waste water and now under Techno-economic evaluation for a full-fledged retrofit treatment facility with necessary automation and can control as being under active consideration and evaluation as per Israel patented technology. |

Vapi Green Enviro Ltd (CETP – Vapi)
Status of Action Plan as on 24.11.2019

| Long Term Action plan for Inlet & Outlet Control | | | | | | |
|--|---|--|----------------|----------|----|--|
| Sr. No. | Action to be Taken | Objective | Cost Rs. Crore | Time | | Current Status as on 24.11.2019 |
| | | | | | | <p>VGEL will also explore other technologies like:</p> <ol style="list-style-type: none"> 1. Advanced oxidation with Fenton Catalytic Reactor (FCR) – Pilot plant trails will be started by 10th December. 2. Mechanical Vapor Recompression (MVR) Technology: To take care of more quantity of non-biodegradable COD waste water, MVR Technology to treat and dispose the concentrated non-biodegradable COD waste water and high TDS waste water. Pilot plant installation is going on and it will be functioning by 25/11/2019. <p>VGEL will finalize the technology based on merit.</p> |
| 3 | All industries will discharge their effluent through over ground pipe line with the help of pump. | For preventing use of any unauthorized outlet. | -- | 31/12/19 | 0% | The effluent drainage network and pumping stations are operated by GIDC. As discussed in meeting at CPCB zonal office – Vadodara on 19/10/2019, GIDC will provide over ground pipeline from the final outlet of each member units to GIDC chamber and remove all other connections including domestic discharge line. There will be only one discharge line from industry. |

Daily plant report

| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 01-Jan-19 | 47658 | 48714 | 7.58 | 7.13 | 1210 | 254 | 330 | 67 | NA | NA | 42 | 45 | 4574 | 19856 | 62.1 |
| 02-Jan-19 | 53478 | 52560 | 7.38 | 7.39 | 1070 | 248 | 687 | 59 | NA | NA | 52 | 44 | 3780 | 20580 | 64.4 |
| 03-Jan-19 | 55412 | 54987 | 7.44 | 7.5 | 874 | 230 | 447 | 58 | NA | NA | 56 | 52 | 4744 | 22700 | 60.9 |
| 04-Jan-19 | 53999 | 54899 | 6.87 | 7.52 | 1184 | 236 | 263 | 67 | NA | NA | 45 | 46 | 3190 | 19948 | 59.9 |
| 05-Jan-19 | 54289 | 54628 | 7.37 | 7.36 | 1205 | 272 | 427 | 68 | NA | NA | 44 | 40 | 3540 | 24512 | 63.4 |
| 06-Jan-19 | 55128 | 54897 | 7.41 | 7.19 | 1002 | 304 | 270 | 76 | NA | NA | 41 | 38 | 3450 | 25112 | 59.4 |
| 07-Jan-19 | 53978 | 53644 | 7.39 | 7.22 | 757 | 284 | 257 | 52 | NA | NA | 39 | 34 | 4906 | 27684 | 61.7 |
| 08-Jan-19 | 51428 | 52189 | 7.44 | 7.4 | 832 | 252 | 159 | 56 | NA | NA | 50 | 40 | 5228 | 18712 | 63 |
| 09-Jan-19 | 55489 | 55004 | 7.42 | 7.13 | 608 | 224 | 281 | 59 | NA | NA | 21 | 45 | 4530 | 19432 | 62 |
| 10-Jan-19 | 52896 | 52789 | 7.58 | 7.66 | 746 | 234 | NA | 60 | NA | NA | 17 | 40 | 3710 | 17728 | 60.1 |
| 11-Jan-19 | 54898 | 53999 | 7.66 | 7.94 | 922 | 212 | NA | 64 | 300 | 30 | 53 | 29 | 4446 | 19772 | 63.4 |
| 12-Jan-19 | 52338 | 52138 | 7.73 | 7.85 | 842 | 234 | 198 | 78 | 230 | 32 | 50 | 20 | 4332 | 19720 | 57.9 |
| 13-Jan-19 | 53999 | 54218 | 7.62 | 7.69 | 1130 | 244 | 477 | 86 | 360 | 20 | 46 | 40 | 4098 | 20172 | 61.2 |
| 14-Jan-19 | 50991 | 52131 | 7.72 | 7.7 | 1056 | 288 | 191 | 62 | 300 | 22 | 69 | 44 | 3804 | 12940 | 60.9 |
| 15-Jan-19 | 54818 | 54513 | 7.72 | 7.2 | 1101 | 304 | 326 | 99 | 280 | 18 | 55 | 50 | 3826 | 16856 | 62 |
| 16-Jan-19 | 53109 | 52971 | 7.51 | 7.46 | 1146 | 314 | 362 | 81 | 320 | 16 | 55 | 52 | 4366 | 19508 | 62.3 |
| 17-Jan-19 | 56532 | 57109 | 7.82 | 7.6 | 1204 | 318 | 501 | 66 | NA | NA | 56 | 56 | 4166 | 16484 | 63.8 |
| 18-Jan-19 | 57288 | 57318 | 7.68 | 7.04 | 1040 | 296 | 300 | 56 | NA | NA | 48 | 44 | 3866 | 17964 | 59.8 |
| 19-Jan-19 | 57483 | 57187 | 7.72 | 7.3 | 1157 | 254 | 360 | 59 | NA | NA | 46 | 38 | 4256 | 21456 | 60.3 |
| 20-Jan-19 | 55818 | 56227 | 7.57 | 7.44 | 964 | 264 | 251 | 78 | NA | NA | 33 | 42 | 4316 | 25224 | 61.4 |
| 21-Jan-19 | 54726 | 54421 | 7.77 | 7.15 | 826 | 240 | 236 | 86 | 240 | 10 | 38 | 38 | 3954 | 16736 | 61.8 |
| 22-Jan-19 | 55408 | 55278 | 7.37 | 7.21 | 1029 | 224 | 498 | 84 | 240 | 16 | 45 | 37 | 4304 | 19268 | 61.3 |
| 23-Jan-19 | 54298 | 54098 | 7.75 | 7.7 | 960 | 238 | 222 | 90 | 280 | 18 | 50 | 33 | 4530 | 17132 | 61 |
| 24-Jan-19 | 55134 | 55011 | 7.52 | 7.8 | 874 | 242 | 208 | 89 | 240 | 12 | 36 | 38 | 3540 | 20240 | 61.3 |
| 25-Jan-19 | 56130 | 55494 | 7.61 | 7.89 | 1184 | 256 | 369 | 92 | 360 | 20 | 42 | 29 | 3952 | 21280 | 62.8 |
| 26-Jan-19 | 52558 | 54193 | 7.71 | 7.74 | 1177 | 284 | 431 | 94 | 340 | 24 | 36 | 34 | 4416 | 26944 | 60.6 |
| 27-Jan-19 | 55892 | 55564 | 7.38 | 7.72 | 884 | 276 | 267 | 109 | 240 | 22 | 42 | 40 | 4336 | 24952 | 60.1 |
| 28-Jan-19 | 55609 | 55191 | 7.76 | 7.65 | 1026 | 252 | 364 | 89 | 320 | 28 | 46 | 36 | 4378 | 31172 | 60.7 |
| 29-Jan-19 | 50897 | 52106 | 7.88 | 7.87 | 1024 | 274 | 266 | 77 | 320 | 26 | 43 | 34 | 4282 | 19744 | 60.8 |
| 30-Jan-19 | 53426 | 53127 | 7.46 | 7.5 | 936 | 266 | 348 | 91 | 280 | 22 | 43 | 28 | 3752 | 19272 | 61.3 |
| 31-Jan-19 | 48666 | 48512 | 7.64 | 7.78 | 1152 | 274 | 327 | 80 | 340 | 28 | 36 | 32 | 4002 | 20416 | 61.9 |
| Average | 53993 | 54036 | 8 | 8 | 1004 | 261 | 332 | 75 | 294 | 21 | 44 | 39 | 4148 | 20759 | 61 |
| 01-Feb-19 | 53581 | 53392 | 7.1 | 7.7 | 1256 | 304 | 344 | 64 | 440 | 32 | 51 | 34 | 3798 | 16500 | 66.7 |
| 02-Feb-19 | 53751 | 53496 | 7.5 | 7.35 | 1154 | 312 | 496 | 47 | 400 | 28 | 59 | 44 | 4140 | 17995 | 62.2 |
| 03-Feb-19 | 48787 | 49120 | 7.71 | 7.51 | 1162 | 276 | 202 | 74 | 300 | 34 | 50 | 37 | 4696 | 11704 | 63.9 |
| 04-Feb-19 | 54979 | 54102 | 7.53 | 7.64 | 1093 | 284 | 252 | 71 | 260 | 30 | 56 | 38 | 5076 | 27064 | 63.3 |
| 05-Feb-19 | 54896 | 55072 | 7.76 | 7.64 | 1249 | 300 | 305 | 78 | 380 | 26 | 61 | 45 | 5164 | 30612 | 62.4 |
| 06-Feb-19 | 53231 | 53068 | 7.66 | 7.68 | 1056 | 324 | 270 | 57 | 260 | 24 | 47 | 43 | 5482 | 29844 | 62.5 |
| 07-Feb-19 | 55137 | 54884 | 7.45 | 7.09 | 1231 | 296 | 298 | 47 | 310 | 30 | 70 | 44 | 3996 | 31444 | 59.2 |
| 08-Feb-19 | 58432 | 57696 | 7.7 | 7.78 | 1178 | 272 | 325 | 59 | 320 | 28 | 41 | 52 | 5942 | 31564 | 60.0 |
| 09-Feb-19 | 54393 | 54768 | 7.48 | 7.74 | 1216 | 284 | 410 | 57 | 340 | 34 | 61 | 48 | 6310 | 31212 | 60 |
| 10-Feb-19 | 53987 | 53813 | 7.71 | 7.78 | 1112 | 272 | 480 | 67 | 320 | 26 | 67 | 51 | 5416 | 30596 | 60.1 |
| 11-Feb-19 | 56134 | 55596 | 7.53 | 7.57 | 1178 | 244 | 372 | 71 | 300 | 22 | 49 | 40 | 6114 | 28788 | 59.1 |
| 12-Feb-19 | 55790 | 55319 | 7.79 | 7.51 | 1221 | 252 | 320 | 69 | 320 | 24 | 56 | 32 | 6036 | 29728 | 61.4 |
| 13-Feb-19 | 55156 | 55309 | 7.48 | 7.5 | 1258 | 256 | 220 | 54 | 300 | 30 | 62 | 38 | 5324 | 30652 | 65.0 |
| 14-Feb-19 | 54621 | 54811 | 7.51 | 7.53 | 1204 | 276 | 478 | 67 | 350 | 30 | 58 | 42 | 5136 | 28916 | 57.4 |

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| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 15-Feb-19 | 55628 | 55488 | 7.51 | 7.62 | 1277 | 304 | 334 | 67 | 420 | 28 | 47 | 44 | 6028 | 28104 | 59.1 |
| 16-Feb-19 | 56769 | 56131 | 7.53 | 7.74 | 1162 | 324 | 268 | 56 | 340 | 36 | 64 | 56 | 5428 | 28168 | 58.9 |
| 17-Feb-19 | 55499 | 55083 | 7.47 | 7.74 | 1274 | 314 | 444 | 50 | 360 | 32 | 47 | 50 | 6042 | 32668 | 58.9 |
| 18-Feb-19 | 57129 | 56596 | 7.75 | 7.66 | 1248 | 300 | 313 | 41 | 350 | 30 | 57 | 31 | 5662 | 27880 | 58.8 |
| 19-Feb-19 | 55104 | 54896 | 7.66 | 7.51 | 1168 | 286 | 286 | 47 | 300 | 28 | 44 | 34 | 6176 | 25672 | 60.1 |
| 20-Feb-19 | 53682 | 54676 | 7.6 | 7.75 | 1338 | 276 | 465 | 51 | 360 | 32 | 64 | 37 | 5904 | 25432 | 59.1 |
| 21-Feb-19 | 54373 | 54079 | 7.65 | 7.8 | 1040 | 252 | 477 | 42 | 310 | 24 | 55 | 42 | 5646 | 26828 | 56.4 |
| 22-Feb-19 | 56494 | 55284 | 7.71 | 7.75 | 1056 | 256 | 252 | 50 | 290 | 22 | 68 | 45 | 6176 | 28272 | 56.6 |
| 23-Feb-19 | 55314 | 54918 | 7.6 | 7.78 | 1280 | 224 | 394 | 52 | 240 | 18 | 47 | 47 | 6438 | 21664 | 62.6 |
| 24-Feb-19 | 54292 | 54358 | 7.8 | 7.93 | 1258 | 260 | 387 | 41 | 300 | 28 | 62 | 50 | 6048 | 28252 | 59.6 |
| 25-Feb-19 | 56187 | 55332 | 7.59 | 7.86 | 1170 | 264 | 364 | 56 | 300 | 30 | 42 | 54 | 5740 | 30684 | 54.6 |
| 26-Feb-19 | 54072 | 53967 | 7.39 | 7.21 | 1214 | 238 | 510 | 67 | 360 | 30 | 42 | 44 | 5182 | 26436 | 61.6 |
| 27-Feb-19 | 54657 | 54477 | 7.47 | 7.77 | 1022 | 235 | 409 | 64 | 340 | 36 | 65 | 39 | 5672 | 30824 | 61.4 |
| 28-Feb-19 | 54499 | 54180 | 7.49 | 7.72 | 1244 | 230 | 392 | 67 | 360 | 30 | 55 | 54 | 5406 | 27380 | 56.9 |
| Average | 54878 | 54640 | 8 | 8 | 1190 | 276 | 360 | 58 | 330 | 29 | 55 | 43 | 5506 | 27317 | 60 |
| 01-Mar-19 | 54108 | 53992 | 7.44 | 7.7 | 1218 | 274 | 414 | 61 | 400 | 28 | 58 | 53 | 5122 | 30212 | 64.1 |
| 02-Mar-19 | 55218 | 55103 | 7.60 | 7.58 | 1024 | 285 | 404 | 67 | 290 | 26 | 67 | 52 | 5540 | 29760 | 64.5 |
| 03-Mar-19 | 54828 | 54618 | 7.32 | 7.14 | 1290 | 264 | 434 | 68 | 380 | 22 | 58 | 48 | 5394 | 29856 | 65.4 |
| 04-Mar-19 | 52137 | 53378 | 7.7 | 7.66 | 1164 | 244 | 351 | 77 | 360 | 30 | 60 | 49 | 5428 | 28376 | 65 |
| 05-Mar-19 | 54088 | 54328 | 7.22 | 7.54 | 1344 | 262 | 396 | 93 | 380 | 30 | 72 | 52 | 5004 | 28332 | 65 |
| 06-Mar-19 | 41009 | 48394 | 7.56 | 7.51 | 1120 | 312 | 410 | 104 | 360 | 28 | 53 | 48 | 5332 | 28668 | 64.5 |
| 07-Mar-19 | 50343 | 52328 | 7.77 | 7.35 | 1184 | 272 | 341 | 75 | 320 | 24 | 42 | 44 | 4848 | 26196 | 61.8 |
| 08-Mar-19 | 53537 | 53091 | 7.56 | 7.43 | 1013 | 242 | 356 | 94 | 300 | 20 | 56 | 42 | 5032 | 24996 | 61.5 |
| 09-Mar-19 | 53792 | 53411 | 7.49 | 7.33 | 944 | 224 | 218 | 96 | 280 | 24 | 54 | 40 | 5188 | 20364 | 64.1 |
| 10-Mar-19 | 52871 | 52640 | 7.6 | 7.6 | 1002 | 232 | 342 | 84 | 220 | 18 | 33 | 42 | 5558 | 21048 | 65.5 |
| 11-Mar-19 | 53699 | 53453 | 7.45 | 7.27 | 1434 | 284 | 376 | 84 | 390 | 20 | 39 | 47 | 4820 | 27400 | 64.2 |
| 12-Mar-19 | 54617 | 54109 | 7.66 | 7.53 | 1365 | 272 | 449 | 68 | 340 | 24 | 68 | 37 | 5408 | 10044 | 62.4 |
| 13-Mar-19 | 54532 | 54299 | 7.57 | 7.50 | 1189 | 256 | 455 | 92 | 280 | 28 | 57 | 38 | 4436 | 22600 | 64.7 |
| 14-Mar-19 | 52680 | 53718 | 7.54 | 8.54 | 1400 | 284 | 416 | 98 | 420 | 26 | 34 | 44 | 5066 | 26272 | 65.7 |
| 15-Mar-19 | 54089 | 54312 | 7.5 | 7.63 | 1162 | 286 | 386 | 109 | 320 | 30 | 72 | 37 | 4500 | 20776 | 65.5 |
| 16-Mar-19 | 55366 | 54773 | 7.76 | 7.72 | 1204 | 264 | 284 | 115 | 330 | 34 | 78 | 52 | 4244 | 14892 | 66.8 |
| 17-Mar-19 | 53258 | 54828 | 7.51 | 7.31 | 1144 | 252 | 429 | 84 | 280 | 22 | 66 | 58 | 3738 | 13080 | 62.7 |
| 18-Mar-19 | 55872 | 55090 | 7.46 | 7.81 | 1224 | 248 | 396 | 82 | 360 | 20 | 79 | 61 | 3184 | 18816 | 60.9 |
| 19-Mar-19 | 54896 | 54463 | 7.58 | 7.80 | 1178 | 236 | 447 | 68 | 360 | 18 | 81 | 58 | 4216 | 19460 | 65.8 |
| 20-Mar-19 | 54849 | 54538 | 7.5 | 7.87 | 1288 | 244 | 813 | 94 | 400 | 26 | 62 | 62 | 5028 | 21908 | 62.3 |
| 21-Mar-19 | 35427 | 37908 | 7.59 | 7.99 | 1456 | 284 | 362 | 100 | 460 | 24 | 48 | 51 | 5454 | 22732 | 64.2 |
| 22-Mar-19 | 43430 | 43005 | 7.3 | 7.66 | 1274 | 312 | 335 | 38 | 400 | 24 | 59 | 49 | 5952 | 24532 | 63.2 |
| 23-Mar-19 | 54731 | 54290 | 7.34 | 7.67 | 1264 | 314 | 392 | 78 | 360 | 30 | 72 | 52 | 5426 | 27752 | 61.9 |
| 24-Mar-19 | 53978 | 54131 | 7.42 | 7.54 | 1178 | 296 | 461 | 104 | 300 | 32 | 68 | 53 | 5382 | 25384 | 62.3 |
| 25-Mar-19 | 55130 | 54653 | 7.64 | 7.84 | 1024 | 288 | 417 | 92 | 300 | 34 | 81 | 61 | 4872 | 18884 | 63.9 |
| 26-Mar-19 | 54887 | 54608 | 7.27 | 7.00 | 1172 | 254 | 433 | 93 | 340 | 28 | 42 | 64 | 4416 | 23988 | 64.3 |
| 27-Mar-19 | 54136 | 55044 | 6.76 | 7.48 | 1301 | 264 | 419 | 81 | 440 | 26 | 54 | 54 | 4620 | 21804 | 62.3 |
| 28-Mar-19 | 56392 | 54933 | 7.34 | 7.65 | 1141 | 286 | 444 | 73 | 410 | 42 | 42 | 46 | 5248 | 26704 | 62.1 |
| 29-Mar-19 | 55312 | 54912 | 7.36 | 7.77 | 1102 | 262 | 420 | 96 | 340 | 34 | 58 | 36 | 5154 | 27560 | 61.2 |
| 30-Mar-19 | 54872 | 53998 | 7.63 | 7.85 | 1314 | 248 | 315 | 88 | 420 | 30 | 57 | 48 | 5822 | 19404 | 62.3 |
| 31-Mar-19 | 54128 | 53726 | 7.51 | 7.72 | 1200 | 224 | 288 | 113 | 380 | 32 | 48 | 40 | 4676 | 33100 | 62.0 |

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Daily plant report

| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| Average | 52846 | 53099 | 7 | 8 | 1204 | 267 | 400 | 86 | 352 | 27 | 59 | 49 | 4971 | 23706 | 64 |
| 01-Apr-19 | 54833 | 54314 | 7.74 | 7.86 | 1209 | 256 | 385 | 69 | 386 | 24 | 56 | 44 | 5496 | 28684 | 62.8 |
| 02-Apr-19 | 54566 | 54296 | 7.7 | 7.8 | 1151 | 284 | 336 | 88 | 366 | 28 | 63 | 38 | 4706 | 40292 | 60.1 |
| 03-Apr-19 | 54257 | 56347 | 7.84 | 7.72 | 1231 | 300 | 359 | 101 | 426 | 32 | 70 | 47 | 4072 | 29172 | 60.1 |
| 04-Apr-19 | 54684 | 54498 | 7.95 | 7.68 | 1128 | 312 | 306 | 84 | 304 | 26 | 68 | 55 | 3828 | 35536 | 58.5 |
| 05-Apr-19 | 55572 | 55412 | 7.78 | 7.6 | 1036 | 288 | 288 | 64 | 266 | 24 | 75 | 56 | 5074 | 51376 | 62.3 |
| 06-Apr-19 | 54933 | 54684 | 7.54 | 7.74 | 1324 | 276 | 392 | 78 | 426 | 18 | 68 | 61 | 4062 | 26292 | 59.6 |
| 07-Apr-19 | 53791 | 53684 | 7.66 | 7.66 | 1097 | 254 | 337 | 86 | 294 | 39 | 45 | 51 | 4552 | 42500 | 62.2 |
| 08-Apr-19 | 54264 | 54190 | 7.86 | 7.73 | 1246 | 244 | 339 | 80 | 384 | 28 | 48 | 46 | 4104 | 29264 | 64.7 |
| 09-Apr-19 | 56844 | 56986 | 7.35 | 7.61 | 1084 | 236 | 260 | 82 | 376 | 32 | 58 | 38 | 4206 | 26052 | 61.8 |
| 10-Apr-19 | 54844 | 54597 | 7.78 | 7.77 | 1453 | 256 | 410 | 85 | 386 | 34 | 69 | 34 | 3904 | 24468 | 59.2 |
| 11-Apr-19 | 55511 | 55140 | 7.61 | 8.28 | 1146 | 300 | 220 | 84 | 346 | 36 | 87 | 52 | 5052 | 25112 | 63.8 |
| 12-Apr-19 | 54590 | 54384 | 7.72 | 7.8 | 1044 | 286 | 286 | 79 | 312 | 32 | 60 | 56 | 4588 | 25732 | 59.0 |
| 13-Apr-19 | 55391 | 55298 | 7.71 | 7.74 | 1359 | 312 | 430 | 88 | 424 | 40 | 62 | 49 | 4244 | 26920 | 61.4 |
| 14-Apr-19 | 54428 | 54872 | 7.62 | 7.65 | 1061 | 268 | 290 | 78 | 298 | 34 | 67 | 48 | 3956 | 20700 | 62.9 |
| 15-Apr-19 | 54623 | 54813 | 7.12 | 7.66 | 1124 | 244 | 422 | 87 | 376 | 32 | 75 | 57 | 3914 | 19468 | 63.6 |
| 16-Apr-19 | 55134 | 54800 | 7.37 | 7.85 | 1089 | 256 | 331 | 72 | 336 | 34 | 57 | 59 | 3706 | 23828 | 56.6 |
| 17-Apr-19 | 54247 | 54897 | 7.34 | 7.7 | 1346 | 236 | 414 | 79 | 420 | 30 | 49 | 51 | 4564 | 27788 | 65.2 |
| 18-Apr-19 | 54433 | 55132 | 7.55 | 7.21 | 1359 | 314 | 482 | 54 | 380 | 36 | 60 | 48 | 4860 | 23136 | 60.4 |
| 19-Apr-19 | 55412 | 55318 | 7.75 | 7.74 | 1399 | 324 | 436 | 84 | 409 | 24 | 48 | 47 | 4650 | 23252 | 61.4 |
| 20-Apr-19 | 55140 | 54808 | 7.69 | 7.77 | 1060 | 334 | 349 | 89 | 284 | 22 | 54 | 43 | 4816 | 26424 | 63.9 |
| 21-Apr-19 | 53749 | 53504 | 7.45 | 7.58 | 1159 | 301 | 362 | 82 | 340 | 18 | 58 | 39 | 4762 | 29252 | 62.4 |
| 22-Apr-19 | 56104 | 55819 | 7.76 | 7.74 | 1257 | 288 | 487 | 80 | 380 | 24 | 62 | 36 | 4566 | 25576 | 62.4 |
| 23-Apr-19 | 54263 | 54131 | 7.47 | 7.78 | 1266 | 262 | 348 | 89 | 384 | 29 | 75 | 54 | 4680 | 24764 | 59.7 |
| 24-Apr-19 | 55417 | 55189 | 7.58 | 7.78 | 1403 | 284 | 442 | 85 | 380 | 28 | 70 | 58 | 4392 | 10436 | 67.1 |
| 25-Apr-19 | 55817 | 55671 | 7.48 | 7.61 | 1128 | 336 | 312 | 88 | 344 | 32 | 55 | 61 | 3834 | 16284 | 63.3 |
| 26-Apr-19 | 54390 | 54418 | 7.65 | 7.84 | 1162 | 272 | 364 | 104 | 356 | 36 | 71 | 44 | 3450 | 22240 | 59.4 |
| 27-Apr-19 | 55108 | 55410 | 7.6 | 7.62 | 1346 | 286 | 352 | 94 | 426 | 34 | 67 | 43 | 3474 | 22088 | 60.8 |
| 28-Apr-19 | 55984 | 55411 | 7.53 | 7.71 | 1133 | 334 | 385 | 90 | 376 | 34 | 78 | 52 | 3376 | 30312 | 67.6 |
| 29-Apr-19 | 54712 | 54358 | 7.69 | 7.8 | 1209 | 300 | 400 | 59 | 384 | 30 | 70 | 61 | 2898 | 24048 | 62.0 |
| 30-Apr-19 | 55712 | 55443 | 7.75 | 7.74 | 1175 | 312 | 322 | 72 | 346 | 28 | 66 | 54 | 3688 | 25732 | 60.9 |
| Average | 54958 | 54927 | 8 | 8 | 1206 | 285 | 362 | 82 | 364 | 30 | 64 | 49 | 4249 | 26891 | 62 |
| 01-May-19 | 54824 | 54512 | 7.79 | 7.71 | 1206 | 284 | 384 | 79 | 337 | 30 | 68 | 49 | 4994 | 24076 | 65.0 |
| 02-May-19 | 54878 | 54679 | 7.91 | 7.83 | 1074 | 262 | 254 | 72 | 302 | 28 | 50 | 43 | 4778 | 19896 | 64.1 |
| 03-May-19 | 54211 | 54094 | 7.57 | 7.6 | 1230 | 288 | 355 | 71 | 302 | 24 | 44 | 40 | 4619 | 21988 | 64.5 |
| 04-May-19 | 55321 | 55081 | 7.69 | 7.52 | 1210 | 312 | 392 | 84 | 355 | 32 | 79 | 58 | 4498 | 21780 | 64.1 |
| 05-May-19 | 53889 | 54839 | 7.91 | 7.9 | 1279 | 296 | 393 | 70 | 302 | 44 | 75 | 64 | 3160 | 19368 | 67.2 |
| 06-May-19 | 55432 | 55062 | 7.58 | 7.78 | 1366 | 288 | 375 | 54 | 426 | 36 | 51 | 61 | 4264 | 9152 | 62.9 |
| 07-May-19 | 54912 | 55214 | 7.43 | 7.84 | 1144 | 344 | 411 | 48 | 320 | 42 | 57 | 52 | 3378 | 21016 | 61.2 |
| 08-May-19 | 53242 | 54714 | 7.7 | 7.76 | 1253 | 312 | 305 | 45 | 337 | 29 | 68 | 58 | 4530 | 20188 | 63.1 |
| 09-May-19 | 54919 | 55224 | 7.66 | 7.72 | 1293 | 300 | 384 | 64 | 391 | 28 | 60 | 38 | 3560 | 22292 | 61.0 |
| 10-May-19 | 54135 | 54807 | 7.71 | 7.7 | 1370 | 336 | 342 | 64 | 409 | 32 | 73 | 39 | 3814 | 18580 | 54.3 |
| 11-May-19 | 48432 | 50122 | 7.65 | 7.59 | 1255 | 304 | 464 | 62 | 426 | 34 | 56 | 49 | 3728 | 18260 | 65.0 |
| 12-May-19 | 54632 | 54733 | 7.46 | 7.76 | 1384 | 312 | 330 | 54 | 426 | 36 | 45 | 44 | 3460 | 21252 | 65.0 |
| 13-May-19 | 54147 | 54688 | 7.56 | 7.82 | 1304 | 324 | 448 | 59 | 409 | 40 | 57 | 39 | 3618 | 20020 | 62.8 |

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Daily plant report

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| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 14-May-19 | 54934 | 54577 | 7.85 | 7.78 | 1221 | 292 | 322 | 72 | 337 | 44 | 68 | 37 | 3174 | 18556 | 59.5 |
| 15-May-19 | 53844 | 54028 | 7.65 | 7.95 | 1230 | 284 | 296 | 69 | 320 | 36 | 48 | 34 | 3818 | 19428 | 60.5 |
| 16-May-19 | 54834 | 54629 | 7.72 | 7.87 | 1288 | 272 | 385 | 71 | 364 | 38 | 42 | 31 | 4768 | 18120 | 61.2 |
| 17-May-19 | 55411 | 54839 | 7.55 | 7.82 | 1086 | 242 | 402 | 62 | 284 | 38 | 61 | 29 | 5908 | 20092 | 61.8 |
| 18-May-19 | 55431 | 54981 | 7.42 | 7.54 | 1397 | 256 | 362 | 64 | 373 | 32 | 64 | 39 | 5854 | 22860 | 63.1 |
| 19-May-19 | 53431 | 53669 | 7.66 | 7.81 | 1254 | 288 | 498 | 53 | 426 | 36 | 53 | 41 | 4630 | 20060 | 58.8 |
| 20-May-19 | 54824 | 54612 | 7.58 | 7.71 | 1193 | 304 | 343 | 50 | 344 | 42 | 58 | 37 | 4100 | 20204 | 61.8 |
| 21-May-19 | 54272 | 54001 | 7.67 | 7.64 | 1208 | 248 | 417 | 72 | 391 | 44 | 43 | 34 | 5338 | 20944 | 61.8 |
| 22-May-19 | 53614 | 53183 | 7.71 | 7.78 | 1204 | 266 | 236 | 69 | 337 | 36 | 48 | 33 | 4722 | 21464 | 62.7 |
| 23-May-19 | 53644 | 53328 | 7.27 | 7.7 | 1237 | 268 | 280 | 70 | 391 | 40 | 59 | 39 | 4990 | 11688 | 63.4 |
| 24-May-19 | 54989 | 54911 | 7.92 | 7.84 | 884 | 264 | 398 | 72 | 160 | 36 | 64 | 41 | 3912 | 18144 | 63.9 |
| 25-May-19 | 53772 | 53394 | 7.71 | 7.79 | 1301 | 276 | 461 | 58 | 362 | 30 | 75 | 49 | 4374 | 18052 | 64.6 |
| 26-May-19 | 53940 | 53459 | 7.59 | 7.79 | 1034 | 296 | 408 | 67 | 302 | 28 | 64 | 51 | 4424 | 21336 | 64.3 |
| 27-May-19 | 53844 | 53614 | 7.79 | 7.9 | 894 | 284 | 336 | 61 | 213 | 28 | 48 | 43 | 5676 | 26416 | 63.8 |
| 28-May-19 | 53984 | 53872 | 7.85 | 7.82 | 1188 | 266 | 426 | 71 | 384 | 30 | 54 | 38 | 5842 | 26040 | 63.7 |
| 29-May-19 | 53998 | 53691 | 7.87 | 7.74 | 889 | 212 | 270 | 108 | 248 | 32 | 64 | 58 | 5420 | 23832 | 63.7 |
| 30-May-19 | 53800 | 53504 | 7.59 | 7.42 | 1024 | 205 | 312 | 84 | 260 | 24 | 52 | 54 | 4828 | 24420 | 64.1 |
| 31-May-19 | 54394 | 53732 | 7.64 | 7.58 | 1148 | 214 | 298 | 64 | 280 | 28 | 55 | 50 | 4658 | 22480 | 62.8 |
| Average | 54191 | 54187 | 8 | 8 | 1195 | 281 | 364 | 67 | 339 | 34 | 58 | 44 | 4479 | 20387 | 63 |
| 01-Jun-19 | 51842 | 51558 | 7.83 | 7.56 | 1239 | 275 | 404 | 78 | 320 | 26 | 64 | 34 | 5344 | 23040 | 62.3 |
| 02-Jun-19 | 52568 | 52108 | 7.93 | 7.67 | 1097 | 242 | 373 | 89 | 266 | 32 | 57 | 43 | 4588 | 25832 | 62.9 |
| 03-Jun-19 | 54530 | 55014 | 7.3 | 7.44 | 1110 | 212 | 397 | 92 | 313 | 34 | 61 | 44 | 4350 | 22656 | 64.8 |
| 04-Jun-19 | 54800 | 54608 | 7.14 | 7.9 | 1074 | 240 | 316 | 105 | 295 | 30 | 55 | 52 | 4520 | 19060 | 65.2 |
| 05-Jun-19 | 54736 | 54617 | 7.59 | 7.52 | 1058 | 256 | 283 | 95 | 480 | 30 | 47 | 50 | 5124 | 18140 | 62.6 |
| 06-Jun-19 | 54108 | 53870 | 7.42 | 7.46 | 937 | 244 | 288 | 73 | 257 | 28 | 53 | 42 | 4580 | 19540 | 62.9 |
| 07-Jun-19 | 53418 | 53312 | 7.52 | 7.53 | 1040 | 254 | 314 | 82 | 284 | 24 | 41 | 49 | 3660 | 18812 | 65.0 |
| 08-Jun-19 | 53689 | 53268 | 6.98 | 7.48 | 1198 | 272 | 344 | 95 | 409 | 22 | 46 | 40 | 3768 | 18936 | 64.0 |
| 09-Jun-19 | 54262 | 54008 | 7.38 | 7.58 | 1144 | 264 | 302 | 114 | 288 | 18 | 34 | 44 | 3730 | 18028 | 62.5 |
| 10-Jun-19 | 53314 | 53089 | 7.27 | 7.41 | 1154 | 254 | 417 | 96 | 320 | 22 | 47 | 34 | 3440 | 16524 | 64.6 |
| 11-Jun-19 | 54874 | 54608 | 7.36 | 7.45 | 1030 | 241 | 360 | 101 | 340 | 22 | 51 | 40 | 4012 | 20044 | 59.8 |
| 12-Jun-19 | 53118 | 53852 | 7.43 | 7.44 | 1045 | 254 | 272 | 95 | 360 | 26 | 56 | 52 | 4740 | 18024 | 62.4 |
| 13-Jun-19 | 53108 | 52809 | 7.25 | 7.47 | 965 | 240 | 243 | 89 | 280 | 24 | 39 | 48 | 4420 | 20164 | 64.9 |
| 14-Jun-19 | 41323 | 40937 | 7.36 | 7.5 | 1033 | 254 | 302 | 73 | 340 | 22 | 33 | 42 | 4232 | 21168 | 62.8 |
| 15-Jun-19 | 54612 | 54707 | 7.47 | 7.49 | 1055 | 251 | 303 | 65 | 320 | 26 | 28 | 30 | 4088 | 21892 | 62.0 |
| 16-Jun-19 | 54552 | 54835 | 7.60 | 7.47 | 1053 | 248 | 312 | 62 | 310 | 24 | 42 | 26 | 4358 | 22032 | 61.8 |
| 17-Jun-19 | 54085 | 54320 | 7.38 | 7.53 | 973 | 250 | 355 | 56 | 340 | 27 | 47 | 32 | 3710 | 21972 | 62.4 |
| 18-Jun-19 | 54664 | 54608 | 7.32 | 7.59 | 1026 | 247 | 287 | 51 | 300 | 18 | 36 | 41 | 4860 | 19568 | 63.8 |
| 19-Jun-19 | 56305 | 56087 | 7.44 | 7.52 | 879 | 243 | 251 | 71 | 260 | 20 | 24 | 35 | 3860 | 21252 | 62.8 |
| 20-Jun-19 | 52671 | 53817 | 7.23 | 7.39 | 853 | 242 | 276 | 81 | 240 | 20 | 33 | 26 | 3806 | 20620 | 64.6 |
| 21-Jun-19 | 33414 | 32896 | 7.15 | 7.35 | 949 | 234 | 324 | 80 | 280 | 18 | 41 | 30 | 4840 | 26812 | 63.7 |
| 22-Jun-19 | 48832 | 48508 | 7.45 | 7.34 | 895 | 222 | 200 | 108 | 220 | 30 | 38 | 36 | 5084 | 25912 | 63.3 |
| 23-Jun-19 | 54298 | 53185 | 7.34 | 7.38 | 921 | 223 | 296 | 88 | 260 | 28 | 26 | 35 | 4196 | 26496 | 63.0 |
| 24-Jun-19 | 53814 | 53400 | 7.59 | 7.34 | 851 | 229 | 282 | 95 | 220 | 28 | 27 | 32 | 4926 | 26096 | 60.4 |
| 25-Jun-19 | 49352 | 49291 | 8.18 | 7.73 | 934 | 243 | 257 | 87 | 180 | 24 | 24 | 28 | 4540 | 21872 | 63.9 |
| 26-Jun-19 | 54642 | 54560 | 7.58 | 7.59 | 941 | 227 | 303 | 63 | 320 | 18 | 24 | 19 | 5160 | 21852 | 63.0 |
| 27-Jun-19 | 54828 | 54555 | 7.68 | 7.82 | 964 | 237 | 259 | 68 | 290 | 22 | 34 | 22 | 5306 | 22328 | 63.0 |

Daily plant report

| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 28-Jun-19 | 56721 | 56814 | 7.49 | 7.79 | 975 | 239 | 287 | 80 | 300 | 20 | 24 | 32 | 4784 | 27300 | 63.0 |
| 29-Jun-19 | 58832 | 60109 | 7.87 | 7.89 | 717 | 203 | 324 | 99 | 220 | 16 | 25 | 22 | 4168 | 26436 | 64.2 |
| 30-Jun-19 | 57619 | 58566 | 7.93 | 7.72 | 633 | 184 | 248 | 107 | 130 | 12 | 15 | 20 | 4712 | 24200 | 63.3 |
| Average | 52964 | 52931 | 7 | 8 | 991 | 241 | 306 | 85 | 291 | 24 | 39 | 36 | 4430 | 21887 | 63 |
| | | | | | | | | | | | | | | | |
| 01-Jul-19 | 55860 | 55576 | 7.58 | 7.87 | 424 | 152 | 300 | 114 | 200 | 16 | 14 | 16 | 4290 | 26688 | 58.1 |
| 02-Jul-19 | 54832 | 54540 | 7.64 | 7.74 | 701 | 156 | 291 | 90 | 200 | 12 | 16 | 14 | 3780 | 25632 | 60.2 |
| 03-Jul-19 | 54023 | 54236 | 7.67 | 7.80 | 855 | 195 | 264 | 77 | 220 | 14 | 31 | 22 | 4218 | 22228 | 64.9 |
| 04-Jul-19 | 54625 | 54103 | 7.69 | 7.77 | 954 | 213 | 304 | 74 | 260 | 10 | 41 | 30 | 4428 | 20472 | 63 |
| 05-Jul-19 | 55287 | 54821 | 7.37 | 7.78 | 928 | 237 | 316 | 95 | 304 | 12 | 28 | 32 | 3960 | 18616 | 63.5 |
| 06-Jul-19 | 54872 | 54318 | 7.47 | 7.65 | 672 | 220 | 244 | 101 | 204 | 18 | 21 | 30 | 4120 | 21824 | 63.7 |
| 07-Jul-19 | 54472 | 53998 | 7.61 | 7.71 | 524 | 185 | 212 | 84 | 180 | 14 | 11 | 17 | 4409 | 28608 | 64.2 |
| 08-Jul-19 | 53992 | 53998 | 7.51 | 7.60 | 728 | 188 | 240 | 94 | 210 | 8 | 17 | 20 | 4334 | 27856 | 64.6 |
| 09-Jul-19 | 54890 | 54732 | 7.49 | 8.15 | 846 | 229 | 288 | 89 | 200 | 12 | 26 | 25 | 4228 | 28572 | 63.3 |
| 10-Jul-19 | 54890 | 54732 | 7.49 | 8.15 | 846 | 229 | 288 | 89 | 200 | 12 | 26 | 25 | 4228 | 28572 | 63.3 |
| 10-Jul-19 | 55014 | 54879 | 7.65 | 7.76 | 905 | 237 | 328 | 85 | 300 | 14 | 32 | 33 | 4536 | 25876 | 62.1 |
| 11-Jul-19 | 54872 | 54696 | 7.70 | 7.87 | 917 | 207 | 314 | 94 | 294 | 14 | 29 | 26 | 4818 | 25848 | 60.5 |
| 12-Jul-19 | 54666 | 54598 | 7.76 | 7.89 | 990 | 224 | 249 | 95 | 320 | 18 | 59 | 38 | 3890 | 26240 | 61.9 |
| 13-Jul-19 | 53894 | 53568 | 7.67 | 7.89 | 990 | 224 | 249 | 95 | 320 | 18 | 59 | 38 | 3890 | 26240 | 61.9 |
| 14-Jul-19 | 54602 | 54473 | 7.5 | 7.78 | 946 | 233 | 294 | 101 | 314 | 24 | 39 | 37 | 3870 | 26008 | 62.5 |
| 15-Jul-19 | 54602 | 54473 | 7.5 | 7.78 | 946 | 233 | 294 | 101 | 314 | 24 | 39 | 37 | 3870 | 26008 | 62.5 |
| 15-Jul-19 | 54877 | 54694 | 7.64 | 7.86 | 963 | 245 | 268 | 80 | 280 | 22 | 37 | 37 | 3640 | 25840 | 61.9 |
| 16-Jul-19 | 54877 | 54694 | 7.64 | 7.86 | 963 | 245 | 268 | 80 | 280 | 22 | 37 | 37 | 3640 | 25840 | 61.9 |
| 16-Jul-19 | 54991 | 54809 | 7.48 | 7.71 | 950 | 244 | 344 | 80 | 296 | 20 | 43 | 39 | 4538 | 25224 | 62.3 |
| 17-Jul-19 | 54991 | 54809 | 7.48 | 7.71 | 950 | 244 | 344 | 80 | 296 | 20 | 43 | 39 | 4538 | 25224 | 62.3 |
| 17-Jul-19 | 54342 | 54494 | 7.35 | 7.53 | 972 | 248 | 332 | 88 | 312 | 24 | 50 | 47 | 4772 | 25012 | 64.2 |
| 18-Jul-19 | 54342 | 54494 | 7.35 | 7.53 | 972 | 248 | 332 | 88 | 312 | 24 | 50 | 47 | 4772 | 25012 | 64.2 |
| 18-Jul-19 | 54858 | 54690 | 7.04 | 7.35 | 984 | 240 | 284 | 82 | 308 | 18 | 46 | 46 | 4412 | 24436 | 63.3 |
| 19-Jul-19 | 54858 | 54690 | 7.04 | 7.35 | 984 | 240 | 284 | 82 | 308 | 18 | 46 | 46 | 4412 | 24436 | 63.3 |
| 19-Jul-19 | 53190 | 52842 | 7.17 | 8.12 | 935 | 239 | 296 | 85 | 296 | 20 | 48 | 48 | 4694 | 23812 | 62.4 |
| 20-Jul-19 | 53190 | 52842 | 7.17 | 8.12 | 935 | 239 | 296 | 85 | 296 | 20 | 48 | 48 | 4694 | 23812 | 62.4 |
| 20-Jul-19 | 53896 | 53500 | 7.56 | 7.70 | 988 | 232 | 321 | 77 | 260 | 18 | 46 | 43 | 4004 | 22740 | 64 |
| 21-Jul-19 | 53896 | 53500 | 7.56 | 7.70 | 988 | 232 | 321 | 77 | 260 | 18 | 46 | 43 | 4004 | 22740 | 64 |
| 21-Jul-19 | 54555 | 54108 | 7.72 | 7.73 | 995 | 250 | 304 | 94 | 336 | 22 | 43 | 46 | 4508 | 26208 | 65 |
| 22-Jul-19 | 54555 | 54108 | 7.72 | 7.73 | 995 | 250 | 304 | 94 | 336 | 22 | 43 | 46 | 4508 | 26208 | 65 |
| 22-Jul-19 | 54290 | 53768 | 7.70 | 7.74 | 1030 | 248 | 272 | 87 | 324 | 26 | 43 | 40 | 4170 | 25480 | 62.9 |
| 23-Jul-19 | 54290 | 53768 | 7.70 | 7.74 | 1030 | 248 | 272 | 87 | 324 | 26 | 43 | 40 | 4170 | 25480 | 62.9 |
| 23-Jul-19 | 52863 | 52687 | 7.52 | 7.85 | 1050 | 239 | 324 | 64 | 356 | 28 | 42 | 41 | 3980 | 21940 | 60.6 |
| 24-Jul-19 | 52863 | 52687 | 7.52 | 7.85 | 1050 | 239 | 324 | 64 | 356 | 28 | 42 | 41 | 3980 | 21940 | 60.6 |
| 24-Jul-19 | 52700 | 52659 | 7.27 | 7.73 | 951 | 249 | 276 | 102 | 268 | 28 | 44 | 44 | 4442 | 23004 | 63.9 |
| 25-Jul-19 | 52700 | 52659 | 7.27 | 7.73 | 951 | 249 | 276 | 102 | 268 | 28 | 44 | 44 | 4442 | 23004 | 63.9 |
| 25-Jul-19 | 53672 | 54073 | 7.66 | 7.73 | 937 | 242 | 288 | 74 | 270 | 24 | 48 | 42 | 4208 | 19188 | 63.9 |
| 26-Jul-19 | 53672 | 54073 | 7.66 | 7.73 | 937 | 242 | 288 | 74 | 270 | 24 | 48 | 42 | 4208 | 19188 | 63.9 |
| 26-Jul-19 | 53889 | 53929 | 7.52 | 7.75 | 969 | 230 | 284 | 89 | 296 | 22 | 36 | 38 | 4520 | 18948 | 66.3 |
| 27-Jul-19 | 53889 | 53929 | 7.52 | 7.75 | 969 | 230 | 284 | 89 | 296 | 22 | 36 | 38 | 4520 | 18948 | 66.3 |
| 27-Jul-19 | 54633 | 54567 | 7.73 | 7.72 | 924 | 225 | 326 | 102 | 300 | 18 | 45 | 35 | 4464 | 20940 | 64.2 |
| 28-Jul-19 | 54633 | 54567 | 7.73 | 7.72 | 924 | 225 | 326 | 102 | 300 | 18 | 45 | 35 | 4464 | 20940 | 64.2 |
| 28-Jul-19 | 55136 | 54943 | 7.58 | 7.64 | 957 | 225 | 315 | 89 | 290 | 22 | 37 | 41 | 3868 | 21696 | 64.8 |
| 29-Jul-19 | 55136 | 54943 | 7.58 | 7.64 | 957 | 225 | 315 | 89 | 290 | 22 | 37 | 41 | 3868 | 21696 | 64.8 |
| 29-Jul-19 | 54812 | 54208 | 7.71 | 7.51 | 794 | 212 | 290 | 96 | 280 | 20 | 41 | 35 | 4060 | 22436 | 63.1 |
| 30-Jul-19 | 54812 | 54208 | 7.71 | 7.51 | 794 | 212 | 290 | 96 | 280 | 20 | 41 | 35 | 4060 | 22436 | 63.1 |
| 30-Jul-19 | 54553 | 54469 | 7.82 | 7.82 | 659 | 191 | 246 | 95 | 240 | 12 | 27 | 35 | 3914 | 20172 | 58.7 |
| 31-Jul-19 | 54553 | 54469 | 7.82 | 7.82 | 659 | 191 | 246 | 95 | 240 | 12 | 27 | 35 | 3914 | 20172 | 58.7 |
| 31-Jul-19 | 55039 | 54908 | 7.52 | 7.62 | 757 | 173 | 258 | 64 | 256 | 12 | 35 | 34 | 3648 | 18960 | 59.6 |
| Average | 54458 | 54254 | 8 | 8 | 875 | 221 | 289 | 88 | 273 | 18 | 36 | 35 | 4204 | 23683 | 63 |
| | | | | | | | | | | | | | | | |
| 01-Aug-19 | 54469 | 54612 | 7.74 | 7.75 | 921 | 195 | 264 | 96 | 308 | 10 | 30 | 37 | 4040 | 16436 | 61.9 |
| 02-Aug-19 | 54469 | 54612 | 7.74 | 7.75 | 921 | 195 | 264 | 96 | 308 | 10 | 30 | 37 | 4040 | 16436 | 61.9 |
| 02-Aug-19 | 54803 | 54799 | 7.62 | 7.84 | 684 | 193 | 346 | 78 | 230 | 8 | 37 | 32 | 4468 | 19992 | 62.3 |
| 03-Aug-19 | 54803 | 54799 | 7.62 | 7.84 | 684 | 193 | 346 | 78 | 230 | 8 | 37 | 32 | 4468 | 19992 | 62.3 |
| 03-Aug-19 | 54218 | 54308 | 7.61 | 7.57 | 383 | 124 | 182 | 97 | 120 | 14 | 15 | 23 | 4154 | 22176 | 62.5 |
| 04-Aug-19 | 54218 | 54308 | 7.61 | 7.57 | 383 | 124 | 182 | 97 | 120 | 14 | 15 | 23 | 4154 | 22176 | 62.5 |
| 04-Aug-19 | 54500 | 54463 | 7.61 | 7.79 | 475 | 98 | 176 | 89 | 140 | 6 | 27 | 23 | 4380 | 21744 | 60.7 |
| 05-Aug-19 | 54500 | 54463 | 7.61 | 7.79 | 475 | 98 | 176 | 89 | 140 | 6 | 27 | 23 | 4380 | 21744 | 60.7 |
| 05-Aug-19 | 54833 | 54796 | 7.58 | 7.68 | 605 | 135 | 210 | 97 | 180 | 8 | 44 | 33 | 4268 | 21472 | 58.8 |
| 06-Aug-19 | 54833 | 54796 | 7.58 | 7.68 | 605 | 135 | 210 | 97 | 180 | 8 | 44 | 33 | 4268 | 21472 | 58.8 |
| 06-Aug-19 | 54901 | 54666 | 7.56 | 7.61 | 845 | 178 | 225 | 118 | 220 | 10 | 47 | 36 | 4210 | 21108 | 62.4 |
| 07-Aug-19 | 54901 | 54666 | 7.56 | 7.61 | 845 | 178 | 225 | 118 | 220 | 10 | 47 | 36 | 4210 | 21108 | 62.4 |
| 07-Aug-19 | 54558 | 54309 | 7.79 | 7.70 | 887 | 200 | 291 | 112 | 216 | 10 | 28 | 38 | 3840 | 22116 | 58.1 |
| 08-Aug-19 | 54558 | 54309 | 7.79 | 7.70 | 887 | 200 | 291 | 112 | 216 | 10 | 28 | 38 | 3840 | 22116 | 58.1 |
| 08-Aug-19 | 55009 | 54908 | 7.38 | 7.68 | 930 | 210 | 260 | 82 | 286 | 12 | 48 | 40 | 4472 | 24036 | 63.5 |
| 09-Aug-19 | 55009 | 54908 | 7.38 | 7.68 | 930 | 210 | 260 | 82 | 286 | 12 | 48 | 40 | 4472 | 24036 | 63.5 |
| 09-Aug-19 | 54200 | 54269 | 7.67 | 7.70 | 974 | 241 | 283 | 95 | 300 | 14 | 44 | 41 | 3863 | 20592 | 62.4 |

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Daily plant report

| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| | | | | | | | | | | | | | | | |
| 10-Aug-19 | 53990 | 53918 | 7.57 | 7.82 | 953 | 226 | 312 | 92 | 308 | 18 | 33 | 37 | 3500 | 20624 | 61.9 |
| 11-Aug-19 | 54663 | 54531 | 7.82 | 7.80 | 994 | 239 | 268 | 100 | 326 | 20 | 46 | 35 | 3790 | 18060 | 63.9 |
| 12-Aug-19 | 54102 | 54230 | 7.18 | 7.84 | 970 | 243 | 265 | 88 | 312 | 24 | 43 | 40 | 3846 | 20444 | 61.4 |
| 13-Aug-19 | 50137 | 49938 | 7.12 | 7.61 | 992 | 225 | 286 | 67 | 330 | 22 | 32 | 41 | 4096 | 20464 | 61.4 |
| 14-Aug-19 | 52834 | 52604 | 7.65 | 7.65 | 907 | 240 | 284 | 66 | 260 | 20 | 38 | 27 | 3716 | 17364 | 61.2 |
| 15-Aug-19 | 49735 | 49230 | 7.49 | 7.83 | 980 | 242 | 300 | 82 | 290 | 18 | 43 | 37 | 3666 | 19632 | 61.9 |
| 16-Aug-19 | 55081 | 54833 | 7.61 | 7.78 | 992 | 241 | 267 | 97 | 280 | 22 | 34 | 45 | 3754 | 24056 | 62.7 |
| 17-Aug-19 | 54980 | 54539 | 7.55 | 7.83 | 962 | 242 | 334 | 98 | 290 | 20 | 31 | 39 | 4244 | 25220 | 62.1 |
| 18-Aug-19 | 54342 | 54209 | 7.58 | 7.89 | 1013 | 247 | 333 | 106 | 310 | 24 | 48 | 35 | 4068 | 23768 | 62.0 |
| 19-Aug-19 | 54633 | 54401 | 7.46 | 7.89 | 989 | 246 | 286 | 99 | 260 | 22 | 47 | 45 | 4226 | 24480 | 61.7 |
| 20-Aug-19 | 54863 | 54493 | 7.19 | 7.7 | 889 | 236 | 298 | 105 | 204 | 20 | 38 | 44 | 4184 | 24292 | 62.7 |
| 21-Aug-19 | 55001 | 54887 | 7.61 | 7.65 | 1063 | 248 | 374 | 95 | 318 | 22 | 30 | 40 | 3810 | 20252 | 60.4 |
| 22-Aug-19 | 54985 | 54721 | 7.53 | 7.46 | 1002 | 233 | 329 | 87 | 300 | 22 | 38 | 42 | 3554 | 22544 | 62.0 |
| 23-Aug-19 | 55302 | 55181 | 7.58 | 7.53 | 982 | 240 | 292 | 80 | 290 | 24 | 43 | 38 | 3600 | 20044 | 62.7 |
| 24-Aug-19 | 54121 | 53982 | 7.66 | 7.66 | 959 | 229 | 302 | 77 | 280 | 28 | 42 | 44 | 4146 | 23292 | 61.2 |
| 25-Aug-19 | 52338 | 52418 | 7.54 | 7.78 | 947 | 242 | 286 | 94 | 260 | 26 | 49 | 42 | 4120 | 22400 | 60.5 |
| 26-Aug-19 | 54812 | 54674 | 7.68 | 7.63 | 944 | 245 | 262 | 100 | 258 | 26 | 46 | 45 | 3788 | 24760 | 58.1 |
| 27-Aug-19 | 55108 | 54985 | 7.61 | 7.72 | 993 | 239 | 216 | 84 | 300 | 24 | 47 | 47 | 3866 | 24632 | 58.4 |
| 28-Aug-19 | 54389 | 54819 | 7.64 | 7.5 | 956 | 238 | 300 | 94 | 270 | 24 | 38 | 49 | 3024 | 22744 | 61.6 |
| 29-Aug-19 | 54894 | 54500 | 7.57 | 7.24 | 993 | 246 | 238 | 95 | 308 | 22 | 27 | 37 | 3942 | 21288 | 60.9 |
| 30-Aug-19 | 54598 | 54473 | 7.59 | 7.45 | 867 | 236 | 277 | 103 | 182 | 20 | 31 | 32 | 3994 | 19860 | 61.7 |
| 31-Aug-19 | 55264 | 54911 | 7.27 | 7.62 | 941 | 234 | 307 | 68 | 256 | 18 | 33 | 39 | 3730 | 21472 | 62.8 |
| Average | 54247 | 54116 | 8 | 8 | 903 | 220 | 279 | 92 | 264 | 19 | 38 | 38 | 3947 | 21657 | 61 |
| 01-Sep-19 | 54872 | 54509 | 7.42 | 7.18 | 994 | 242 | 288 | 59 | 309 | 24 | 30 | 37 | 3890 | 18960 | 59.2 |
| 02-Sep-19 | 54961 | 54833 | 7.56 | 7.29 | 895 | 243 | 302 | 64 | 210 | 20 | 47 | 40 | 3880 | 18620 | 60.0 |
| 03-Sep-19 | 56109 | 55999 | 7.39 | 7.22 | 839 | 235 | 268 | 88 | 200 | 18 | 40 | 47 | 3526 | 31416 | 55.6 |
| 04-Sep-19 | 55134 | 54993 | 7.82 | 7.19 | 760 | 230 | 246 | 96 | 180 | 18 | 43 | 44 | 2498 | 19820 | 60.9 |
| 05-Sep-19 | 54908 | 54822 | 7.96 | 7.42 | 761 | 194 | 314 | 102 | 184 | 16 | 35 | 37 | 3580 | 14668 | 58.9 |
| 06-Sep-19 | 55230 | 55163 | 7.58 | 7.56 | 802 | 178 | 296 | 84 | 200 | 14 | 39 | 33 | 3578 | 19776 | 60.9 |
| 07-Sep-19 | 55390 | 54803 | 7.49 | 7.42 | 753 | 209 | 288 | 56 | 168 | 18 | 33 | 31 | 3958 | 10268 | 61.2 |
| 08-Sep-19 | 54862 | 54678 | 7.72 | 7.33 | 732 | 182 | 308 | 68 | 148 | 14 | 43 | 33 | 3788 | 12484 | 63.9 |
| 09-Sep-19 | 55463 | 55208 | 7.82 | 7.29 | 765 | 182 | 294 | 72 | 180 | 12 | 36 | 32 | 3318 | 18450 | 61.9 |
| 10-Sep-19 | 54892 | 54776 | 7.69 | 7.39 | 607 | 178 | 224 | 86 | 154 | 14 | 33 | 35 | 3784 | 22048 | 62 |
| 11-Sep-19 | 54933 | 54765 | 7.64 | 7.24 | 667 | 159 | 209 | 98 | 156 | 10 | 34 | 34 | 4610 | 19648 | 62.8 |
| 12-Sep-19 | 55104 | 54917 | 7.83 | 7.18 | 795 | 156 | 256 | 92 | 168 | 12 | 37 | 34 | 3456 | 19452 | 64.9 |
| 13-Sep-19 | 54817 | 54692 | 7.68 | 7.2 | 914 | 199 | 287 | 68 | 220 | 18 | 48 | 40 | 3686 | 21296 | 65.2 |
| 14-Sep-19 | 53689 | 53712 | 7.52 | 7.16 | 946 | 222 | 304 | 73 | 240 | 14 | 49 | 41 | 3736 | 23048 | 62.8 |
| 15-Sep-19 | 55317 | 55022 | 7.8 | 7.14 | 1083 | 239 | 294 | 59 | 280 | 20 | 50 | 40 | 4856 | 20008 | 59.4 |
| 16-Sep-19 | 55208 | 54984 | 7.64 | 7.26 | 1048 | 241 | 314 | 74 | 310 | 22 | 49 | 43 | 3198 | 21456 | 63.4 |
| 17-Sep-19 | 55008 | 54894 | 7.58 | 7.34 | 984 | 252 | 286 | 83 | 260 | 18 | 34 | 40 | 3780 | 23772 | 62.7 |
| 18-Sep-19 | 54562 | 54679 | 7.9 | 7.25 | 1104 | 236 | 354 | 112 | 312 | 24 | 46 | 43 | 3338 | 25004 | 61.8 |
| 19-Sep-19 | 54337 | 54183 | 7.65 | 7.42 | 1026 | 254 | 326 | 104 | 296 | 26 | 57 | 41 | 3328 | 9788 | 60.9 |
| 20-Sep-19 | 54912 | 54856 | 7.44 | 7.29 | 968 | 243 | 288 | 94 | 268 | 20 | 52 | 47 | 3554 | 17668 | 62.4 |
| 21-Sep-19 | 55001 | 54875 | 7.55 | 7.15 | 1037 | 228 | 401 | 72 | 300 | 22 | 44 | 46 | 3648 | 21450 | 64.6 |
| 22-Sep-19 | 54808 | 54892 | 7.69 | 7.19 | 1088 | 242 | 394 | 101 | 308 | 24 | 50 | 48 | 3330 | 18088 | 61.7 |
| 23-Sep-19 | 54763 | 54598 | 7.71 | 7.26 | 1146 | 262 | 344 | 84 | 384 | 28 | 36 | 46 | 3752 | 16980 | 65 |

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Daily plant report

1419

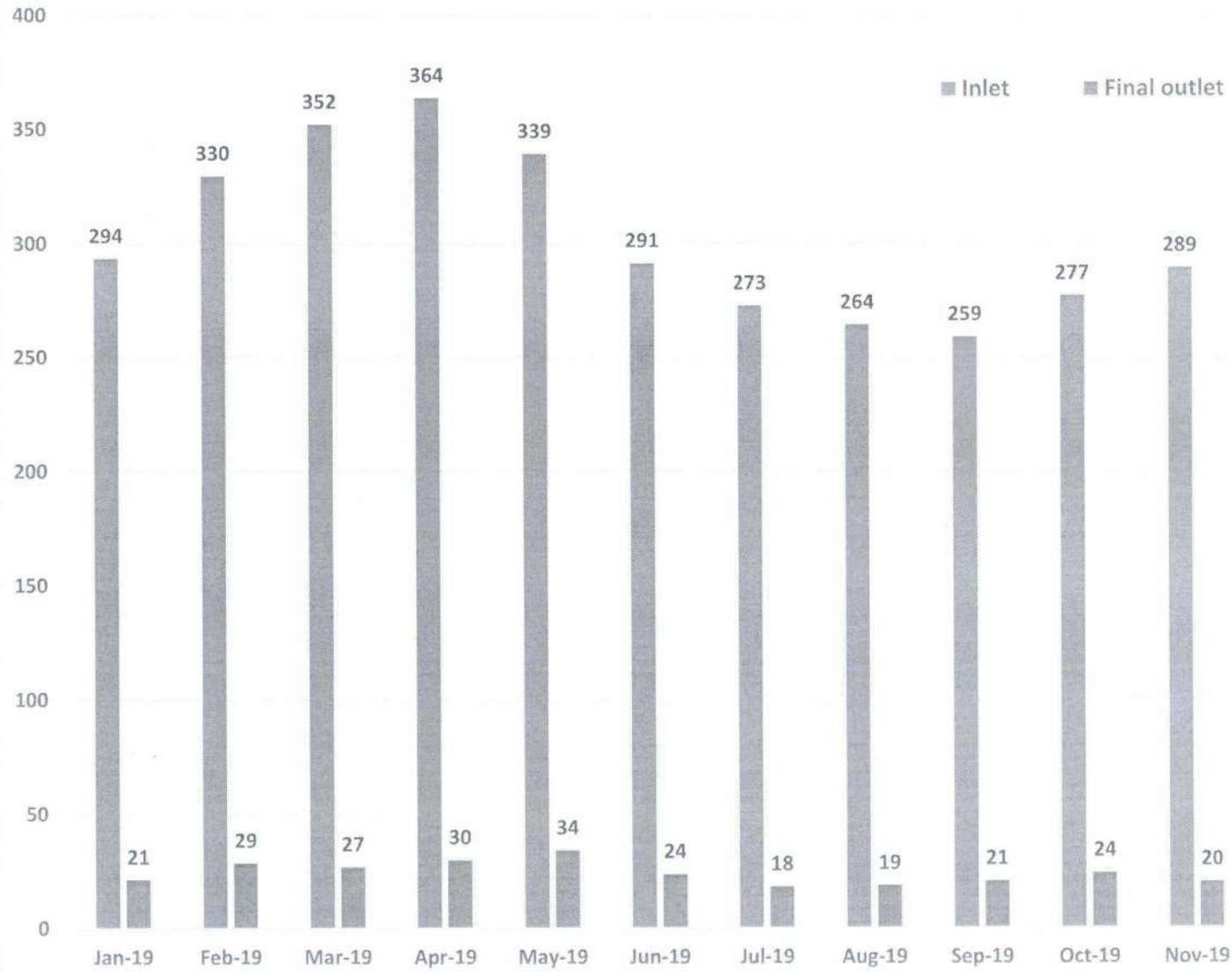
| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 24-Sep-19 | 55103 | 54991 | 7.82 | 7.23 | 1065 | 254 | 312 | 76 | 375 | 32 | 46 | 41 | 3798 | 18252 | 61.4 |
| 25-Sep-19 | 54866 | 54798 | 7.52 | 7.32 | 1042 | 256 | 256 | 56 | 324 | 30 | 35 | 39 | 3234 | 21220 | 59.8 |
| 26-Sep-19 | 55311 | 55083 | 7.59 | 7.18 | 961 | 245 | 287 | 48 | 284 | 28 | 45 | 42 | 4034 | 21224 | 62.5 |
| 27-Sep-19 | 54933 | 54708 | 7.63 | 7.22 | 1008 | 238 | 266 | 64 | 256 | 24 | 35 | 38 | 3879 | 24896 | 63.4 |
| 28-Sep-19 | 54834 | 54791 | 7.49 | 7.26 | 1104 | 248 | 336 | 76 | 390 | 22 | 46 | 37 | 3402 | 16992 | 60.8 |
| 29-Sep-19 | 55008 | 54931 | 7.68 | 7.14 | 1135 | 264 | 348 | 86 | 388 | 28 | 53 | 45 | 4420 | 29964 | 59.4 |
| 30-Sep-19 | 54926 | 54791 | 7.77 | 7.16 | 987 | 250 | 308 | 95 | 314 | 28 | 52 | 50 | 4576 | 24848 | 60.8 |
| Average | 54975 | 54832 | 8 | 7 | 934 | 225 | 300 | 80 | 259 | 21 | 43 | 40 | 3714 | 20052 | 62 |
| 01-Oct-19 | 54491 | 54418 | 7.34 | 7.56 | 976 | 242 | 276 | 64 | 240 | 26 | 36 | 48 | 4004 | 22940 | 58.2 |
| 02-Oct-19 | 54976 | 54748 | 7.56 | 7.42 | 1002 | 246 | 312 | 72 | 280 | 24 | 29 | 37 | 4282 | 22512 | 62.4 |
| 03-Oct-19 | 53912 | 53772 | 7.78 | 7.49 | 948 | 236 | 224 | 69 | 260 | 28 | 42 | 31 | 4588 | 24604 | 63.8 |
| 04-Oct-19 | 54793 | 54608 | 7.42 | 7.38 | 896 | 242 | 235 | 78 | 250 | 20 | 35 | 40 | 4038 | 23692 | 60.7 |
| 05-Oct-19 | 55109 | 54924 | 7.51 | 7.51 | 1064 | 230 | 284 | 92 | 270 | 26 | 37 | 35 | 4730 | 24000 | 56.8 |
| 06-Oct-19 | 49714 | 49672 | 7.34 | 7.58 | 1012 | 246 | 256 | 87 | 310 | 24 | 29 | 36 | 4871 | 26836 | 59.8 |
| 07-Oct-19 | 54716 | 54517 | 7.28 | 7.64 | 1087 | 236 | 306 | 56 | 320 | 22 | 48 | 30 | 4390 | 27156 | 56.8 |
| 08-Oct-19 | 51304 | 51444 | 7.19 | 7.28 | 964 | 243 | 228 | 84 | 270 | 26 | 52 | 46 | 4404 | 26688 | 59.5 |
| 09-Oct-19 | 51414 | 50192 | 7.38 | 7.49 | 1032 | 248 | 316 | 79 | 286 | 24 | 37 | 50 | 4558 | 26816 | 62.0 |
| 10-Oct-19 | 54372 | 54088 | 7.56 | 7.55 | 1054 | 252 | 272 | 93 | 310 | 20 | 46 | 38 | 4420 | 21130 | 58.0 |
| 11-Oct-19 | 54192 | 53911 | 7.81 | 7.69 | 1142 | 232 | 284 | 66 | 320 | 18 | 29 | 46 | 4700 | 24912 | 59.4 |
| 12-Oct-19 | 54260 | 53192 | 7.54 | 7.64 | 936 | 258 | 246 | 79 | 256 | 26 | 30 | 30 | 4629 | 18856 | 58.6 |
| 13-Oct-19 | 54633 | 54166 | 7.58 | 7.51 | 998 | 240 | 258 | 81 | 260 | 24 | 28 | 30 | 4210 | 20692 | 65.4 |
| 14-Oct-19 | 54908 | 54614 | 7.49 | 7.49 | 954 | 226 | 222 | 69 | 230 | 22 | 42 | 26 | 3522 | 23564 | 65.5 |
| 15-Oct-19 | 54080 | 53716 | 7.68 | 7.58 | 896 | 230 | 248 | 74 | 242 | 20 | 48 | 40 | 3668 | 27700 | 62.1 |
| 16-Oct-19 | 53618 | 53260 | 7.87 | 7.56 | 962 | 224 | 272 | 79 | 256 | 22 | 52 | 47 | 4924 | 26450 | 59.5 |
| 17-Oct-19 | 52417 | 52712 | 7.71 | 7.68 | 973 | 240 | 266 | 89 | 272 | 26 | 46 | 50 | 4326 | 24940 | 58.1 |
| 18-Oct-19 | 54711 | 54517 | 7.54 | 7.31 | 939 | 242 | 234 | 74 | 242 | 24 | 42 | 46 | 4632 | 23776 | 58.8 |
| 19-Oct-19 | 53803 | 53754 | 7.91 | 7.52 | 1058 | 238 | 282 | 68 | 312 | 20 | 43 | 40 | 4712 | 25760 | 58.4 |
| 20-Oct-19 | 54030 | 53898 | 7.21 | 7.59 | 1084 | 236 | 290 | 85 | 296 | 24 | 48 | 41 | 4180 | 24681 | 60.7 |
| 21-Oct-19 | 54232 | 53988 | 7.18 | 7.44 | 1024 | 246 | 244 | 91 | 252 | 26 | 40 | 48 | 4076 | 22128 | 59.8 |
| 22-Oct-19 | 54217 | 53766 | 7.08 | 7.26 | 1059 | 242 | 256 | 71 | 238 | 24 | 42 | 39 | 3838 | 23448 | 59.1 |
| 23-Oct-19 | 53308 | 53084 | 7.34 | 7.37 | 1096 | 236 | 272 | 85 | 280 | 26 | 43 | 42 | 4334 | 23928 | 59.1 |
| 24-Oct-19 | 54532 | 54501 | 7.58 | 7.59 | 1132 | 239 | 296 | 60 | 312 | 24 | 46 | 42 | 4502 | 25412 | 60.1 |
| 25-Oct-19 | 54517 | 54184 | 7.39 | 7.54 | 1063 | 244 | 258 | 58 | 286 | 26 | 42 | 45 | 4026 | 24816 | 60.3 |
| 26-Oct-19 | 53784 | 53612 | 7.24 | 7.61 | 973 | 240 | 256 | 72 | 246 | 28 | 38 | 42 | 4408 | 26896 | 58.9 |
| 27-Oct-19 | 47339 | 48129 | 7.22 | 7.68 | 1006 | 252 | 288 | 77 | 288 | 24 | 33 | 37 | 4612 | 28732 | 61.2 |
| 28-Oct-19 | 41879 | 41358 | 7.61 | 7.42 | 1064 | 236 | 234 | 89 | 310 | 26 | 32 | 32 | 4658 | 24150 | 62.4 |
| 29-Oct-19 | 37854 | 37917 | 7.77 | 7.57 | 1058 | 242 | 218 | 71 | 320 | 24 | 31 | 33 | 4552 | 22028 | 64.9 |
| 30-Oct-19 | 45213 | 44992 | 7.51 | 7.49 | 1025 | 232 | 260 | 83 | 280 | 26 | 36 | 30 | 4310 | 26824 | 61.8 |
| 31-Oct-19 | 48962 | 48548 | 7.54 | 7.54 | 1008 | 233 | 276 | 92 | 290 | 28 | 35 | 37 | 5120 | 21340 | 62.4 |
| Average | 52300 | 52071 | 7 | 8 | 1016 | 240 | 264 | 77 | 277 | 24 | 39 | 39 | 4394 | 24432 | 60 |
| 01-Nov-19 | 53827 | 54009 | 7.24 | 7.89 | 1138 | 249 | 378 | 86 | 300 | 20 | 36 | 41 | 4530 | 20464 | 58.1 |
| 02-Nov-19 | 55387 | 55089 | 7.56 | 7.79 | 954 | 252 | 296 | 84 | 260 | 24 | 48 | 40 | 3560 | 17364 | 56.8 |
| 03-Nov-19 | 54703 | 54424 | 7.31 | 7.91 | 837 | 229 | 312 | 72 | 240 | 18 | 49 | 43 | 3814 | 19632 | 59.5 |
| 04-Nov-19 | 54718 | 54692 | 7.42 | 7.72 | 941 | 220 | 274 | 77 | 296 | 20 | 42 | 40 | 3728 | 24056 | 62.0 |
| 05-Nov-19 | 54219 | 54198 | 7.58 | 8.1 | 882 | 216 | 256 | 91 | 260 | 18 | 48 | 43 | 3460 | 25220 | 62.1 |

h/1

| Day | Flow M ³ /day | | pH | | COD mg /lit | | SS mg /lit | | BOD mg/lit | | NH3-N mg/lit | | TSS Conc mg/lit | | |
|----------------|--------------------------|--------------|----------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|-----------------|-----------------|-----------|
| | Inflow | Outlet Flow | Inlet | Final Outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | Inlet | Final outlet | MLSS mg/lit | RAS CONC mg/lit | % VSS |
| 06-Nov-19 | 54711 | 54378 | 7.61 | 7.6 | 1022 | 230 | 284 | 80 | 336 | 18 | 52 | 41 | 3618 | 23768 | 63.1 |
| 07-Nov-19 | 54714 | 54476 | 7.54 | 7.81 | 962 | 242 | 262 | 97 | 324 | 20 | 40 | 47 | 3174 | 24480 | 60.4 |
| 08-Nov-19 | 54713 | 54375 | 7.32 | 7.79 | 990 | 232 | 228 | 59 | 356 | 24 | 38 | 47 | 3578 | 24292 | 65.4 |
| 09-Nov-19 | 53419 | 54394 | 7.18 | 7.97 | 897 | 262 | 230 | 77 | 272 | 22 | 32 | 44 | 3958 | 22048 | 65.5 |
| 10-Nov-19 | 53628 | 53491 | 7.49 | 7.6 | 1026 | 246 | 286 | 85 | 242 | 20 | 47 | 37 | 3784 | 19648 | 62.1 |
| 11-Nov-19 | 45892 | 47321 | 7.68 | 7.76 | 1009 | 253 | 294 | 82 | 312 | 24 | 49 | 33 | 4610 | 19452 | 61.3 |
| 12-Nov-19 | 49321 | 49488 | 7.51 | 7.85 | 942 | 244 | 266 | 96 | 296 | 18 | 40 | 31 | 3338 | 21450 | 62.4 |
| 13-Nov-19 | 49378 | 49919 | 7.33 | 7.9 | 1082 | 229 | 254 | 106 | 252 | 20 | 32 | 33 | 3328 | 18088 | 60.9 |
| 14-Nov-19 | 50797 | 50154 | 7.34 | 7.69 | 914 | 230 | 282 | 72 | 330 | 18 | 38 | 32 | 3554 | 26836 | 61.2 |
| 15-Nov-19 | 50318 | 50278 | 7.51 | 7.91 | 892 | 246 | 244 | 81 | 260 | 19 | 48 | 42 | 3798 | 27156 | 63.3 |
| Average | 52650 | 52712 | 7 | 8 | 966 | 239 | 276 | 83 | 289 | 20 | 43 | 40 | 3722 | 22264 | 62 |

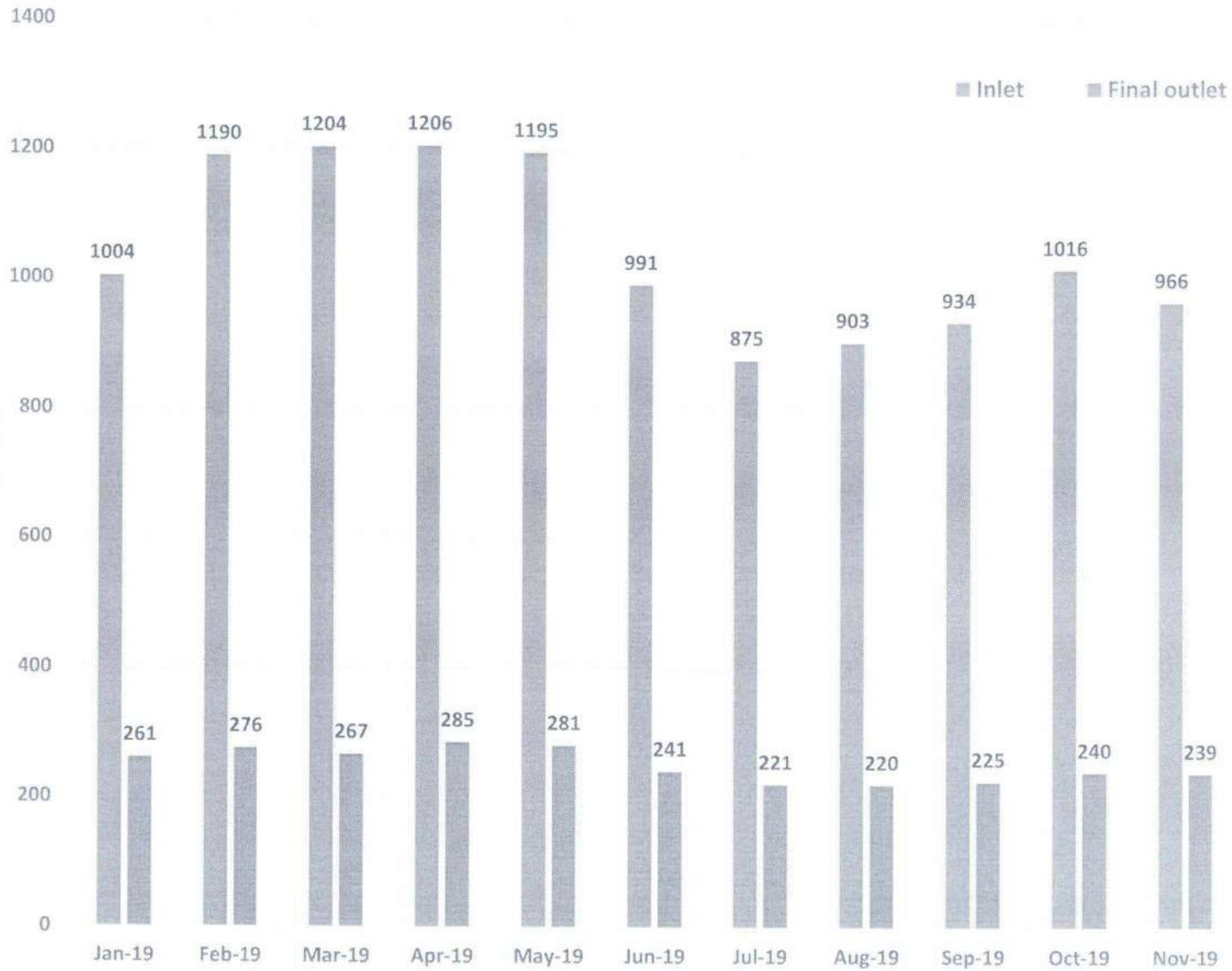
115

CETP BOD Results in mg/Lit



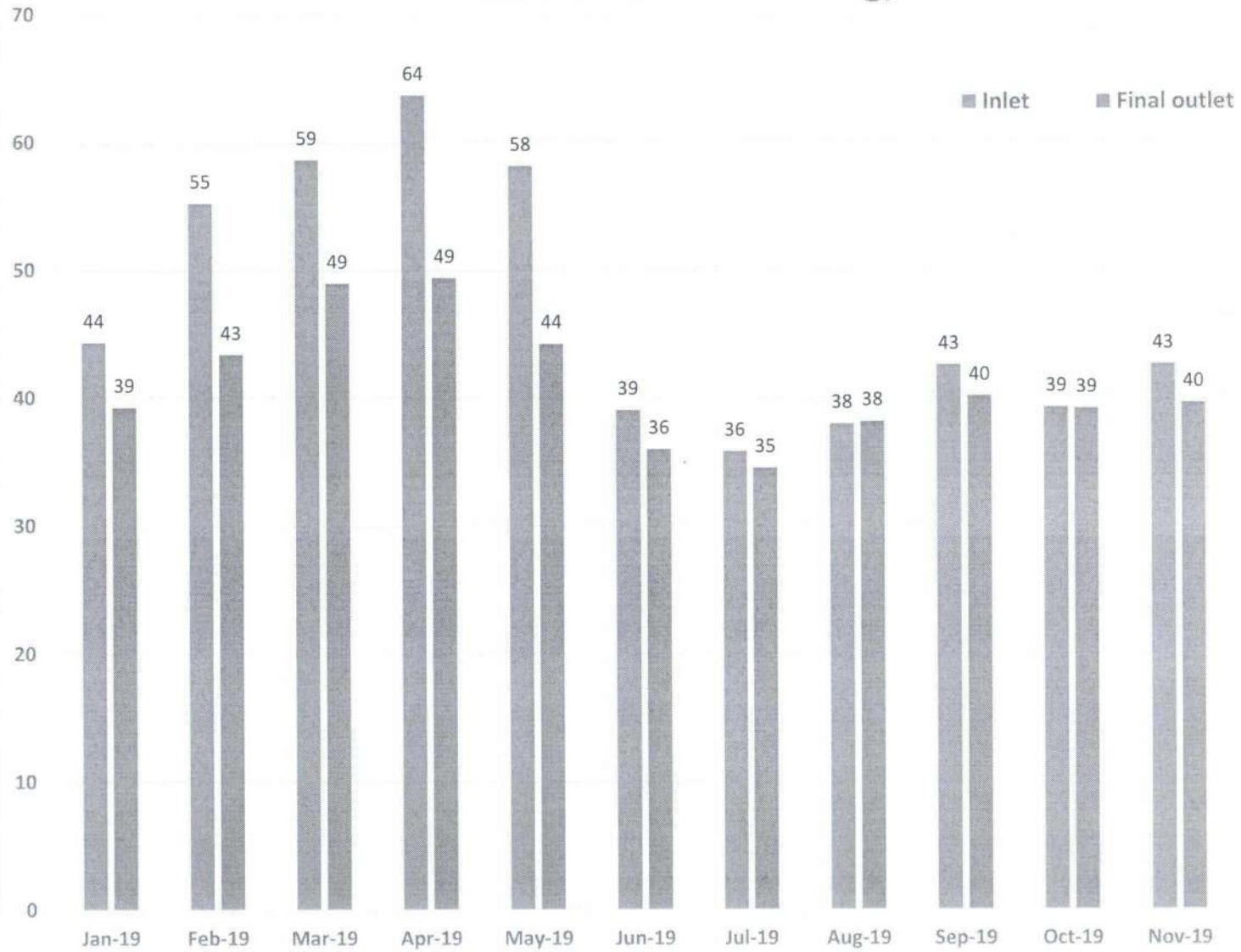
116

CETP COD Results in mg/Lit



1/7

CETP NH3-N Results mg/Lit



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Annexure - 2

| Joint Monitoring of VGEL & GPCB | | | |
|---------------------------------|-------------------------|------------|------------|
| SNO | name Of Unit | Address | Date |
| 1 | Unimark remedies | Phase I | 10/14/2019 |
| 2 | SK Trader Scrap Yards | Degam Road | 10/20/2019 |
| 3 | M.M.Chemical | A2-725 | 7/5/2019 |
| 4 | Spectra Dyes & Chemical | C1B-721 | 7/2/2019 |
| 5 | Vivid Intermediates | 143 | 5/28/2019 |
| 6 | Uniform Paints | C1B-651/2 | 8/23/2019 |

Annexure-3

Date: 06/07/2019

Subject: Lifting of wastewater from third phase Area which was seeping in to irrigation canal.

As per the instruction of GPCB, R.O office Vapi VGEL had lifted waste water from third phase Area. This waste water was seeping in to the irrigation canal.

Transportation & Disposal Details:

Manifest No. 77098

Date: 06/07/2019

Tanker No. DN-09-F-9949

Wastewater Quantity: 17.62 KL

Disposal at: Inlet of CETP



Annexure-4

| VAPI GREEN ENVIRO LIMITED (CETP) | | | | | | |
|---|--------|---|--|---------|-------------|-----------------|
| PLOT NO. 135, VIA HOUSE, VIA CHAR RASTA, VAPI | | | | | | |
| Zero Effluent/ZERO LIQUID DISCHARGE Member Industry | | | | | | |
| Sr. No. | M. NO. | Name of Unit | ADDRESS | Phase | Base Volume | Drainage Status |
| 1 | 502 | AARKEY PAINTS P.LTD | Plot No:J-758/1, Phase-II, GIDC Vapi | II | 1 | Disconnected |
| 2 | 773 | AARTI INDUSTRIES (C.S. DIV) | Plot No:22-C/1, First Phase, GIDC Vapi | I | 30 | Disconnected |
| 3 | 570 | AARTI INDUSTRIES LTD (ACID DIVISION) | Plot No:802,803,804, Phase-III, GIDC Vapi | III | 342 | Disconnected |
| 4 | 845 | AARTI SALT & CHEMICAL | Plot No:A-1-6&9, PHASE - I, GIDC, VAPI | I | 0.5 | Disconnected |
| 5 | 7 | ADIT CONTAINERS | Plot No:C1/B-1901/1 &2, THIRD PHASE, GIDC VAPI | III | 10 | Disconnected |
| 6 | 506 | AJANTA PAINTS | Plot No:136-G, Phase-II, GIDC Vapi | II | 1 | Disconnected |
| 7 | 33 | AMIT CHEMICAL INDUSTRIES | Plot No:1101/I-B,GIDC VAPI | III | 1 | Disconnected |
| 8 | 38 | ANANT AND COMPANY | Plot No:159, SECOND PHASE, GIDC VAPI | II | 8 | Disconnected |
| 9 | 40 | ANJALI PAINTS | Plot No:A-1/2205, THIRD PHASE ,GIDC Vapi | III | 4 | Disconnected |
| 10 | 45 | APURVA CHEMICALS | Plot No:2806, THIRD PHASE,GIDC Vapi | III | 12 | Disconnected |
| 11 | 50 | ARYAN PAPER MILLS PVT.LTD | Plot No:177-178, SECOND PHASE, GIDC Vapi | II | 92 | Disconnected |
| 12 | 86 | BHAGAWATI HERBAL AND HEALTHCARE PVT. LTD. | Plot No:785-4, 40 Shed Area, GIDC VAPI | 40 SHED | 10 | Disconnected |
| 13 | 862 | BHARAT INDUSTRIES | Plot No: 779/1/A, 40 SHED AREA, GIDC VAPI | 40 SHED | 2.5 | Disconnected |
| 14 | 73 | CENTRAL CHEMICALS INDUSTRIES | Plot No:2929/2935-A,"J"Type Area, GIDC Vapi | J TYPE | 1.5 | Disconnected |
| 15 | 621 | CHEMO TRIX INDIA .PVT.LTD. | Plot No:C1B/2419, Ph-III, GIDC Vapi | III | 2 | Disconnected |
| 16 | 84 | CHEMSONS INDUSTRIAL CORPORATION | Plot No: 2902, FIRST PHASE, BHI NEW TELEPHONE EX.GIDC Vapi | I | 23 | Disconnected |
| 17 | 96 | CRAFT CORNER PAPER MILL P. LTD | Plot No:1703/A, Ph-III,GIDC Vapi | III | 100 | Disconnected |

| | | | | | | |
|----|-----|----------------------------------|---|----------|------|--------------|
| 18 | 106 | DBM PAPER MILLS PVT. LTD | Plot No:288/1 & 2, 289/1, Second Phase, GIDC Vapi | II | 124 | Disconnected |
| 19 | 108 | DEVEN CHEMICAL INDUSTRIES | Plot No:1401/2,Ph-3 GIDC Vapi | III | 1 | Disconnected |
| 20 | 638 | DIVYESH CHEMICALS | Plot No:2911, Phase-II, GIDC Vapi | II | 1.5 | Disconnected |
| 21 | 154 | GUJARAT NITRO CHEM P. LTD | Plot No:196-9/B, Second Phase, GIDC Vapi | II | 10 | Disconnected |
| 22 | 555 | HI TECH INKS PVT. LTD. | Plot No:634, Phase-II, GIDC Vapi | II | 1.46 | Disconnected |
| 23 | 785 | HINDUSTAN METAL INDUSTRIES | Plot No:C1-2707/4, Third Phase, GIDC Vapi | III | 3.33 | Disconnected |
| 24 | 818 | HIRA CHEMICALS INDUSTRIES | Plot No:A1-5405, Phase-IV, GIDC Vapi | IV | 10 | Disconnected |
| 25 | 535 | HIRA PAINTS | Plot No:2501-3/A, Phase-II, GIDC Vapi | II | 1 | Disconnected |
| 26 | 863 | HITEN CHEMICAL | Plot No:C1B-2418, THIRD PHASE, GIDC VAPI | III | 3 | Disconnected |
| 27 | 508 | IMPERIAL PAINTS | Plot No:L322/16-3, Phase-II, GIDC Vapi | II | 1 | Disconnected |
| 28 | 187 | INDIAN SCIENTIFIC GLASS IND. | Plot No:67, Phase-I, GIDC VAPI | I | 26 | Disconnected |
| 29 | 537 | INTECH ORCHEM (P) LTD. | Plot No:1733, Phase-III, GIDC Vapi | III | 5 | Disconnected |
| 30 | 830 | JAI AMBE THINCHEM | Plot No:C1B-2010, Fourth Phase, GIDC Vapi | IV | 6 | Disconnected |
| 31 | 195 | JAYSONS CHEMICAL INDUSTRIES | Plot No:317-7, 40 Shed Area, GIDC VAPI | 40 SHED | 25 | Disconnected |
| 32 | 230 | K.K.POONJA & SONS | Plot No:1422.Ph-III, GIDC Vapi | III | 5 | Disconnected |
| 33 | 726 | KHEMKA GLASS PRODUCT P. LTD | Plot No:68/1, Phase-I , GIDC Vapi | I | 4 | Disconnected |
| 34 | 727 | KISSAN AGRO FERTILIZER | Plot No:A-2-2219, Ph-3,GIDC,Vapi | III | 1 | Disconnected |
| 35 | 224 | KRISHNA FINE CHEM INDUSTRIES | Plot No:C1-74, 100 Shed Area, GIDC VAPI | 100 SHED | 2 | Disconnected |
| 36 | 228 | KWALITY PULP & PAPER MILLS | Plot No:183, Phase-II, GIDC Vapi | II | 95 | Disconnected |
| 37 | 348 | M/S. RISHIROOP POLYMERS PVT.LTD. | Plot No:1301, Ph-III, GIDC Vapi | III | 32 | Disconnected |
| 38 | 840 | MAMTA INDUSTRIES | Plot No:C1B-2437 , PH -III, GIDC, VAPI | III | 103 | Disconnected |
| 39 | 837 | MARUTI CHARMICALS | Shed No: J-2318, Third Phase, GIDC Vapi | III | 2 | Disconnected |
| 40 | 400 | MICRO RESIN PVT. LTD. | Plot No.:A1/2002, Phase - III, GIDC Vapi | III | 60 | Disconnected |
| 41 | 260 | MODISON METAL LTD | Plot No., 85/E, 85D Road E, Ph-I GIDC Vapi | I | 50 | Disconnected |

| | | | | | | |
|----|-----|----------------------------------|---|----------|-----|--------------|
| 42 | 641 | MOHMAD YUNUSH & SONS | Plot No:176/3B, Second Phase GIDC Vapi | II | 5 | Disconnected |
| 43 | 859 | N. L. ENTERPRISES | Plot No: C/1-69, 100 SHED AREA, GIDC VAPI | 100 | 1.5 | Disconnected |
| 44 | 854 | NETMATRIX LTD | Plot No:C1-77/524,78/525,65/551, 100 Shed Area, GIDC VAPI | 100 SHED | 29 | Disconnected |
| 45 | 614 | NIKHIL INDUSTRIES | Plot No:C1B-5104/2, Phase-III, GIDC Vapi | III | 2 | Disconnected |
| 46 | 294 | ORIENTAL CHEMICAL INDUSTRIES. | Plot No:C1B-77,100 Shed Area Vapi | 100 SHED | 1 | Disconnected |
| 47 | 402 | OSKER CHEMICAL / SIMI CHEMICALS. | Plot No:C1-702/8, GIDC Vapi | 40 SHED | 7 | Disconnected |
| 48 | 865 | P S V POLYCHEM | Plot No:1706/2-A-2-B, THIRD PHASE, GIDC VAPI | III | 26 | Disconnected |
| 49 | 846 | PNN INTERNATIONAL | Plot No: 194, PH-II, GIDC VAPI | II | 85 | Disconnected |
| 50 | 315 | PRAGNA ORGANICS | Plot No:2907, Phase-IV, GIDC Vapi | IV | 3 | Disconnected |
| 51 | 833 | PRATIMA DYES & CHEMICAL | Plot No:765, 40 Shed Area, GIDC Vapi | 40 SHED | 0.8 | Disconnected |
| 52 | 838 | PRIME CHEMICALS | Plot No:313/2, 40 Shed Area, GIDC Vapi | 40 SHED | 3 | Disconnected |
| 53 | 714 | RAHUL SULPHATE | Plot No:313/3, 100 Shed, GIDC Vapi | 100 SHED | 4 | Disconnected |
| 54 | 864 | ROLEX LANOLINE PRODUCTS LTD | Plot No:6309, FORTH PHASE, GIDC VAPI | IV | 13 | Disconnected |
| 55 | 567 | S . K. CORPORATION | Plot No:1731, Phase-III, GIDC Vapi | III | 1 | Disconnected |
| 56 | 559 | S . R . CHEMICAL INDUSTRIES | Plot No:1001/2, Phase-IV, GIDC Vapi | IV | 2 | Disconnected |
| 57 | 798 | S.M Chemical Vapi Pvt. Ltd. | Plot No:313/1, Second Phase, GIDC vapi | II | 8 | Disconnected |
| 58 | 449 | S.M.INDUSTRIES | Plot No:J-5103 / 3 & 4, Ph-III GIDC Vapi | III | 9 | Disconnected |
| 59 | 360 | S.P.JOSHI & P.B.JOSHI | Plot No:L/13/2703, Phase-III, GIDC Vapi | III | 2 | Disconnected |
| 60 | 745 | SACHIN METAL COATS | Plot No:J-15, "J" Type, GIDC Vapi | J TYPE | 2 | Disconnected |
| 61 | 568 | SAFA CHEMICAL INDUSTRIES | Plot No:4608, Phase- IV, GIDC Vapi | IV | 1 | Disconnected |
| 62 | 361 | SANDHYA ORGANIC CHEMICALS P. LTD | Plot No:808/A-2, Phase-III, GIDC Vapi | III | 13 | Disconnected |
| 63 | 725 | SETCO CHEMICAL (I) PVT. LTD. | Plot No: A1/322/9, Phase-II, GIDC Vapi | II | 2 | Disconnected |
| 64 | 887 | SETCO CHEMICALS (I) pvt. Ltd. | Plot No: 788/1, PHASE-II, GIDC VAPI | II | 0 | Disconnected |

| | | | | | | |
|----|-----|---|---|------------|-----|--------------|
| 65 | 886 | SETCO CHEMICALS (I) pvt. Ltd. (u-ii) | Plot No:290/1, PHASE-II, GIDC VAPI | II | 2.5 | Disconnected |
| 66 | 382 | SHALIBHADRA CHEMICALS | Plot No:C1B-Shed No:48, LIC Sector, GIDC Vapi | LIC SECTOR | 12 | Disconnected |
| 67 | 499 | SHREE AMBICA CHEMICALS IND | Plot No:Ex-3, Opp. N.H.No:8, Phase- I GIDC Vapi | I | 4 | Disconnected |
| 68 | 394 | SHREE GURUDEV CHEMICALS | Plot No:1101-1/A, Phase-III, GIDC Vapi | III | 5 | Disconnected |
| 69 | 693 | SHYAM OXIDES P. LTD. | Plot No:1208/2, Phase-III, GIDC Vapi | III | 3 | Disconnected |
| 70 | 868 | SIDDHI CHLOROEXIM P. LTD | Plot No: C1B/322/17, SECOND PHASE, GIDC VAPI | II | 9 | Disconnected |
| 71 | 700 | SPARKEL CHEMICAL INDUSTRIES | Plot No:320/16, 40 Shed Area, PH-II, GIDC Vapi | 40 SHED | 3 | Disconnected |
| 72 | 418 | SUDISH CHEMICALS PVT. LTD | Plot No:C-1/71, 100 Shed Area GIDC Vapi | 100 SHED | 2 | Disconnected |
| 73 | 432 | SUPER SULPHATES | Plot No:702/9, 40 Shed Area, GIDC Vapi | 40 SHED | 3 | Disconnected |
| 74 | 430 | SUPERNA CHEMICAL LTD. | Plot No:656, Silvassa Road, 100 Shed, GIDC Vapi | 100 SHED | 10 | Disconnected |
| 75 | 866 | SURYA INDUSTRIES | Plot No:6306, SUBLET-1, FORTH PHASE, GIDC VAPI | IV | 20 | Disconnected |
| 76 | 858 | TECHNO PLAST INDUSTRIES | Plot No:76/A-2, J TYPE AREA, GIDC VAPI | J TYPE | 4 | Disconnected |
| 77 | 461 | ULTIMA SEARCH | Plot No.:A2/2, Phase-II, GIDC Vapi | II | 18 | Disconnected |
| 78 | 592 | UNIFORM PAINTS | Plot No:C1B-651/2, Phase-II, GIDC Vapi | II | 3 | Disconnected |
| 79 | 593 | UNIFORM POLYMERS | Plot No:645, Phase-II, GIDC Vapi | II | 1 | Disconnected |
| 80 | 682 | UNIQUE ENTERPRISE | Plot No:1304/1, Phase-III, GIDC Vapi | III | 1.5 | Disconnected |
| 81 | 594 | UNIQUE PAINTS | Plot No:6134, 2nd Phase GIDC Vapi | II | 0 | Disconnected |
| 82 | 276 | UPL LIMITED (U-07) (NERKA CHEMICAL) | Plot No: 50,51/B, Ph- I,GIDC Vapi | I | 23 | Disconnected |
| 83 | 713 | URECA INDUSRIES | Plot No:A-2/6107, Ph-4 GIDC Vapi | IV | 10 | Disconnected |
| 84 | 617 | VADILAL CHEMICALS IND. | Plot No:799, Phase-II, GIDC Vapi | II | 15 | Disconnected |
| 85 | 653 | VAPI PRODUCT INDUSTRIES PVT. LTD (U-II) | Plot No:789/3-A, Phase-II, GIDC Vapi | II | 165 | Disconnected |
| 86 | 729 | VITRAG CHEMICAL P. LTD | Plot No:535,100 Shed Area, GIDC Vapi | 100 SHED | 3 | Disconnected |

| | | | | | | |
|----|-----|------------------------------------|--|-----|-----|---|
| 87 | 494 | VIVID INTERMEDIATES PVT.LTD. | Plot No:143, Phase-II, GIDC Vapi | II | 22 | Disconnected |
| 88 | 632 | WAGESH ENERGY EQUIPMENTS PVT. LTD. | Plot No:2902, Phase- IV, GIDC Vapi | IV | 1 | Disconnected |
| 89 | 757 | WEST CHEM INDUSTRIES | Plot No:L-2705/9, Third Phase, GIDC Vapi | III | 1 | Disconnected |
| 90 | 885 | YASHO INDUSTRIES PVT. LTD. (U_II) | Plot No:1713, PHASE-III, GIDC VAPI | III | 150 | Disconnected |
| 91 | 374 | SUMITOMO CHEMICLAS INDIA P. LTD | Plot No:C/5,-185, Phase-I, GIDC Vapi | I | 14 | Removed from ZLD List because as per new CCA they have discharge permission |
| 92 | 736 | HEMANI CHEMI ORGANIC P. LTD | Plot No:155, Second Phase,GIDC,Vapi | II | 188 | Removed from ZLD List because as per new CCA they have discharge permission |

| ZLD Non Member VGEL | | | | |
|---------------------|---|--|------------------|--------------|
| Sr. No. | Name Of Units | Address | Type of industry | Remark |
| 1 | Aarti Industries Ltd(Blue Blend Division) [PAR] | 806 807 IIIphase | Chemical | Disconnected |
| 2 | Acrolite Chemicals [PAR] | Plot No-3105, Phase4, Gidc, Vapi Ho, Vapi | Chemical | Disconnected |
| 3 | Advance Colour [PAR] | 2326/4 III Phase | Chemical | Disconnected |
| 4 | Advent Enterprises [PAR] | Plot No:68/2, GIDC VAPI | chemical | Disconnected |
| 5 | Anchit Chemicals Pvt. Ltd [PAR] | Plot No.:1714 Phase-III GIDC vapi | Chemical | Disconnected |
| 6 | Chirag Industries [PAR] | Plot No: 6139/3, IV PHASE, GIDC VAPI | Chemical | Disconnected |
| 7 | Coated Sales Company P Ltd [PAR] | Plot No. C1B-1304/14, 3rd Phase Vapi G.I.D.C., | Chemical | Disconnected |
| 8 | Engineered Coated Fabric Pvt. Ltd. [PAR] | Plot No:76 B, Jtype GIDC Vapi | Chemical/Textile | Disconnected |
| 9 | Ganesh Engineering [PAR] | Plot No:C/1 .2309GIDC Vapi | chemical | Disconnected |
| 10 | Honey Card Board Industries [PAR] | Plot No :57-C Phase -I | Chemical | Disconnected |
| 11 | Host International (P) Ltd. [PAR] | Plot No.:C-1/38,100 Sjed area | Chemical | Disconnected |
| 12 | Ideal Baking Corporation [PAR] | Shed A2-214, A-1,2, Near Bank Of Baroda, Phase 3, GIDC, Vapi | Chemical | Disconnected |
| 13 | J. H. International [PAR] | 309 II Phase | chemical | Disconnected |
| 14 | Krishna Industries [PAR] | Plot No-C-1/2, Phase-1, Gidc Vapi, | Chemical | Disconnected |
| 15 | Kruti Chemicals [PAR] | Plot No.c1b-5004/2, 4th Phase,Gidc, Vapi | Chemical | Disconnected |
| 16 | Mahi Industries [PAR] | Plot No:1413near colour quip , PH -III, GIDC, VAPI | Chemical | Disconnected |
| 17 | Matulya Enterprise [PAR] | Plot No.363/C Phase-II | Chemical | Disconnected |
| 18 | Nema Switch Gear (Pioneer Adhesves- Old Name) [PAR] | Plot No:C1B-2425, III phase GIDC Vapi | chemical | Disconnected |

| | | | | |
|----|---|--|----------------|--------------|
| 19 | Nexus Consumer Care [PAR] | PLOT NO. C-1/2302, III PHASE, GIDC, NEAR BANK OF BARODA 3- PHASE, Vapi | Chemical | Disconnected |
| 20 | Orient Organics [PAR] | PLOT NO-5306/2, 4TH PHASE, GIDC, Vapi | Chemical | Disconnected |
| 21 | Padmanandi Enterprise [PAR] | Plot No:1402 Phase-III | Chemical | Disconnected |
| 22 | Patel Industries [PAR] | Plot No:2502/1/B, Shed No:1 | Chemical | Disconnected |
| 23 | Pretech Controls Llp [PAR] | Plot No. 136/L, 2nd Phase,, Road - S, GIDC,, Vapi | Chemical | Disconnected |
| 24 | Rvn Paper And Boards Pvt. Limited [PAR] | Plot No:54-a/1, FIRST PHASE, GIDC, VAPI | Chemical/PaPer | Disconnected |
| 25 | S. K. Enterprises [PAR] | Plot No:L-6200/6 Phase-IV | Chemical | Disconnected |
| 26 | S.D. Ferro Alloys [PAR] | Office 25,26,27,28 Chandralok complex | Chemical | Disconnected |
| 27 | Sark Industries Pvt. Ltd [PAR] | Plot No. 791/7, No. 40, Shed Area, G.I.D.C, vapi | Chemical | Disconnected |
| 28 | Shreeji Industries (Vangurd Engineering) [PAR] | Plot No: L-1206/14 Phase-III | Chemical | Disconnected |
| 29 | Starwin Perfect Manufacturing Co.Pvt.Ltd.(Old:Perfect Industries) [PAR] | Plot No:J-3 Phase -I | Chemical | Disconnected |
| 30 | Tejal Gases Chemicals [PAR] | 771/1, 40 Sheds Area, G I D C, G I D C, Vapi | Chemical | Disconnected |
| 31 | The Standard Chem Co Pvt Ltd [PAR] | Plot No-1302/2, 3rd Phase, Vapi | Chemical | Disconnected |
| 32 | Vapi Clay Mills [PAR] | Plot No 334, G I D C 2nd Phase, Silvassa Road, G I D C 2nd Phase, Vapi | Chemical | Disconnected |
| 33 | Yogleela Sulphur & Agchem Inds Pvt. Ltd. [PAR] | 791 40 shed | Chemical | Disconnected |

Annexure-5

| Drainage to be disconnected out of 28 Units | | | | | |
|---|--------|--|---|---------|---------------------|
| Sr. No. | M. NO. | Name of Unit | ADDRESS | Phase | Drainage connection |
| 1 | 168 | DEEP YOG INDUSTRIES | Plot No:J-2322, Phase-III, GIDC VAPI | III | available |
| 2 | 206 | J.K.CHEMICALS | Plot No:2906-3, Phase-I, GIDC VAPI | I | available |
| 3 | 313 | PORWAL CHEMICALS (Shree Agro Chemical) | Plot No:1401, Ph-III, GIDC Vapi | III | available |
| 4 | 396 | SHREE LAXMI CONTAINERS | Plot No:737, GIDC Vapi | 40 Shed | available |
| 5 | 511 | ARPANA RESINS & ALLIED (.DHARMAVATI) | Plot No:738, Phase-II, GIDC Vapi | II | available |
| 6 | 512 | SWADEV CHEMICALS | Plot No:C-1/2609, 3rd Phase,Vapi | III | available |
| 7 | 517 | CHEMIN IND. | Plot No:C1B-21, Phase-I, GIDC Vapi | I | available |
| 8 | 561 | RAJVI INDUSTRIES | Plot No:297-3, Phase- II, GIDC Vapi | II | available |
| 9 | 589 | TRIMURTI ENTERPRISES | Plot No:198-1, Phase- II, GIDC Vapi | II | available |
| 10 | 612 | GUJARATI DYES & CHEM (Shiv Chem) | Plot No:1408, Ph-III GIDC Vapi | III | available |
| 11 | 627 | OMTECH CHEMICALS INDUSTRIES P. LTD (Artek Home Care) | Plot No:30-A, GIDC Vapi | I | available |
| 12 | 684 | FABER INDUSTRIES LTD. | Plot No:J-2331, 3rd Phase, GIDC Vapi | III | available |
| 13 | 823 | KHUSHI CHEMICALS | Plot No:165/B/3, Second Phase, GIDC Vapi | II | available |
| 14 | 828 | SHREE SAI ENTREPRISE | Plot No:C-1B/38, GIDC Vapi | IV | available |
| 15 | 21 | ALLIED CHEMICAL INDUSTRIES | Plot No.: 320/17, THIRD PHASE,GIDC VAPI | III | available |
| 16 | 801 | KRUPA TRADING COMPANY (Mahika Packaging India) | Plot No:2916, "J"Type, First Phase, GIDC Vapi | J"Type | Avilable |

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STATUS OF 28 MEMBER UNITS

STATUS OF 28 MEMBER UNITS

| Sr. No. | Sl. No. | Name of Unit | ADDRESS | Phase | LCA Status | Operated By (Own/ Rent) | Plot Status | Exchange/Lease/Type |
|---------|---------|-------------------------------------|---|---------|---|--------------------------|---|---------------------|
| 1 | 3 | ARNT INTERMEDIATE PRIVATE LIMITED | Plot No. 2996, FOURTH PHASE, GIDC Vapi | IV | Not Available | Own | empty | not available |
| 2 | 21 | ALLIED CHEMICAL INDUSTRIES | Plot No. 320/37, THIRD PHASE, GIDC VAPI | III | Not Available | Rent | only shed not working | available |
| 3 | 149 | NEW GUJARAT IMPRA CHEM INDUSTRIES | Plot No. 808/B-1, Ph. III GIDC Vapi | III | PCB ID: 24278 (Chemotest) | Sold | not merge with Chemodist industries | n.s. available |
| 4 | 168 | DEEP YOG INDUSTRIES | Plot No. 2322, Phase-III, GIDC VAPI | III | Not Available | Rent | working setup adhesive coating line for plastic & paper | available |
| 5 | 205 | J.K. CHEMICALS | Plot No. 2956-3, Phase-I, GIDC VAPI | I | Not Available | Rent | working (Rent) | available |
| 6 | 304 | PERCYNIC CHEMICAL | Plot No. A-2/12, Phase-I, GIDC Vapi | I | Not Available. On the name of Shree Agro Chemical | Open Plot | open plot | not available |
| 7 | 312 | POORVAI CHEMICALS | Plot No. 1401, Ph-III, GIDC Vapi | III | Not Available | Own | working | available |
| 8 | 328 | SEAGAL CHEMICALS | Plot No. A1 2109, Third Phase, GIDC Vapi | III | Not Available | Sold to South Green | only shed not working | not available |
| 9 | 360 | S.P. JOSHI & P.R. JOSHI | Plot No. L/13/2203, Phase-III, GIDC Vapi | III | Not Available | Own | working | not available |
| 10 | 356 | SHREE LAXMI CONTAINERS | Plot No. 737, GIDC Vapi | 40 shed | Not Available | Own | working | available |
| 11 | 475 | VAPI ACID & CHEMICALS CO. | Plot No. 165-B/5, Phase-II, GIDC Vapi | I | Not Available | Rent | working | not available |
| 12 | 493 | KUSUM DYE CHEM | Plot No. 303-8D, Phase-II, GIDC Vapi | II | Not Available | Rent | working | not available |
| 13 | 511 | ARPARA RESINS & ALLIED (DHARMAVATI) | Plot No. 738, Phase-II, GIDC Vapi | II | Not Available | Rent | Working. On the name of Shree Raw material | available in 5/20 |
| 14 | 512 | SWADLY CHEMICALS | Plot No. C-1/2601, 3rd Phase Vapi | III | Not Available | Own | shaded | available |
| 15 | 517 | CHEMIN IND | Plot No. C-18-21, Phase-I, GIDC Vapi | I | Not Available | Sold to Micro Free | working | available |
| 16 | 561 | RAVI INDUSTRIES | Plot No. 297-3, Phase-I, GIDC Vapi | II | Not Available | Rent (Egg Unit) | working | available |
| 17 | 575 | METH ENTERPRISE | Plot No. 304, Phase-IV, GIDC Vapi | IV | Not Available | Own | working/leaving | not available |
| 18 | 580 | MAISHRA TEXTILE | Plot No. 3104, FORTH PHASE, GIDC Vapi | IV | LCA on the name of Jay Raw Textile PCB ID - 23683 | Own, With Change of Name | working | available |
| 19 | 588 | TRAK PHARMA | Plot No. 717, 40 shed Area, GIDC Vapi | 40 shed | Not Available | Owned | empty shed not working | available |
| 20 | 589 | THIMURTI ENTERPRISES | Plot No. 198-1, Phase-II, GIDC Vapi | II | Not Available | Rent | working/leaving | available |
| 21 | 612 | GUJARATI DYES & CHEM | Plot No. 1208, Ph. II, GIDC Vapi | II | LCA is available of the name of shv Chem. PCB ID 74285 | Rent | Working. Day merge with shv Chem | available |
| 22 | 627 | OMTECH CHEMICALS INDUSTRIES P. LTD | Plot No. 30-A, GIDC Vapi | I | LCA Available on the name of Artek Home Care PCB ID 23603 | Rent | Working on the LCA of Peretto (Pvt) Ltd | available |
| 23 | 684 | FABER INDUSTRIES LTD. | Plot No. 1-3331, 3rd Phase, GIDC Vapi | III | Not Available | Rent | Working, day merge with Peretto | available |
| 24 | 750 | MAUPAM INDUSTRIES | Plot No. 996, Phase-IV, GIDC Vapi | IV | LCA - Available, PCB ID 25885 | Rent | empty | available |
| 25 | 782 | PARSHODA INDUSTRIES | Plot No. 7, 8, 9/4, NH No. 6, GIDC Vapi | I | Not Available | Sold | open plot | not available |
| 26 | 851 | GRUPO TRADING COMPANY | Plot No. 2915, 1 st Type, First Phase, GIDC Vapi | Private | LCA - Available, PCB ID 64313 | Rent | Working, tank change of name Mahela Textiles | Available |
| 27 | 873 | KHUSHI CHEMICALS | Plot No. 1657A/5, Second phase, GIDC Vapi | II | Not Available | Rent | Working, on lease | available |
| 28 | 876 | SHREE SAI ENTERPRISE | Plot No. 1427, GIDC Vapi | II | Not Available | Rent | Working, on lease | available |

Annexure-6

LIST OF UNITS WHERE REDUCER ARE INSTALLED

| Sr. No. | M. NO. | Name of Unit | ADDRESS | Phase | Pumpin g Station | Reducer Status |
|---------|--------|---|---|---------|------------------|-----------------------|
| 1 | 149 | NEW GUJARAT IMPRA CHEM INDUSTRIES (Chemodist) | Plot No:808/B-1, Ph-III GIDC Vapi | III | PS6 | Close Unit |
| 2 | 352 | RUBBY MACONS LTD | Plot No:789/4, Ph-III,GIDC Vapi | III | PS6 | Close Unit |
| 3 | 3 | AARTI INTERMEDIATE PRIVATE LIMITED | Plot No:2006, FOURTH PHASE,GIDC Vapi | IV | PS3 | Close Unit |
| 4 | 229 | K. D. INDUSTRIES | Plot No:C1B-5106 & 5106/1, Ph-III GIDC Vapi | III | PS3 | Close Unit |
| 5 | 299 | PANHAS CHEMICALS P.LTD | Plot No:C-1-6124 & 6125, Ph-4 Vapi | IV | PS3 | Close Unit |
| 6 | 409 | SONYCOL (VAPI) PVT. LTD | Plot No:C1B-5106/2, GIDC Vapi | IV | PS3 | Close Unit |
| 7 | 675 | M. R. INDUSTRIES | Plot No:L-6101/1, Phase-IV, GIDC Vapi | IV | PS3 | Close Unit |
| 8 | 744 | SUPREME INDUSTRIES | Plot No:C1B-2013, Ph-4, GIDC Vapi | IV | PS3 | Close Unit |
| 9 | 804 | SUHAN ENTERPRISE | Plot No:C1B/5501/2, Phase-IV, GIDC Vapi | IV | PS3 | Close Unit |
| 10 | 64 | BHAGERIA DYE CHEM LTD. | Plot No: 6310, FOURTH PHASE, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 11 | 112 | DIBHA PAINTS | Plot No:J-6102/5, PHASE-IV, GIDC VAPI | IV | PS3 | Drainage Disconnected |
| 12 | 159 | GURUKANT DYE CHEMICAL P. LTD | Plot No:6021/B, Ph-IV GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 13 | 315 | PRAGNA ORGANICS | Plot No:2907, Phase-IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 14 | 400 | MICRO RESIN PVT. LTD. | Plot No.:A1/2002, Phase - III, GIDC Vapi | III | PS3 | Drainage Disconnected |
| 15 | 432 | SUPER SULPHATES | Plot No:702/9, 40 Shed Area, GIDC Vapi | 40 Shed | PS3 | Drainage Disconnected |
| 16 | 449 | S.M.INDUSTRIES | Plot No:J-5103 / 3 & 4, Ph-III GIDC Vapi | III | PS3 | Drainage Disconnected |
| 17 | 502 | AARKEY PAINTS P.LTD | Plot No:J-758/1, Phase-II, GIDC Vapi | II | PS3 | Drainage Disconnected |
| 18 | 535 | HIRA PAINTS | Plot No:2501-3/A, Phase-II, GIDC Vapi | II | PS3 | Drainage Disconnected |
| 19 | 555 | HI TECH INKS PVT. LTD. | Plot No:634, Phase- II, GIDC Vapi | 100 | PS3 | Drainage Disconnected |

| | | | | | | |
|----|-----|------------------------------------|---|----------|-----|-----------------------|
| 20 | 559 | S .R . CHEMICAL INDUSTRIES | Plot No:1001/2, Phase-IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 21 | 568 | SAFA CHEMICAL INDUSTRIES | Plot No:4608, Phase- IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 22 | 575 | SHETH ENTERPRISE | Plot No:904, Phase- IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 23 | 594 | UNIQUE PAINTS | Plot No:6134, 2nd Phase GIDC Vapi | II | PS3 | Drainage Disconnected |
| 24 | 614 | NIKHIL INDUSTRIES | Plot No:C1B-5104/2, Phase-III, GIDC Vapi | III | PS3 | Drainage Disconnected |
| 25 | 632 | WAGESH ENERGY EQUIPMENTS PVT. LTD. | Plot No:2902, Phase- IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 26 | 667 | CROPNOSYS INDIA PVT.LTD | Plot No:5303 Ph-IV GIDC VAPI | IV | PS3 | Drainage Disconnected |
| 27 | 713 | URECA INDUSRIES | Plot No:A-2/6107, Ph-4 GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 28 | 714 | RAHUL SULPHATE | Plot No:313/3, 100 Shed, GIDC Vapi | 100 Shed | PS3 | Drainage Disconnected |
| 29 | 729 | VITRAG CHEMICAL P . LTD | Plot No:535,100 Shed Area, GIDC Vapi | 100 Shed | PS3 | Drainage Disconnected |
| 30 | 815 | GAMASKO PHARMACHEM INDUSTRIES | Plot No:6129/11, Forth Phase, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 31 | 818 | HIRA CHEMICALS INDUSTRIES | Plot No:A1-5405, Phase-IV, GIDC Vapi | IV | PS3 | Drainage Disconnected |
| 32 | 854 | NETMATRIX LTD | Plot No:C1-77/524,78/525,65/551, 100 Shed Area, GIDC VAPI | 100 Shed | PS3 | Drainage Disconnected |
| 33 | 864 | ROLEX LANOLINE PRODUCTS LTD | Plot No:6309, FORTH PHASE, GIDC VAPI | IV | PS3 | Drainage Disconnected |
| 34 | 866 | SURYA INDUSTRIES | Plot No:6306, SUBLET-1, FORTH PHASE, GIDC VAPI | IV | PS3 | Drainage Disconnected |
| 35 | 19 | ALCHEMIE ORGANICS LTD | Plot No:902, THIRD PHASE, GIDC VAPI | III | PS6 | Drainage Disconnected |
| 36 | 33 | AMIT CHEMICAL INDUSTRIES | Plot No:1101/1-B,GIDC VAPI | III | PS6 | Drainage Disconnected |
| 37 | 40 | ANJALI PAINTS | Plot No:A-1/2205, THIRD PHASE ,GIDC Vapi | III | PS6 | Drainage Disconnected |
| 38 | 45 | APURVA CHEMICALS | Plot No:2806, THIRD PHASE,GIDC Vapi | III | PS6 | Drainage Disconnected |
| 39 | 96 | CRAFT CORNER PAPER MILL P. LTD | Plot No:1703/A, Ph-III,GIDC Vapi | III | PS6 | Drainage Disconnected |
| 40 | 108 | DEVEN CHEMICAL INDUSTRIES | Plot No:1401/2,Ph-3 GIDC Vapi | III | PS6 | Drainage Disconnected |

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| 41 | 168 | DEEP YOG INDUSTRIES | Plot No:J-2322, Phase-III, GIDC VAPI | III | PS6 | Drainage Disconnected |
| 42 | 230 | K.K.POONJA & SONS | Plot No:1422.Ph-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 43 | 313 | PORWAL CHEMICALS (Shree Agro Chemical) | Plot No:1401, Ph-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 44 | 348 | RISHIROOP POLYMERS PVT.LTD. | Plot No:1301, Ph-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 45 | 360 | SAMUDRI CHEMICALS | Plot No:L/13/2703, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 46 | 361 | SANDHYA ORGANIC CHEMICALS P. LTD | Plot No:808/A-2, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 47 | 394 | SHREE GURUDEV CHEMICALS | Plot No:1101-1/A, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 48 | 512 | SWADEV CHEMICALS | Plot No:C-1/2609, 3rd Phase,Vapi | III | PS6 | Drainage Disconnected |
| 49 | 537 | INTECH ORCHEM (P) LTD. | Plot No:1733, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 50 | 567 | S . K. CORPORATION | Plot No:1731, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 51 | 621 | CHEMO TRIX INDIA .PVT.LTD. | Plot No:C1B/2419, Ph-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 52 | 638 | DIVYESH CHEMICALS | Plot No:2911, Phase-II, GIDC Vapi | II | PS6 | Drainage Disconnected |
| 53 | 682 | UNIQUE ENTERPRISE | Plot No:1304/1, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 54 | 693 | SHYAM OXIDES P. LTD. | Plot No:1208/2, Phase-III, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 55 | 727 | KISSAN AGRO FERTILIZER | Plot No:A-2-2219, Ph-3,GIDC,Vapi | III | PS6 | Drainage Disconnected |
| 56 | 743 | VITAL LABORATORIES PRIVATE LTD. | Plot No: 1710, PH-3 GIDC Vapi | III | PS6 | Drainage Disconnected |
| 57 | 757 | WEST CHEM INDUSTRIES | Plot No:L-2705/9, Third Phase, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 58 | 785 | HINDUSTAN METAL INDUSTRIES | Plot No:C1-2707/4, Third Phase, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 59 | 830 | JAI AMBE THINCHEM | Plot No:C1B-2010, Fourth Phase, GIDC Vapi | IV | PS6 | Drainage Disconnected |
| 60 | 837 | MARUTI CHARMICALS | Shed No: J-2318, Third Phase, GIDC Vapi | III | PS6 | Drainage Disconnected |
| 61 | 840 | MAMTA INDUSTRIES | Plot No:C1B-2437 , PH - III, GIDC, VAPI | III | PS6 | Drainage Disconnected |
| 62 | 841 | JAYSHIV CHEMICALS PVT. LTD | Plot No: 2807/2 PH -III, GIDC, VAPI | III | PS6 | Drainage Disconnected |
| 63 | 863 | HITEN CHEMICAL | Plot No:C1B-2418, THIRD PHASE, GIDC | III | PS6 | Drainage Disconnected |

| | | | VAPI | | | |
|----|-----|--------------------------------------|--|-------------|-----|--------------------------|
| 64 | 865 | P S V POLYCHEM | Plot No:1706/2-A-2-B, THIRD PHASE, GIDC VAPI | III | PS6 | Drainage Disconnected |
| 65 | 885 | YASHO INDUSTRIES PVT. LTD. (U_II) | Plot No:1713, PHASE-III, GIDC VAPI | III | PS6 | Drainage Disconnected |
| 66 | 30 | SKYLINE POLYCATS PRIVATE LIMITED | Plot No:C1B-68, 100 Shed Area, GIDC VAPI | 100 Shed | PS3 | Installed |
| 67 | 56 | A.V.S.CHEMICAL INDUSTRIES | Plot No:C1-64,100 Shed Area, GIDC VAPI | 100 Shed | PS3 | Installed |
| 68 | 68 | BHAVNA INDUSTRIES | Plot No:C1B-5005/3, FOURTH PHASE, GIDC Vapi | IV | PS3 | Installed |
| 69 | 83 | CHEMPHA INDUSTRIES | Plot No:C1-2122/2, THIRD PHASE, GIDC Vapi | III | PS3 | Installed |
| 70 | 130 | ELITE VAM AUXICHEM PVT LTD | Plot No:6133, Phase-IV, GIDC VAPI | IV | PS3 | Installed |
| 71 | 133 | C.S.SPECIALITY CHEMICALS P. LTD | Plot No:6101/11, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 72 | 136 | MEGA FINE PHARMA PRIVATE LTD | Plot No:911, Phase-III, GIDC VAPI | III | PS3 | Installed |
| 73 | 139 | FINE O PHARMA | Shed A/2, 6106, Phase 4, GIDC, Vapi | IV | PS3 | Installed |
| 74 | 155 | GUJARAT POLYBONDS P. LTD | Plot No:6307/A,6307/B PH-IV, GIDC Vapi | IV | PS3 | Installed |
| 75 | 164 | HARIHAR ORGANICS P. LTD | Plot No:C1/1901/19, Ph-III GIDC Vapi | III | PS3 | Installed |
| 76 | 182 | HONEST CHEMICALS | Plot No:5106-11, Phase- III, GIDC VAPI | III | PS3 | Installed |
| 77 | 214 | KANSHU CHEMICALS INDUSTRIES | Plot No:C1/5501/10, PHASE-IV, GIDC VAPI | IV | PS3 | Installed |
| 78 | 215 | KAYKAY CYANO CHEMICALS PVT LTD | Plot No:6132, Forth Phase, GIDC Vapi | IV | PS3 | Installed |
| 79 | 236 | LEOPARD INVESTMENTS LTD. | Plot No:504, A1/40, 100 Shed Area, GIDC Vapi | 100 Shed | PS3 | Installed |
| 80 | 251 | MARVIN CHEMICAL INDUSTRIES. | Plot No:C1B-776, 40 Shed Area, GIDC VAPI | 40 Shed | PS3 | Installed |
| 81 | 253 | MED CONCEPTA LABORATORIES. | Plot No: C1B-6113, Ph- IV GIDC Vapi | IV | PS3 | Installed |
| 82 | 280 | NIRMALA DYE CHEM | Plot No:C1-6126, Phase- IV, GIDC VAPI | IV | PS3 | Installed |
| 83 | 290 | OLYMPIC CHEMICALS. | Plot No:C1B-2903, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 84 | 293 | ORBIT PHARMA CHEM | Plot No:C1B-5005/2, Phase-IV, GIDC Vapi | IV | PS3 | Installed |

| | | | | | | |
|-----|-----|-----------------------------------|---|----------|-----|-----------|
| 85 | 295 | PADMAVATI CHEMICALS | Plot No:5101, J-5106/3, Ph-IV, GIDC Vapi | IV | PS3 | Installed |
| 86 | 296 | PADMAVATI CHEMICALS P.LTD | Plot No:5001, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 87 | 323 | PRAVIN INDUSTRIES | Plot No:C1-6118, Ph-IV, GIDC Vapi | IV | PS3 | Installed |
| 88 | 335 | RAINBOW CHEMICAL | Plot No:6021/A, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 89 | 338 | RAMJI PACKAGING PVT LTD | Plot No:6308, Fourth Phase, GIDC Vapi | IV | PS3 | Installed |
| 90 | 383 | SHANTI INTERMEDIATES P. LTD | Plot No:1001/9, Ph-III, GIDC Vapi | III | PS3 | Installed |
| 91 | 386 | SHIV SHAKTI INDUSTRIES | Plot No:924, Phase-4, GID C Vapi | IV | PS3 | Installed |
| 92 | 391 | SHREE DAYAL DYES | Plot No:C1702/4, 40 Shed Area GIDC Vapi | 40 Shed | PS3 | Installed |
| 93 | 414 | STERLING PIGMENTS & COLOURS. | Plot No:C1B-2510, GIDC Vapi | IV | PS3 | Installed |
| 94 | 426 | SUN COLOUR & CHEMICALS | Plot No:C1B/2512, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 95 | 434 | SUPREET CHEMICAL P. LTD | Plot No:A-1/5402, Ph-IV, GIDC Vapi | IV | PS3 | Installed |
| 96 | 440 | SUVISAN INTERMEDIATES PVT LTD. | Plot No:C1B-6114, Forth Phase, GIDC Vapi | IV | PS3 | Installed |
| 97 | 446 | S. B. CHEMICAL | Plot No:5003, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 98 | 485 | VICTORY DYE CHEM INDUSTRIES | Plot No:C1B-71, 100 Shed Area, GIDC Vapi | 100 Shed | PS3 | Installed |
| 99 | 496 | YASHO INDUSTRIES PVT. LTD | Plot No:2515, Ph-IV GIDC Vapi | IV | PS3 | Installed |
| 100 | 501 | Y. S. INDUSTRIES | Plot No:C1/702/2, 40 Shed Area GIDC Vapi | 40 Shed | PS3 | Installed |
| 101 | 519 | D.R.CHEMICAL | Plot No:5106-8, Phase-IV, GIDC Vapi | IV | PS3 | Installed |
| 102 | 580 | KRISHNA TEXTILE (Jayravi Textile) | Plot No:3104, FORTH PHASE,, GIDC Vapi | IV | PS3 | Installed |
| 103 | 623 | YOGESHWAR CHEMICAL | Plot No:6129/11, Ph-III, GIDC Vapi | III | PS3 | Installed |
| 104 | 630 | PHARMAVAT INDUSTRIES unit-2 | Plot No:2501/2, 3rd Phase, GIDC Vapi | III | PS3 | Installed |
| 105 | 642 | APPLE ORGANICS | Plot No:610, 100 Shed Area GIDC Vapi | 100 Shed | PS3 | Installed |
| 106 | 645 | SHREE HARDIK PLATING TECHNOLOGY | Plot No:ShedNo:A/2-6015/A Phase -I, GIDC Vapi | I | PS3 | Installed |
| 107 | 658 | SHIVAM CHEMICAL INDUSTRIES | Plot No:C1B-2501/1, Ph-III GIDC Vapi | III | PS3 | Installed |

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| 108 | 663 | JAI JALARAM CORPORATION | Plot No:905, Phase-III, GIDC Vapi | III | PS3 | Installed |
| 109 | 715 | RISHABH INTERMEDIATES | Plot No:5304, Ph-4 GIDC Vapi | IV | PS3 | Installed |
| 110 | 732 | SWAPNIL ORGANICS PVT. LTD | Plot No:6306, 4th Phase GIDC Vapi | IV | PS3 | Installed |
| 111 | 741 | PATIL DYE STUFF INDUSTRIES | Plot No:C1B-67/605, 100 Shed, GIDC Vapi | 100 shed | PS3 | Installed |
| 112 | 750 | ANUPAM INDUSTRIES (Old- Sonachi Biotech) | Plot no.906, Phase IV, GIDC VAPI | IV | PS3 | Installed |
| 113 | 752 | NEO PACK PLAST (INDIA) P. LTD | Plot No:700-3/A, 40 Shed Area, GIDC Vapi | 40 Shed | PS3 | Installed |
| 114 | 754 | JEEMEE ENTERPRISES | Plot No:L-5310/1, Forth Phase, GIDC Vapi | IV | PS3 | Installed |
| 115 | 762 | PHINAM INDUSTRIES | Plot No:C1B-5501/8, ForthPhase, GIDC Vapi | IV | PS3 | Installed |
| 116 | 820 | PADMAVATI BROMIDES | Plot No:C1B/72/571, 100 Shed Area, Vapi | 100 shed | PS3 | Installed |
| 117 | 831 | HAATKESH CHEM & ENG.IND. | Plot No:C1/85, 100 Shed Area, GIDC Vapi | 100 shed area | PS3 | Installed |
| 118 | 847 | ARYAN PACKAGING INDUSTRIES | Plot No:A1-42, C1B/79, 80, 100 SHED AREA, GIDC Vapi | 100 Shed | PS3 | Installed |
| 119 | 849 | MEGHNA COLOUR CHEM | Plot No:C1B-6115, PH-IV, GIDC VAPI | IV | PS3 | Installed |
| 120 | 856 | MEET COLOURS & PIGMENTS | Plot No: C1/6135, FORTH PHASE, GIDC VAPI | IV | PS3 | Installed |
| 121 | 873 | JAYSHAKTI TUBES | Plot No:C1-6102, FOURTH PHASE, GIDC VAPI | IV | PS3 | Installed |
| 122 | 878 | MICAS ORGANICS LTD (U-II) | Plot No: 3102/1& 8, PH-IV, GIDC VAPI | IV | PS3 | Installed |
| 123 | 893 | PHARMAVAT INDUSTRIES UNIT 2 | Plot No:2501/2/1, 3rd Phase, GIDC Vapi | III | PS3 | Installed |
| 124 | 346 | RESIN & ALLIED CHEMICAL IND | PLOT C1/46, 100 SHED, GIDC VAPI | 40 SHED | PS4 | Installed |
| 125 | 15 | AIM CHEMICALS | Plot No:1401-3, THIRD PHASE, GIDC VAPI | III | PS6 | Installed |
| 126 | 92 | COLOURQUIP | Plot No:1410/11, Ph-III GIDC Vapi | III | PS6 | Installed |
| 127 | 321 | PRASANT INDUSTRIES | Shed No- C1-1304/7, Phase-III, GIDC Vapi | III | PS6 | Installed |
| 128 | 366 | SARNA CHEMICALS P.LTD | Plot No: 805/3,Ph-III,GIDC Vapi | III | PS6 | Installed |

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| 129 | 371 | SARNA CHEMICAL VAPI P.LTD (U-II) | Plot No:1708.Ph-III,GIDC Vapi | III | PS6 | Installed |
| 130 | 378 | SHAH PAPER MILL | Plot No:5202, 1004/2B & 792/2Ph-III, GIDC Vapi | III | PS6 | Installed |
| 131 | 435 | SUPREME DYES & CHEMICAL IND. | Plot No:C/1B 1107/3, Ph-III GIDC Vapi | III | PS6 | Installed |
| 132 | 540 | KROMA INDUSTRIES | Plot No:1404, Ph-III GIDC Vapi | III | PS6 | Installed |
| 133 | 636 | VITAL HELTH CARE P. LTD. | Plot No:1507/2, 1601, 1417, 1418, 1419-20, 1601/3& 4Ph-III GIDC Vapi | III | PS6 | Installed |
| 134 | 781 | SAMRAT REMEDIES LIMITED | Plot No:1501, Third Phase, GIDC Vapi | III | PS6 | Installed |
| 135 | 881 | HERANBA INDUSTRIES LTD. (U_II) | Plot No: A2-2215, PHASE-III, GIDC VAPI | III | PS6 | Installed |
| 136 | 882 | HERANBA INDUSTRIES LTD. (U_III) | Plot No: 1503/1, PHASE-III, GIDC VAPI | III | PS6 | Installed |

Annexure-7

| Drainage to be disconnected of following Electroplating Units | | | | |
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| Sno | Name Of Unit | Address | Member/ Nonmember | Drainage status |
| 1 | Allied Spares & Auto Mfg Co. Pvt. Ltd. | PLOT NO. 1790, PHASE-III, Town:G.J.D.C.VAPI | Non member | Disconnected |
| 2 | Asha Enterprises | PLOTNO.5306/1, PHASE-IV, GIDC, Town:VAPI | Non member | Drainage to be Sealed |
| 3 | Brizal Fab | C-11701546, 100 SHED AREA, Vapi, Town:VAPI | Non member | Drainage to be Sealed |
| 4 | Decor Resources | C/I-B/39,Phase-1, GIDC,VAPI, Town:VAPI | Non member | Drainage to be Sealed |
| 5 | Essaar Electroshine | L-1206/J I, Phase: T1J GIDC, Vapi, Town:Vapi | Non member | Drainage to be Sealed |
| 6 | Hoec BardahlIndia Limited | Plot No- A 1-2007, Phase-III GIOE Estate, Town:Vapi | Non member | Drainage to be Sealed |
| 7 | Host International (P) Ltd | P.NO. C-1/38, 100 Shed area GIDC Estate, Town:VAPI | Non member | Drainage to be Sealed |
| 8 | Jak-Pa Ventures LLP | 165-B-3, PHASE-II GIDC ESTATE,Town:VAPI | Non member | Drainage to be Sealed |
| 9 | Jas Innovative | L-715/8, 40 Shed Area, GIOE Estate, Vapi -- | Non member | Drainage to be Sealed |
| 10 | Jay Engineering | 40 shed area Behind Lalji Mulji Transport,Town:Vapi | Non member | Drainage to be Sealed |
| 11 | Kenson Metal Tubes | 120511-C, PHASE-IIJ GIDC ESTATE,Town: Va pi | Non member | Drainage to be Sealed |
| 12 | Klipco Pvt. Ltd | 53, PHASE I GIDC, VAPI | Non member | Drainage to be Sealed |
| 13 | Krishna Enterprise | Plot No. C-1/72-544, 100 Shed Area, G IDC, V | Non member | Drainage to be Sealed |
| 14 | Krishna Industries | Shed no- C-1/2, Gala No 4 & 5 GIDC,Town:Vapi | Non member | Drainage to be Sealed |
| 15 | Mahavir Structure | Plot No. A-2/27, 100 shed area. GIDC Vapi | Non member | Drainage to be Sealed |

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| 16 | Maheshwari Traders | ADJACENT PLOT OF SHED NO. A-2f14, GIDC' vapi | Non member | Drainage to be Sealed |
| 17 | Maruti Industries | PLOT NO.403, LIC SECTOR G.J.D.C.,Town:VAPI | Non member | Drainage to be Sealed |
| 18 | Mechanical packing Industries | Shed No.NI-2206, IIIrd Phase, GIDC- VAPI -, Pvt. Ltd. | Non member | Drainage to be Sealed |
| 19 | Mica Industried Ltd. | 508,509,510,100 SHED AREA ,Town: Vapi | | Drainage to be Sealed |
| 20 | Nay Polymers(Previous Existence:Unique Polymers) | CI B/2906,PHASE-IV,GIDC,VAPI -,Town:VAPTI | Non member | Drainage to be Sealed |
| 21 | Paper Pack Products | Plot no.- C-I-B/5, 3rd Phase, GIOC- Vapi Town:Vapi | Non member | Drainage to be Sealed |
| 22 | Pretech Controls Lip | Plot No. 136/L, 2nd Phase, G.I.D.C., Town:Vapi | Non member | Drainage to be Sealed |
| 23 | S.N.Engineering | PLOT NOJ-759/5, 40 SHED AREA, GIDC, V API, Town:VAPI | Non member | Drainage to be Sealed |
| 24 | Sarvodaya Metal Industries | 785/3,40 SHED AREA GIDC ESTATE, Town:VAPI | Non member | Drainage to be Sealed |
| 25 | Savitri Engineering Fabricator | Plot No.320/9, 40 shed Area, GrDC Vapi | Non member | Drainage to be Sealed |
| 26 | Shree Giriraj Enterprise | Shed No. B-6/B, Plot No. 700/1 +2/B, 40 Shed Area, | Non member | Drainage to be Sealed |
| 27 | Shree Hansraj Plastics[FonnalY known as : Saptagiri Plating Works] | L-TYPE- 2-6022 PHASE, IV, Town:VAPI | Non member | Drainage to be Sealed |
| 28 | Shreeji Industries | Shed No. CI-6103/A, oroc - Town.Vapi | Non member | Drainage to be Sealed |
| 29 | Shreeji Industries (Vangurd Engineering) | Plot NO:L-1206/14 PH-III | Non member | Drainage to be Sealed |
| 30 | Shreepad Packers | Plot No :5310/05, PHASE-IV GrDC ESTATE, Town:Vapi | Non member | Drainage to be Sealed |
| 31 | Super Industries | PLOT NO.1414 3RD PHASE, GIDC, VAPI | Non member | Drainage to be Sealed |
| 32 | Tulsi Industries | Plot No. B-1 14/2, Shed No.1, 2nd Phase, GIDC - Vapi | Non member | Drainage to be Sealed |

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| 33 | Universal Metal | Plot No- 439, Phase-II GIDC Vapi, Town:Vapi | Non member | Drainage to be Sealed |
| 34 | Vakpati Enterprise | Shed No. CIB - 8, 1st Phase. GJDC. Opp. COE | Non member | Disconnected |
| 35 | Vakpati Enterprise | SHED NO. C-I-B/13, 1 ST PHASE, G.LD.C., | Non member | Drainage to be Sealed |
| 36 | Viral Industries | C-1-2339 III Phase area, GIDC, Town:VAPI(J-14 J type) | Non member | Drainage to be Sealed |

| Status of Electroplating Units | | | | | | |
|--------------------------------|--|--|----------------------|-----------------------|--|--|
| Sno | Name Of Unit | Address | Member/ Nonmember | Drainage status | ETP atatus | Remark |
| 1 | A-One Roto Gravure | L-71515, 40 SilEO AREA GIDC, VAPI, Town:VAPI | Member | Drainage available | ETP Available | 1.Drainage Available 2. ETP Available 3. |
| 2 | Asha Enterprise | SHED NO.9, J TYPE AREA, PHASE-I, Town:GIDC | Member | Drainage available | ETP Primary Treatment | 1.ETP Primary Treatment 2.Drainage available |
| 3 | Bijal Industries | C-551565, 100 SHED AREA GIDC, Vapi | Member | Drainage available | ETP Primary Treatment | 1.ETP Primary Treatment 2.Drainage available |
| 4 | Chitra Chemicals Industries | J-2323, PHASE-3 GJDC, V API, Town:V API | member | Drainage available | ETP Primary Treatment | 1. ETP Primary treatment 2. Drainage available 3. Hard Chrome Plating |
| 5 | Gala Industries | Plot No: C1B 1901/3 Ph- IV GIDC Vapi | Member | Drainage available | ETP Primary Treatment | 1. ETP Primary treatment 2. CETP Member 3. Powder Coating |
| 6 | Galvadeco Parts PvtLimited(Old Name:ShreeHardik Plating)- | Plot No: 1702/A III Phase GIDC ESTATE,Town:vapi | Member | Drainage available | ETP Primary and Tertiary treatment | 1.ETP Primary and tertiary treatment 2. Drainage available |
| 7 | Hard Coats | Plot No : 1107/17 C-1/B PH-III GIDC Vapi | Member | Drainage available | Primary treatment available | Drainage available 2. electroplating 3. ETP Primary tratment only septic tank available |
| 8 | Harshita Metal Finishers | P No C 1/1304/9, Phsae III, GIDC, Vapi | Member | Drainage available | Primary treatment available | 1.Drainage available 2. electroplating 3. ETP Primary tratment only septic tank available |

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| 9 | Indian Anodise | C-1/2616, PHASE-III GJ.D.C. VAPI,Town:VAPI | Member | Drainage available | Primary treatment available | Drainage available 2. electroplating 3. ETP Primary treatment only septic tank available |
| 10 | Jay Jalaram Corporation | PLOT NO.905, PHASE-JJT GIDC ESTATE,Town:Vapi | Member | Drainage available | Primary treatment available | 1. Drainage available 2. electroplating 3. ETP Primary treatment only septic tank available |
| 11 | Modison Metal Ltd- | Plot No: 85/E, 85D Road E, Ph-I GIDC Vapi | Member | Drainage disconnecte d | ETP Primary treatment | 1.ETP Primary treatment 2. Drainage Disconnected 3. Plating work |
| 12 | Modison Metals Limited- | Plot No:85/A, Road E, Ph- I GIDC Vapi | Member | Drainage disconnecte d | ETP Primary treatment | 1.ETP Primary treatment 2. Drainage available |
| 13 | N .L.Enterprise | P.NO.547,SHED NO. C- 1/69,100SHED AREA, GIDC | Member | Drainage disconnecte d | ETP Primart treatment | 1. No Drainage 2. ETP Primary treatment only 3.Electroplating |
| 14 | Nakoda Metals Industries | PLOT NO.276 PHASE- TI,Town:GJDC VAPI | Member | Drainage available | ETP Primart and tertiary treatment | 1.Drainage available 2. ETP Primary and tertiarytreatment only 3 brass wire |
| 15 | Nehal Engineering Works | PLOT NO.2403, PHASE-III GIDC V API,Town:V API | Member | Drainage available | Primary treatment | 1.ETP Primary treatment available 2 Drainage acvailable 3.Product hard Chrome Plating available |
| 16 | Sabitri Electro Shine | 779/2,40 SHED AREA GJDCESTATE, Town:vapi | Member | Drainage available | Primary treatment | 1.Drainage Available 2. ETP Available |
| 17 | Sachin Metal Coats | Plot no- J-15, J- Type area, Phase-I -, Town:Vapi | Member | Drainage disconnecte d | NO ETP | 1. NO ETP 2. Drainage disconnected 3.Product Epoxy Coating |

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| 18 | Sai Electrical | 303110/A, GIDC VAP], Town: VAPI | Member | Drainage available | Primary treatment | 1.ETP Primary treatment available 2 Drainage acvailable 3 ZINC Plating work |
| 19 | Samit Writing Aids P. Ltd | C-1B-7, PHASE-I GIDC ESTATE, Town: Vapi | Member | Drainage available | Primary treatment | 1.ETP Primary treatment available 2 Drainage available 3Component of Fountaun pen |
| 20 | Shree Hardik Plating tachnology | SHED NO, A2-6015/A Phase -IV GIDC Vapi | Member | Drainage available | ETP Available | 1.Drainage Available 2. ETP Available |
| 21 | Shreeji enterprise | PLOT NO. 196/5, 2ND PHASE, GIDC - V API | Member | Drainage available | ETP Primary Treatment Available | 1.Drainage Available 2. ETP Primary Treatment Available 3.ETP Effluent Evoprated in evoprator 4. Powder Coating |
| 22 | Star Shine Enterprise | PLOTNO.C-I-B,59. 100 SHED AREA GIDC | Member | Drainage available | ETP Primarytreatm ent | 1.ETP Primarytreatment. 2.Drainage available. 3electroplating unit |
| 23 | Sti Industries | A-2/22 I 6, PHASE-III GIDC ESTATE, Town:VAPI | Member | Drainage available | ETP Primary and Tertiary treatment | 1.ETP Primary and tertiary treatment 2. Drainage available 3. Copper Plating |
| 24 | Allied Spares & Auto Mfg Co. Pvt. Ltd. | PLOT NO. 1790, PHASE-III, Town:G.J.D.C.VAPI | Non member | Drainage to be Sealed | NO ETP | 1. Engineering Unit 2. Drainage found sealed 3. Product Auto parts 4. No ETP |
| 25 | Anjani Enterprise | 57/J 1, Phase I, Near State Bank ofIndia GIDC, Vapi,Town:Vapi | Non member | No Drainage connection | ETP Primary Treatment | 1.ETP Primary treatment available 2.Effluent evaporator in heater 3. no Drainage connection |
| 26 | Asha Enterprises | PLOTNO.5306/1, PHASE- IV, GIDC, Town:VAPI | Non member | Drainage to seald | ETP Primary Treatment | 1.ETP Primary Treatment 2.Drainage available 3. Powder coating |

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| 27 | Brizal Fab | C-11701546, 100 SHED AREA, Vapi, Town:VAPI | Non member | Drainage to seald | ETP Primary Treatment | 1.ETP Primary Treatment with heater evoprator system 2.Drainage available 3. Copper plating |
| 28 | Decor Resources | C/I-B/39,Phase-1, GIDC,VAPI, Town:VAPI | Non member | Drainage to seald | | Closed |
| 29 | Essaar Electroshine | L-1206/J I, Phase: T1J GIDC, Vapi, Town:Vapi | Non member | Drainage to seald | | Closed unit , No representative available |
| 30 | Hoec BardahlIndia Limited | Plot No- A 1-2007, Phase-III GIOE Estate, Town:Vapi | Non member | Drainage to seald | NO ETP | 1. No ETP no waste water genration 2.drainage available 3. corogated boxex |
| 31 | Host International (P) Ltd | P.NO. C-1/38, 100 Shed area GIDC Estate, Town:VAPI | Non member | Drainage to seald | Primary treatment available | 1.Drainage available 2. tin plating 3. ETP Primary tratment only |
| 32 | Jak-Pa Ventures LLP | 165-B-3, PHASE-II GIDC ESTATE,Town:VAPI | Non member | Drainage to seald | NO ETP | 1NO ETP 2.Drainage available |
| 33 | Jas Innovative | L-715/8, 40 Shed Area, GIOE Estate, Vapi -- | Non member | No Drainage connection | No ETP | 1.No Drainage Connection 2. No ETP 3. Soak pit Available 4. Company Name Chenge VBN Industry |
| 34 | Jay Engineering | 40 shed area Behind Lalji Mulji Transport,Town:Vapi | Non member | Drainage to seald | | 1. Drainage available 2. Unit used heater evoparetor system. |
| 35 | Kenson Metal Tubes | 12051I-C, PHASE-IJ GIDC ESTATE,Town: Va pi | Non member | Drainage to seald | NO ETP | 1NO ETP 2. Plot given on rent to manglam Drugs. 3.Drainage available 4.No Waste water genration 5. Raw material storage |

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| 36 | Klipco Pvt. Ltd | 53, PHASE I GIDC, VAPI | Non member | Drainage to seald | ETP Primary Treatment | 1. Drainage Not available 2. evoprated available |
| 37 | Krishna Enterprise | Plot No. C-I /72-544, 100 Shed Area, G IDC, V | Non member | Drainage to seald | Primary treatment | 1.ETP Primary treatment available 2.Effluent evaporator in heater 3. septic tank available 4. no Drainage connection |
| 38 | Krishna Industries | Shed no- C-1/2, Gala No 4 & 5 GIDC,Town:Vapi | Non member | Drainage sealed | ETP Primary Treatment | 1. Drainage available 2. aluminium coting 3. ETP Primary tratment only. |
| 39 | Laxmi Shine | Plot No. 3-C/2, 1st Phase, Behind State Bank of India VIA Char Rasta, GIDC -Vapi,Town:Vapi | Non member | No Drainage connection | ETP Primary Treatment | 1.ETP Primary treatment available 2.Effluent evaporator in heater 3. no Drainage connection |
| 40 | Mahasati Enterprise | 795/1,40 Shed Area. - .Town:Vapi | Non member | No Drainage connection | ETP Available | 1.No Drainage Connection 2. ETP Available 3. Exoprator System available |
| 41 | Mahavir Structure | Plot No. A-2/27, 100 shed area. GIDC Vapi | Non member | Drainage to seald | NO ETP | 1.Drainage available 2. NO ETP 3. Trading and lath machine activity |
| 42 | Maheshwari Traders | ADJACENT PLOT OF SHED NO. A-2f14, GIDC' vapi | Non member | Drainage to seald | NO ETP | 1.Drainage available 2. NO ETP 3. Coal Storage |
| 43 | Maruti Industries | PLOT NO.403, LIC SECTOR G.J.D.C.,Town:VAPI | Non member | Drainage to seald | ETP Primart treatment | 1.Drainage available 2. ETP Primary tratment only 3.Electroplating |
| 44 | Mechanical packing Industries | Shed No.NI-2206, IIIrd Phase, GIDC- VAPI -, Pvt. Ltd. | Non member | Drainage to seald | NO ETP | 1.Drainage available 2. NO ETP 3. No Activity |

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| 45 | Mica Industried Ltd. | 508,509,510,100 SHED AREA ,Town: Vapi | | Drainage to seald | | Closed unit . Last 3 year |
| 46 | Nay Polymers(Previous Existence:Unique Polymers) | CI B/2906,PHASE-IV,GIDC,VAPI - ,Town:VAPTI | Non member | Drainage to seald | NO ETP | 1.Drainage available 2. ETP Primary tratment only 3.septic tank available |
| 47 | Paper Pack Products | Plot no.- C-I-B/5, 3rd Phase, GIOC- Vapi Town:Vapi | Non member | Drainage to seald | NO ETP | This Plot given on rent to shreeji paper Conbertor. Drainage available only for domestic use . No ETP |
| 48 | Pretech Controls Lip | Plot No. 136/L, 2nd Phase, G.I.D.C., Town:Vapi | Non member | Drainage to seald | NO ETP | 1.Drainage available 2. Heater evaporator system |
| 49 | Rudra Metals | Plot No. 303/9, 2nd phase, Near Old C- Type, GIDC Vapi, Di: Valsad | Non member | No Drainage | NO ETP | 1. NO Drainage connection 2.Eninnering unit 3.NO ETP 4. Non member to CETP |
| 50 | S. K. Enterprises | P NO: L 6200/6, Phase-IV GIDC, Town: GIDC- V API | Non member | No Drainage | | 1. NO Drainage available. 2. Enginnering Unit. 3. No waste water genration. |
| 51 | S.N.Engineering | PLOT NOJ-759/5, 40 SHED AREA, GIDC, V API, Town:VAPI | Non member | Drainage to seald | Primary treatment | 1. ETP Primary treatment 2.Drainage available 3. Heater evaporator system |
| 52 | Sarvodaya Metal Industries | 785/3,40 SHED AREA GIDC ESTATE, Town:VAPI | Non member | Drainage to seald | Primary treatment | 1.ETP Primary treatment available 2 Drainage available |

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|----|--|--|------------|-------------------|--|---|
| 53 | Savitri Engineering Fabricator | Plot No.320/9, 40 shed Area, GrDC Vapi | Non member | Drainage to seald | NO ETP | 1. Engineering unit 2. NO ETP 3. No Effluent genration 4. Drainage available |
| 54 | Shraddha Enterprise (Old Name: Bajaji Enterprise) | Plot No- C-1304/15, Phase-III GIDC,Town:Vapi | Non member | No Drainage | No ETP | 1.No Drainage Connection 2. No ETP 3. Used for Godown by setco chemical (on rent basis) |
| 55 | Shree Giriraj Enterprise | Shed No. B-6/B, Plot No. 700/1 +2/B, 40 Shed Area, | Non member | Drainage to seald | ETP Primary Treatment | 1.ETP Primary treatment available 2 Drainage available 3. Heater evaporation system available |
| 56 | Shree Hansraj Plastics[FonnaLy known as : Saptagiri Plating Works] | L-TYPE- 2-6022 PHASE, IV, Town:VAPI | Non member | Drainage to seald | | 1. Plot is given on rent to shree hardik plating for godown 2.Drainage available 3.no waste water genration |
| 57 | Shreeji Industries | Shed No. CI-6103/A, oroc -Town.Vapi | Non member | Drainage to seald | Primary and tertiary treatment available | 1.ETP Primary and tertiary treatment available 2. Drainage Available 3. zinc plating work |
| 58 | Shreeji Industries (Vangurd Engineering) | Plot NO:L-1206/14 PH-III | Non member | Drainage to seald | NO ETP | 1. Plot is given on rent to NDR enterprises. 2. activity Auto Parts(Job Work) 3. Engineering unit 4. NO ETP 5. No GPCB CCA 6. Drainage available |
| 59 | Shreepad Packers | Plot No :5310/05, PHASE-IV GrDC ESTATE, Town:Vapi | Non member | Drainage to seald | ETP Primarytreatm ent | 1.ETP Primarytreatment. 2.Drainage available. 3.Plating of Wires. 4. Soak Pit available. |

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|----|--------------------|---|------------|--------------------|---------------------------------|---|
| 60 | Super Industries | PLOT NO.1414 3RD PHASE, GIDC, VAPI | Non member | Drainage to seald | ETP Not In Use | 1.ETP not in Use 2. Drainage available 3. Powder coating 4. No water us in process. |
| 61 | Tulsi Industries | Plot No. B-1 14/2, Shed No.1, 2nd Phase, GIDC - Vapi | Non member | Drainage available | ETP Primary Treatment Available | 1.Drainage Available 2. ETP Primary Treatment Available 3.ETP Effluent Evoprated in evoprator 4. Powder Coating |
| 62 | Universal Metal | Plot No- 439, Phase-II GIDC Vapi, Town:Vapi | Non member | Drainage available | ETP Primary Treatment Available | 1.Drainage Available 2. ETP Primary Treatment Available 3.ETP Effluent Evoprated in evoprator 4. Powder Coating 5. Septic tank available |
| 63 | Vakpati Enterprise | Shed No. CIB - 8, 1st Phase. GJDC. Opp. Centre of Excellence office - Town.Vapi | Non member | Drainage to seald | ETP Primary Treatment Available | 1.Drainage Available 2. ETP Primary Treatment Available 3.ETP Effluent Evoprated in evoprator 4. Powder Coating |
| 64 | Vakpati Enterprise | SHED NO. C-I-B/13, I ST PHASE, G.LD.C., | Non member | Drainage to seald | NO ETP | 1. Drainage available 2. Plot given on rent to Dinesh transport 3. transport activity |
| 65 | Viral Industries | C-1-2339 III Phase area, GIDC, Town:VAPI(J-14 J type) | Non member | Drainage to seald | ETP Primary treatment | 1.ETP Primary and tertiary treatment 2. Drainage available |

ACTIVITY CUM BAR CHART

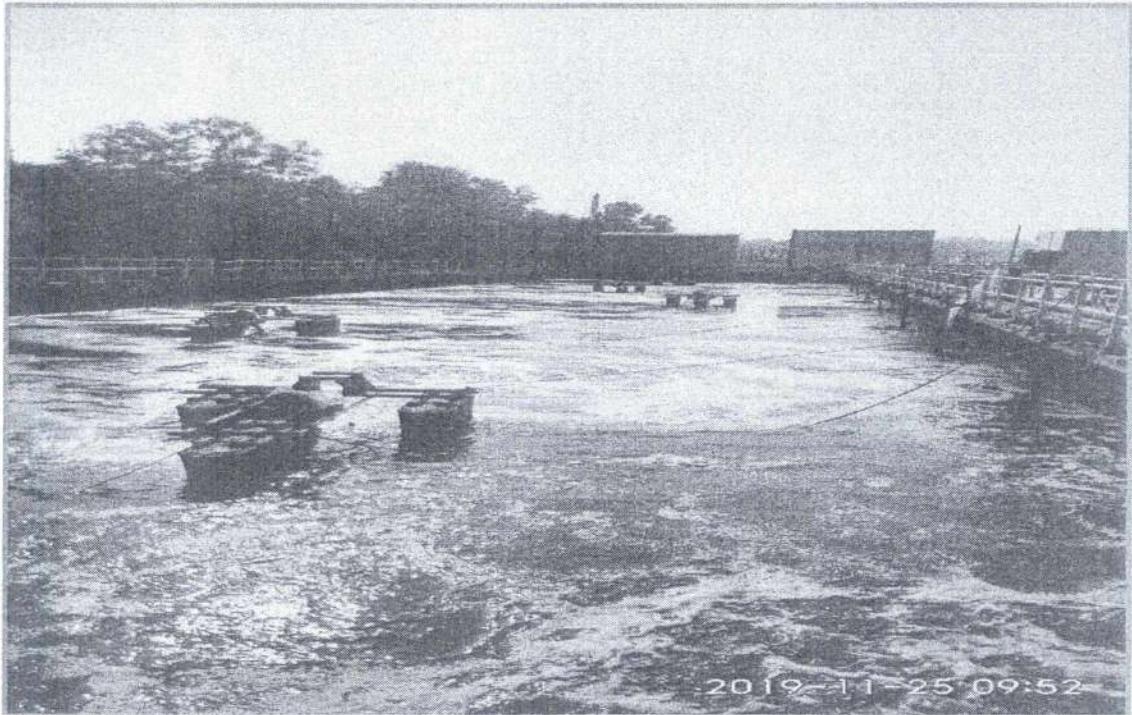
Solar Sun drying System

| Month | | 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 |
|-------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| S.No | Activity | | | | | | | | | | | | | |
| 1 | Trail & Evaluation. | █ | | | | | | | | | | | | |
| 2 | Aproval & Tendering & Work allotment | | | █ | | | | | | | | | | |
| 3 | Design of Hot floor area and solar system | | | | | █ | | | | | | | | |
| 4 | Civil work for floor and Foundations | | | | | | | | | █ | | | | |
| 5 | Fabrication & Erection of Green house, Hot floor with hot water line. | | | | | | | | | | █ | | | |
| 6 | Erection of Equipment , with conveyer & Sludge handling Unit, | | | | | | | | | | | █ | | |
| 7 | Comissioning | | | | | | | | | | | | | █ |

148

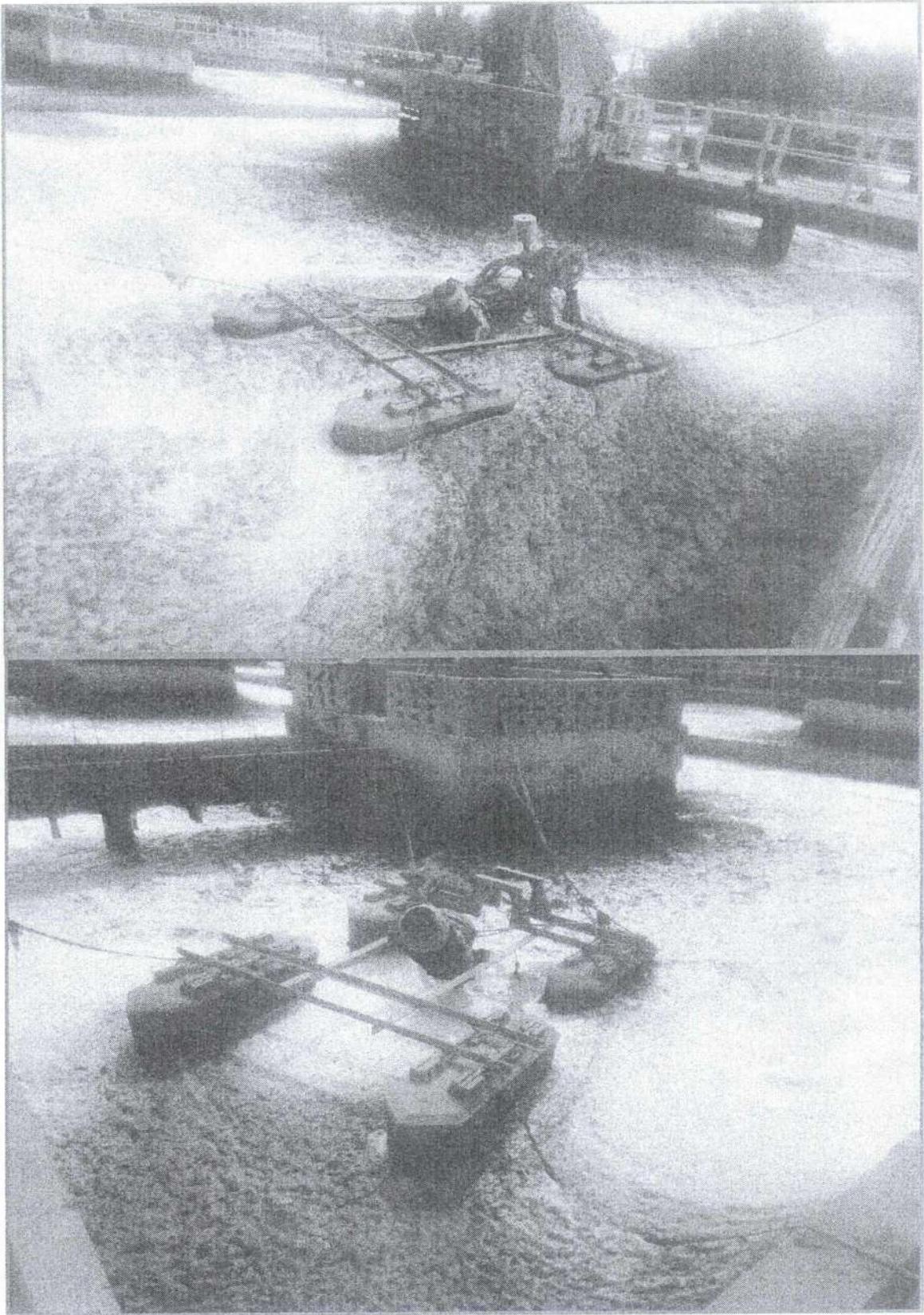
Annexure. 8.

15 HP Jet Mixers installed in Equalization Tanks:

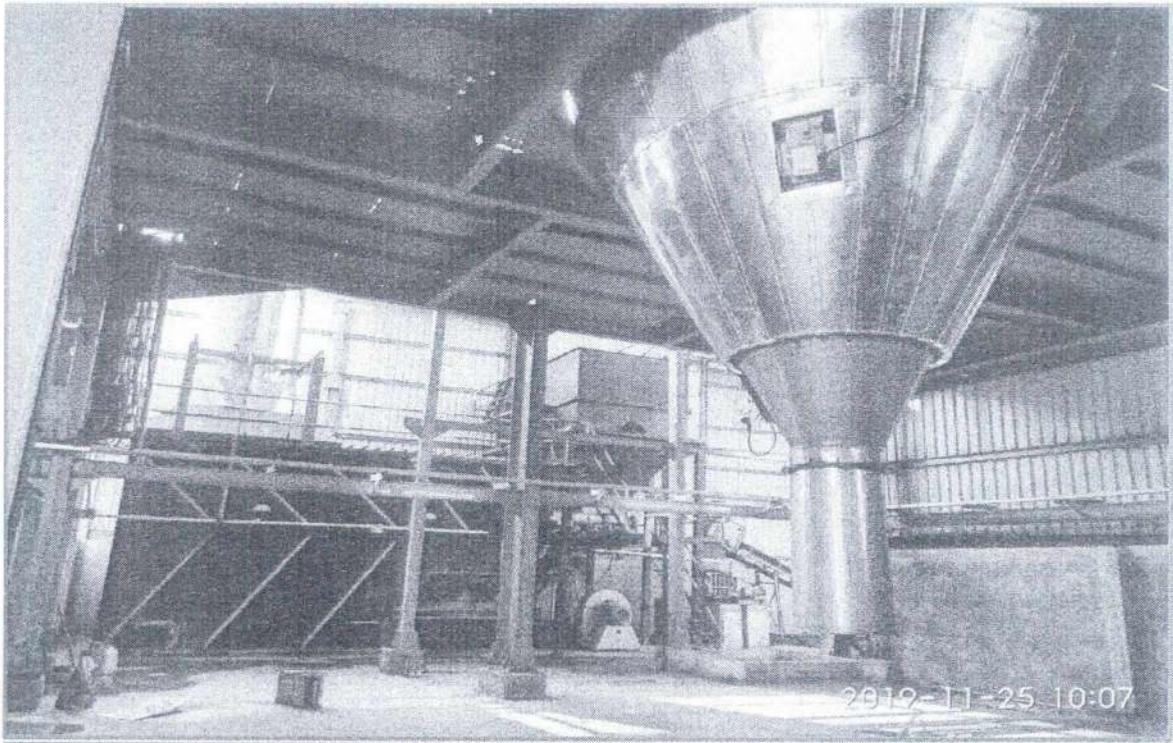


149

30 HP Jet Aerators installed in Aeration Tank:

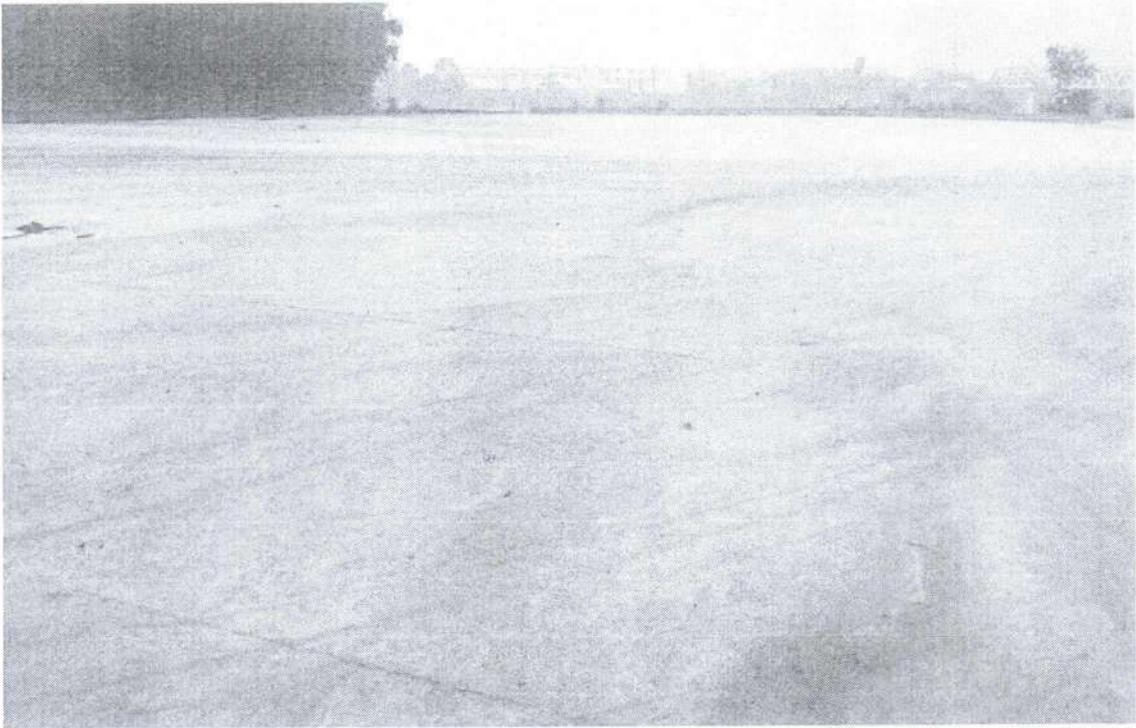


Installation of 8000 Kg/hr Common Spray Dryer:



5

Platform for Solar Sun Drying System:



152

ACTION TAKEN REPORT BASED ON MOM 19.10.2019.

REFERENCE: - Minutes of Meeting held on 25.11.2019 with reference of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.) at VGEL, Vapi.

| SR NO | ACTION TO BE TAKEN | ACTION TAKEN |
|-------|---|---|
| 1 | <ul style="list-style-type: none"> • GIDC was asked to provide above-surface/over-ground discharge line from the individual industries to the intermediate collection chambers and sumps. The intermediate chamber should be designed to cater for the collection of discharge from 4 to 5 member industries. The underground existing pipeline shall also be replaced with new over ground pipeline to carry effluent from industries/intermediate collection sumps to CETP, wherever technically feasible. • GIDC & VGEL was asked to take photographic/ video recording of the existing discharge lines in the industrial units and also after the modification of the discharge line. | <ol style="list-style-type: none"> 1) A consultant is to be hired to survey physical and hydraulic survey of the entire U/G drainage system of GIDC, Vapi. Based on the report submitted by the consultant, the portions of the U/G drainage system will be changed. 2) As discussed in meeting on 19.10.2019, notices were issued to five units (Annexure-1). The drainage chambers will be provided at 1.2 meters above ground as per drawing attached. After approval and checking by GPCB, chambers will be constructed for remaining members of VGEL units. 3) Photographic/ video recording of the existing discharge lines and after construction of chambers at 1.2 meters as per point no 2 will be carried out GIDC. |
| 2 | <ul style="list-style-type: none"> • GIDC was asked to explore the illegal connection in the Vapi GIDC area and to disconnect/remove the same, remove all the underground discharge line of industries who are not member of CETP or who are not generating any effluent or who are adopting ZLD system with the help of VGEL & VIA. GIDC was asked to provide One-Single water supply connection and One-single | <ol style="list-style-type: none"> 1) Total 266 ZLD units were disconnected by GIDC in the past. Further disconnection will be carried out if any list is provided by GPCB/VGEL to GIDC. For Domestic connection, notices are been issued by GIDC(Annexure-2). 2) The total length of road at Vapi industrial estate is 85 Kms. 25 Kms of road is in housing area. Therefore, beside 60 Kms of road at industrial area, 17 Kms of SWD is upgraded as |

| | |
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| <p>drainage line connection for one Consent/ CCA issued to an industry by GPCB. The premises of other units and/or sister concern units should not be used for illegal discharges in to GIDC network leading to CETP. The illegal connections in plot of closed units, ZLD units etc should be inspected and sealed by GIDC & VGEL.</p> <ul style="list-style-type: none">• GIDC was asked to revamp/repair/install the storm water drain lines in the GIDC area as per recommendation in the NGT Committee Revised Report (July 2019). | <p>RCC open drain SWD. Further, 8 Kms of SWD will be constructed where there are RCC pipeline SWD.</p> |
|---|--|


DY. EX. ENGINEER (DRN)
GIDC, VAPI

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Annexure-I.

| | |
|---|---|
|  <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION</p> | <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION (A GOVT. OF GUJARAT UNDERTAKING) OFFICE OF THE DEPUTY EXECUTIVE ENGINEER (Drainage) PLOT NO- C/5/101, ADMINISTRATIVE OFFICE BUILDING, NEAR TELEPHONE EXCHANGE, GIDC CHAR RASTA VAPI- 396195 ☎ [0260] 2432669,670 FAX No. 0260- 2420502</p> |
|---|---|

R.P.A.D.

No:GIDC/DEE(DRN)/VPI/ 879

Date: 24/10/19

To,

M/s. HERANBA INDUSTRIES LTD,

Plot No. 1503-1,

GIDC, Vapi.

Connection No. 36596.

Subject: - Installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

Thanking you

Your faithfully

Dy. Ex. Engineer (DRN)

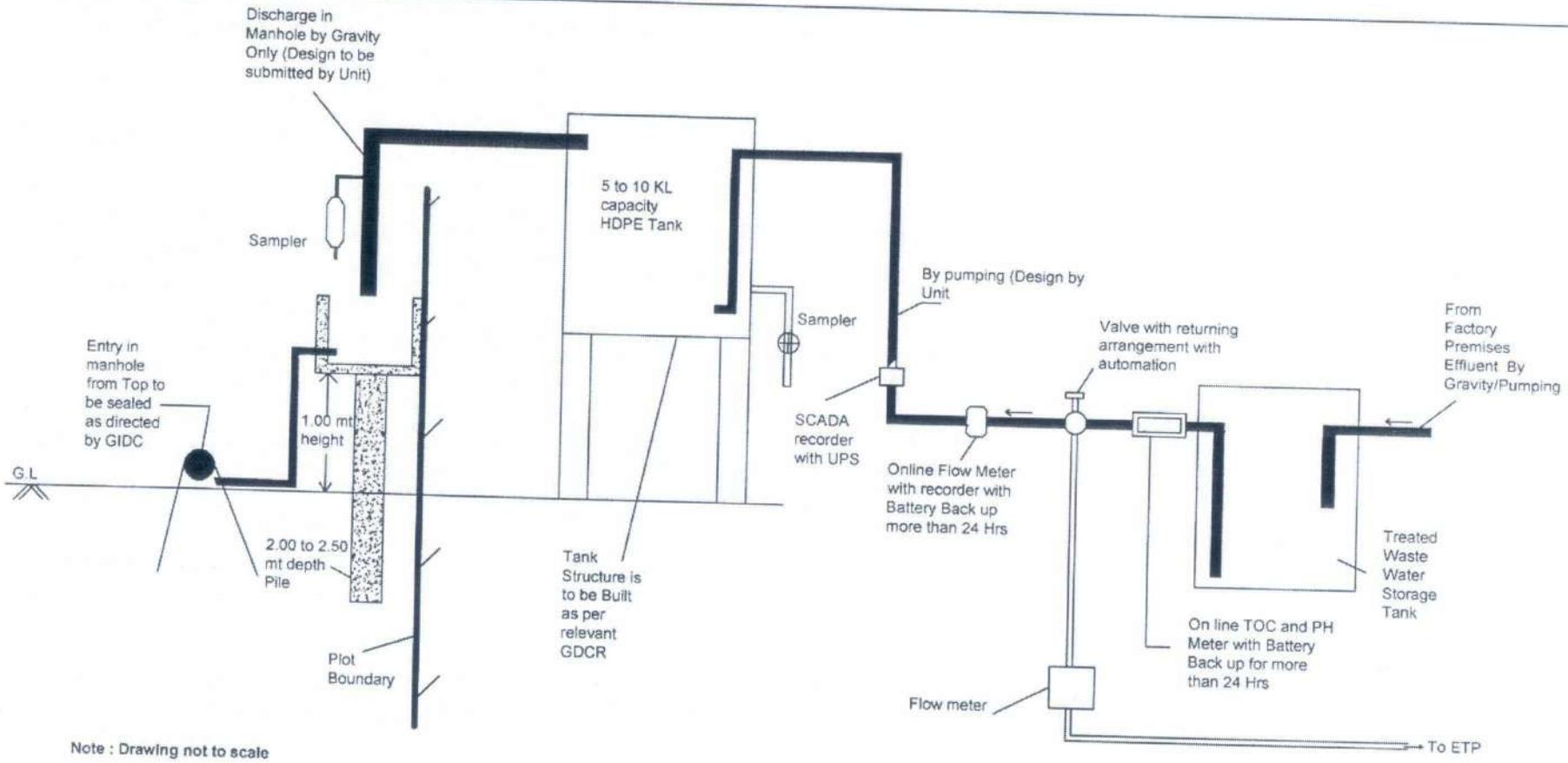
GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.

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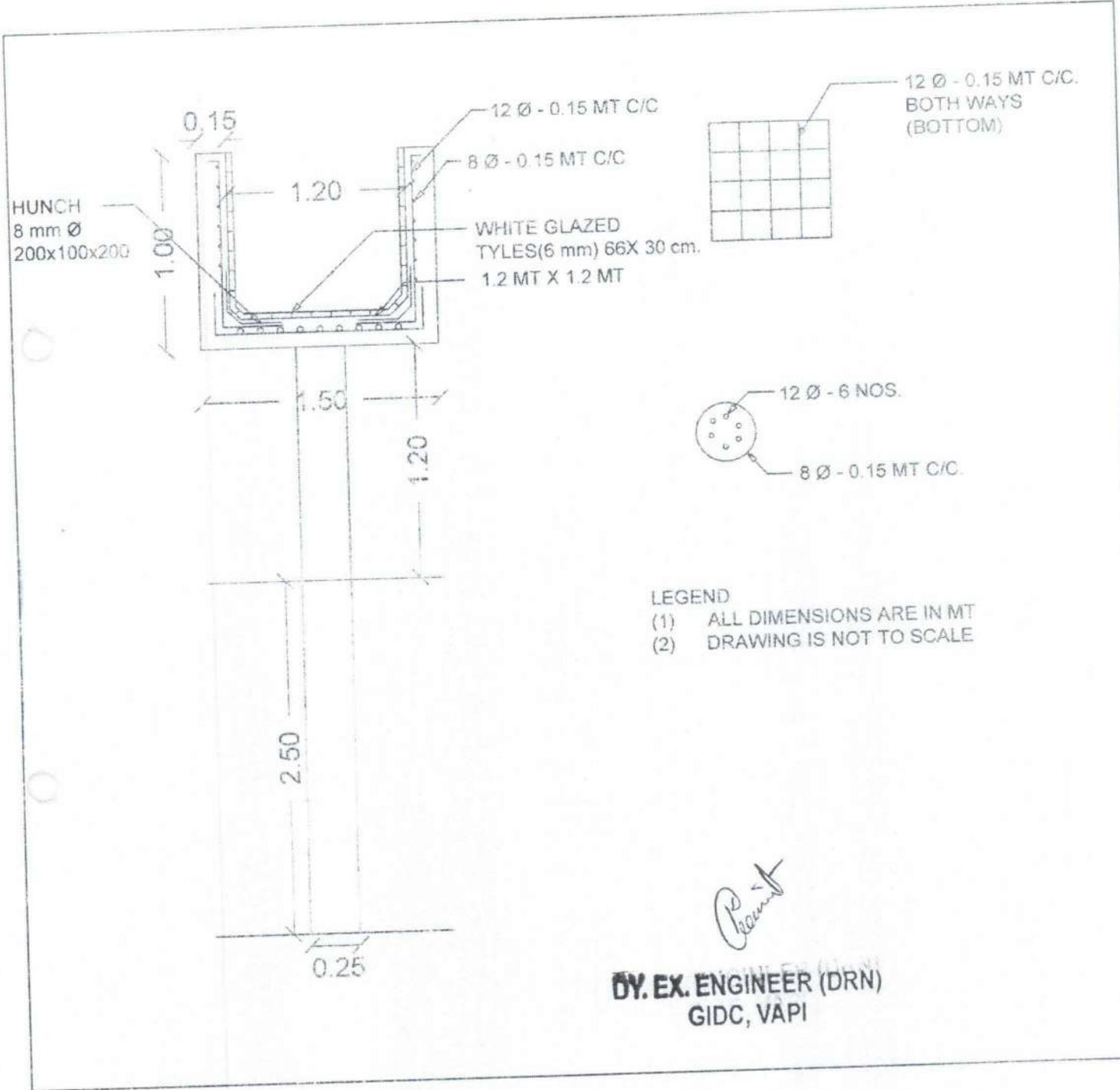
Sketch showing the Sampling point/Drainage Connection (HDPE/Carbon steel(C.S) from Factory Premises to Manhole



Note : Drawing not to scale

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Account
DY. EX. ENGINEER (DRN)
GIDC, VAPI



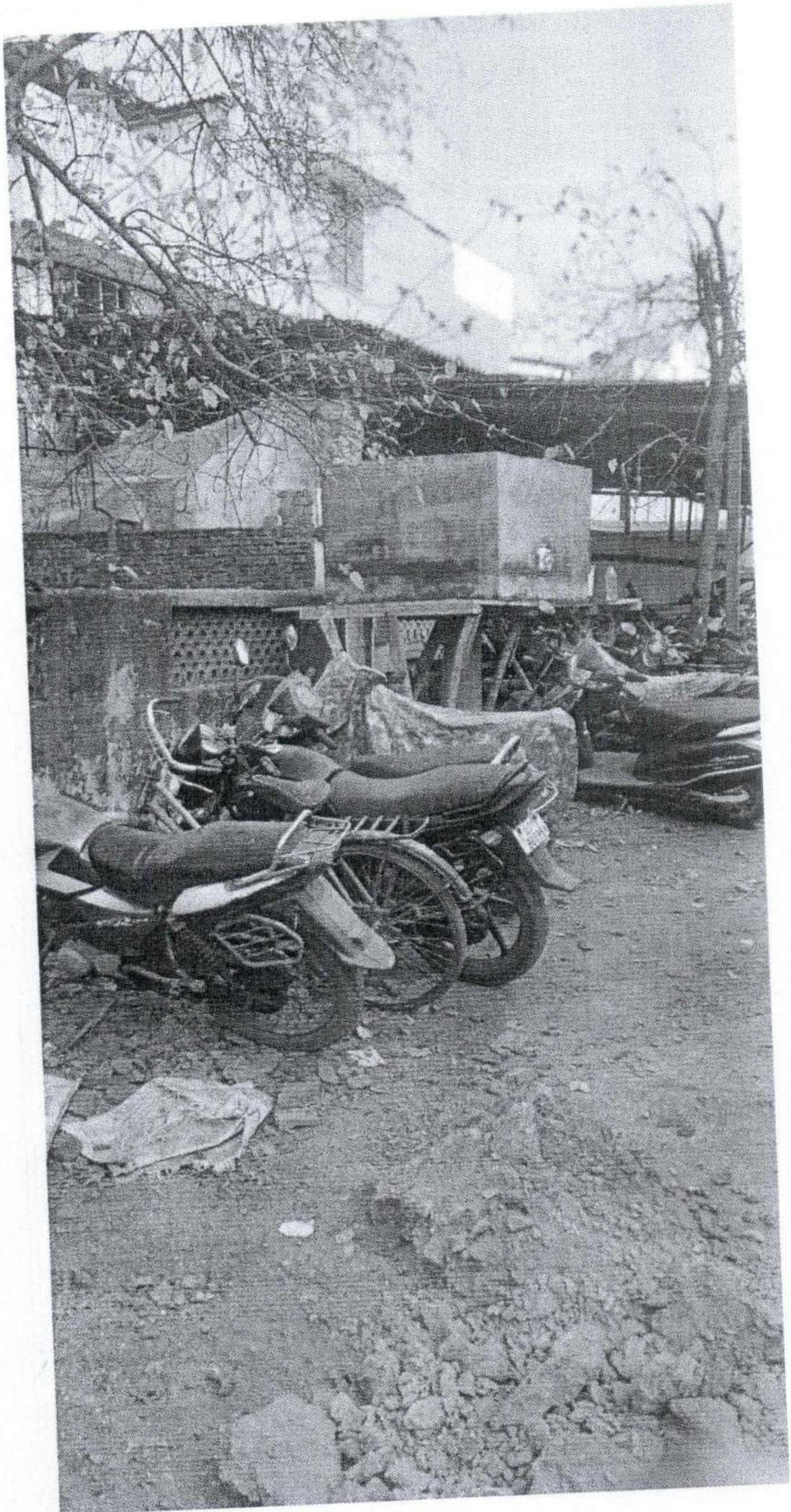
LEGEND
(1) ALL DIMENSIONS ARE IN MT
(2) DRAWING IS NOT TO SCALE

Chavhan
DY. EX. ENGINEER (DRN)
GIDC, VAPI

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| | |
|---|--|
|  <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION</p> | <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION (A GOVT. OF GUJARAT UNDERTAKING) OFFICE OF THE DEPUTY EXECUTIVE ENGINEER (Drainage) PLOT NO- C/5/101, ADMINISTRATIVE OFFICE BUILDING, NEAR TELEPHONE EXCHANGE, GIDC CHAR RASTA VAPI- 396195. ☎ [0260] 2432669, 670 FAX No. 0260- 2420502</p> |
|---|--|

R.P.A.D

No:GIDC/DEE(DRN)/VPI/ 874

Date: 24/10/19

To,
M/s VITAL HEALTH CARE P.LTD.
Plot No 1418,
GIDC, Vapi.
Connection No. 30981.

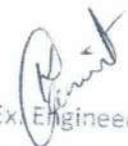
Subject: - Installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

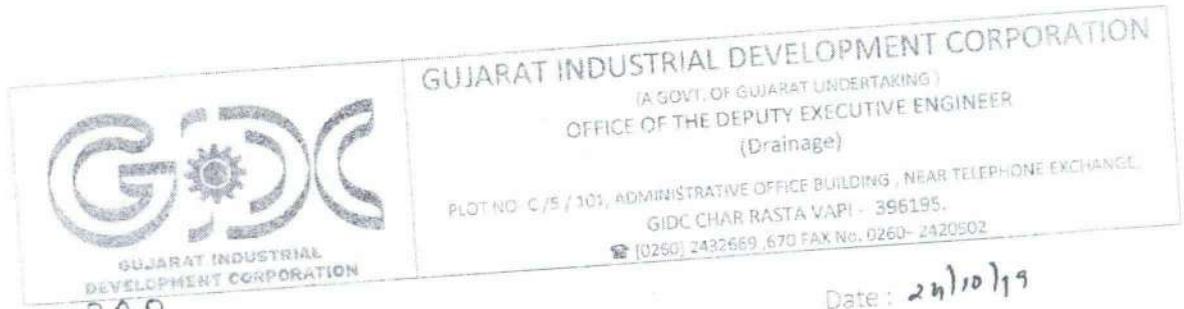
Thanking you

Your faithfully


OIC Dy. Ex. Engineer (DRN)
GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.



R.P.A.D.
No:GIDC/DEE(DRN)/VP/ 875

Date: 24/10/19

To,
M/s VITAL HEALTH CARE PVT.LTD.,
Plot No 1419 & 20,
GIDC, Vapi.
Connection No. 31106.

Subject: - Installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

Thanking you

Your faithfully

Dy. Ex. Engineer (DRN)
D/C
GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.



R.P.A.D.

No:GIDC/DEE(DRN)/VPI/ 676

Date: 24/10/19

To,

M/s. VITAL LABORATORIES PVT.LTD.,

Plot No. 1421,

GIDC, Vapi.

Connection No. 31174.

Subject: - installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

Thanking you

Your faithfully

Dy. Ex. Engineer (DRN)

OIC

GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.

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|---|--|
|  <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION</p> | <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION (A GOVT. OF GUJARAT UNDERTAKING) OFFICE OF THE DEPUTY EXECUTIVE ENGINEER (Drainage) PLOT NO- C/5 / 101, ADMINISTRATIVE OFFICE BUILDING, NEAR TELEPHONE EXCHANGE, GIDC CHAR RASTA VAPI- 396195. ☎ (0260) 2432669, 670 FAX No. 0260- 2430502</p> |
|---|--|

R.P.A.D.

No:GIDC/DEE(DRN)/VPI/ 877

Date: 24/10/19

To,

M/s. VITAL HEALTH CARE P.LTD.,

Plot No. 1507/2,

GIDC, Vapi.

Connection No. 36700.

Subject: - Installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

Thanking you

Your faithfully

o/c Dy. Ex. Engineer (DRN)
GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.



R.P.A.D.

No:GIDC/DEE(DRN)/VPI/ ~~478~~ 878

Date: 24/10/19

To,

M/s JUPITER DYES (p) LTD,

Plot No. 1506-2,

GIDC, Vapi,

Connection No. 34417.

Subject: - Installation of sampling point/Drainage Connection from factory premises to manhole.

In context to the above subject, a sketch showing the sampling point/Drainage connection from factory premises to manhole is attached herewith. As per the sketch, you have to make arrangements inside your factory premises i.e. HDEP tank, treated waste water storage tank etc. on or before 30th November 2019.

After 30th November 2019, your new above ground drainage connection will be installed by GIDC outside your factory premises and your old underground drainage connection will be disconnected.

Thanking you

Your faithfully


Dy. Ex. Engineer (DRN)
GIDC, Vapi.

Enclosure: - A.A.

C.S.W.R. to: - Executive Engineer GIDC, Vapi.....for information please.

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Annexure-2

| | |
|---|--|
|  <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION</p> | <p>GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION (A GOVT. OF GUJARAT UNDERTAKING) OFFICE OF THE DEPUTY EXECUTIVE ENGINEER (Drainage) PLOT NO- C/5 / 101, ADMINISTRATIVE OFFICE BUILDING , NEAR TELEPHONE EXCHANGE, GIDC CHAR RASTA VAPI - 396195. ☎ [0260] 2432669 ,670 FAX No. 0260- 2420502</p> |
|---|--|

No:GIDC/DEE(DRN)/VPI/ 1114

Date : 21/11/19

Notice

To,
M/S. PRADISH ENG WORKS.
Plot/Shed No. 57-1/5, Phase-1, GIDC, Vapi.
Connection: 14994.

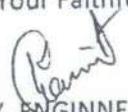
Sub:- Arrangement for disposal of Domestic waste water inside Plot area.

In context to the above subject, it is to inform you that you have to make arrangements for disposal of your domestic waste water on or before 15th December 2019 by constructing or installing precast septic & soak pit system. It is also instructed that drawing of construction/installation of soak pit & septic tank must be approve in the office of Executive Engineer GIDC, Vapi.

After 15th December 2019, your drainage connection will be disconnected without any further notice. For your information please.

Thanking You.

Your Faithfully


DY. EX. ENGINEER (DRN)
GIDC, VAPI.

C.S.W.R. to :- The Executive Engineer GIDC, Vapi.....for information please.

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Minutes of Meeting held on 25.11.2019 with reference of Hon'ble NGT Order dated 28.08.2019 in the matter of O.A.No.95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited &Ors.) at VIA Auditorium Hall, VIA Char Rasta, GIDC, Vapi.

A meeting was convened on 25.11.2019 at Vapi Industrial Association hall, for sensitization and to make aware various directions, issued by Hon'ble NGT order dated 11.01.2019, 13.05.2019 and 28.08.2019 in the matter of O.A. No. 95/2018 (Aryavart Foundation Vs. M/s. Vapi Green Enviro Limited & Ors.).

The meeting was chaired by Regional Director, Central Pollution Control Board, Vadodara, and attended by Scientist 'E', Central Pollution Control Board, Vadodara, Unit Head, Gujarat Pollution Control Board, Unit -Vapi Gandhinagar, Regional Officer, Gujarat Pollution Control Board, Regional Office - Vapi, Officials of VGEL (Vapi CETP), Vapi Industries Association, and defaulting industrial member units as mentioned in committee report. The list of participants is attached as **Annexure-I**.

President, Vapi Industries Association welcomed all the participants of the meeting including officials of CPCB, GPCB, VGEL, VIA and industrial units.

Initially Regional Officer, GPCB, Vapi briefed about various directions issued by Hon'ble NGT, from time to time in the matter of O.A. No. 95/2018. After detailed discussion with the stakeholders following issues are clarified to the gathering and VGEL- CETP, Vapi.

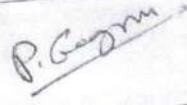
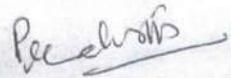
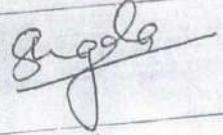
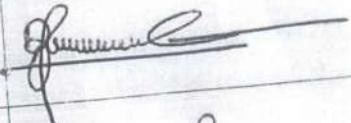
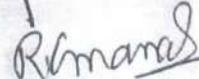
1. As per order dated 28.08.2019 of Hon'ble NGT, joint committee (CPCB & GPCB) to take action for reduction in load to ensure compliance of norms of inlet in CETP so as to ensure that inlet & outlet of CETP are as per norms and compensation as assessed by the Committee in respect of individual units as well as CETP is liable to be recovered as interim compensation on 'Polluters Pay' principle.

While discussing the importance of confirmation of inlet norms of CETP for performance & compliance, CPCB and GPCB jointly mentioned that if individual industrial member unit discharge their treated effluent into CETP beyond the prescribed norms specified in the CC&A, then particular industrial unit shall be considered as defaulting/polluting unit.

2. One of the industrial member unit has raised the question whether COD is the only concern parameter during consideration of defaulting/polluting unit with respect to the inlet criteria of CETP, to which it is replied that unit shall follow all the norms as prescribed in CC&A as well as the discharge quantity.

3. Another industrial member unit raised the question regarding to allow 10% variation in above prescribed norms and discharge quantity, to which it is clarified that it shall not be allowed.
4. There was a general presentation that the amount of compensations fixed by the committee are not applicable to certain industries. However, at this stage it is clarified that the decisions taken are recorded in committee's detailed report (July, 2019) based on GPCB's reports and representations made by individual units during the hearing, accordingly. However, any further representation by any industrial unit maybe duly attended and considered on merit basis by that committee only.
5. Further president VIA informed that VIA will get further clarification in the matter in question.
6. CEO, VGEL, Vapi informed that inlet and outlet of CETP is improved.
7. After that, Regional Director, Central Pollution Control Board, Vadodara, discussed about importance of exchange of good practices & technologies among industries to achieve prescribed norms and improve environmental performance. He also talked about role of control on inlet effluent quality, proper operation & maintenance, trained manpower, proper laboratory etc in compliance of CETP.
8. Regional Officer, Gujarat Pollution Control Board, Regional Office, Vapi, summarized the meeting with various points as given above. The meeting ended with vote of thanks.

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| ATENDENCE SHEET | | | |
|--|---------------------|--------------------------------------|--|
| FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL | | | |
| Sr. No. | Name of Persons | Designation | Signature |
| 1 | Mr. Prasoon Gargava | Regional Director, WZ, CPCB Vadodara |  |
| 2 | Mr. Pratik Bharne | Scientist-"E", CPCB Vadodara |  |
| 3 | Mr. Sushil Vegda | Unit Head, GPCB Gandhinagar |  |
| 4 | Mr. B. R. Gajjar | R.O. GPCB, Vapi |  |
| 5 | Mr. Prakash Bhadra | President, VIA Vapi |  |
| 6 | Mr. R Gnanasegaran | CEO, VGEL Vapi |  |
| | | | |
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A to J.

ATENDENCE SHEET
FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|--|---|-----------------|---------------|------------|------------------------------------|-------------|
| 1 | A One Phthalo Colours | 808/A - J13, Phase III, GIDC, Vapi | | | | | |
| 2 | Aarti Fertilizers | 801/15-19, 21 & 22, Phase III, GIDC, Vapi | Shamraj Kharule | Gm | 9909911207 | nimish.kharule@arti-industries.com | [Signature] |
| 3 | Aarti Industries Ltd. (Alchemie Organic) | 902, Phase III, GIDC, Vapi | Nimesh Naye | Gm | 9727782105 | | [Signature] |
| | Aero Chem Industries | 153, 154 Phase II, GIDC, Vapi | Em. Kint Shah | EM | 9375914719 | Same | [Signature] |
| | Ajit Metal | 5105/1, Phase IV, GIDC, Vapi | | | | | |
| | Akshar Industries | Ex - 11, Old NH No. 8, GIDC, Vapi | Manoj K. Sark | Manager | 963599537 | 3638...@gmail.com | [Signature] |
| | Alpana Dye Chem | C1B/2424, Phase III, GIDC, Vapi | D.S. Bhatt | Director | 9825124359 | | [Signature] |
| | Amardeep Chemical Industries Pvt. Ltd | Plot No. A2/8, Phase 1 | Devans G. Shelu | Admin Manager | 721199404 | amardeep.vapi@gmail.com | [Signature] |
| | Amarjyot Chemicals | 286/2, Phase II, GIDC, Vapi | Bhush Mehra | Director | 9828146318 | bhushmehra@gmail.com | [Signature] |
| | Amitech Chemicals Pvt. Ltd. | Plot No. 1401/6, Phase 3 | | | | | |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|--|--|---|-----------------------|--------------------------|----------------------------|-----------|
| 13 | Amoli Organic | Plot No. 322/4, 40 Shed Area | Kedarn H. S. | General manager | 9825123611 | koolam@amoli india.com | |
| 14 | Amrit Dye Chem Industries | 268, Silvassa Road, GIDC, Vapi | M. Patel | manager | 9427164664 | amritchem@9. | |
| 15 | Anjana Industries (Sunrise Speciality Colours) | Plot No.7.8.9/3, Phase 1 | Ritesh Patel | Incharge | 9825119858 | sunrise.vapi@ gmail.com | |
| 18 | Anjaria Envirotech Pvt. Ltd. | 2920, J Type Area, GIDC, Vapi | B.V. Anjaria | Director | 9879571715 | info@Anjaria .co.in | |
| 19 | Anupam Wash Care | C1-B/2307, BoB Road, Phase III, GIDC, Vapi | | | | | |
| 20 | Apex Pharmachem Pvt. Ltd. | 193/1, Phase II, GIDC, Vapi | Shavesh Uchil | Director | 9825141057 | shavesh@ gmail.com | |
| 21 | Apna Paper Mills Pvt. Ltd. | 782, Phase II, GIDC, Vapi | | | | | |
| 22 | Apurva Chemicals | 2806, Phase III, GIDC, Vapi | Ashish Patel | PLC | 9825141057 | ashish@apurva | |
| 24 | Arochem Industries Pvt. Ltd. | Plot No. 153 - 154, Phase II, GIDC, Vapi | | | | | |
| 25 | Arvind Industries | A-2/274, 40 Shed Area, GIDC, Vapi | Ragnikant P. Patel. Bharat Y. Patil. | proprietor manager | 9227801305 9227859201 | mbypati@gmail .com | |

ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---------------------------|---------------------------------------|-----------------|-------------|------------|---|-----------|
| 26 | Asha Enterprise | Shed No. 9, J Type Area, GIDC, Vapi | Pravin Daryal | G.M. | 9821213777 | gmit1609@gmail.com pravin.daryal@ashae.com | |
| 27 | Balaji Enterprise | C-1304/15, Phase III, GIDC, Vapi | | | | | |
| 28 | Bayer Vapi Pvt. Ltd. | 306/3, Phase II, GIDC, Vapi | | | | | |
| 29 | Best Paper Mill (Unit I) | 57/FGA/A, Phase I, GIDC, Vapi | D.B. ASHAR | Dy (Tech) | 9879557631 | bestmills@ymail.com | |
| 30 | Best Paper Mill (Unit II) | 57, FGH/B2, Phase I, GIDC, Vapi | | | | | |
| 31 | Bhageria Industries Ltd | Plot No. 6310, Phase IV, GIDC, Vapi | S.S. Gill | manager | 9724577511 | - | |
| 32 | Bhagwati Organics | 1754, 40 Shed Area, GIDC, Vapi | N.V. Patel | Partner | 9828111125 | | |
| 33 | Bhavini Products | Plot No. 1767-A, Phase 2 | Hanish Patel | Adm. m. | 9998044694 | PatelSubhashSG@yahoo.com | |
| 34 | Brizol Fab | C-1770/548, 100 Shed Area, GIDC, Vapi | | | | | |
| 35 | Center Point Industries | 316 & 316 - D, GIDC, Vapi | Ashok muth | DLc | 782564117 | - | |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---|---------------------------------------|----------------------|-------------|------------|-------------------------------|-----------|
| 36 | Chemodist Industries | Plot No. 808-B-2, Phase 2 | Manish Aggarwal | G.M. | 9824365514 | manish.aggarwal@chemodist.com | |
| 37 | Chempha Industries | C1/2122/2, Phase III, GIDC, Vapi | Ketan Mehta | Partner | 9820134616 | ketan.sm@chemphaco.com | |
| 38 | Chirag Industries | 6139/3, Phase IV, GIDC, Vapi | | | | | |
| 39 | Colorband Dyestuff Pvt. Ltd. (Shree Dutt Chemicals) | J - 2317, Phase III, GIDC, Vapi | | | | | |
| 40 | Consumers Plastics Pvt. Ltd. | Plot No. 16 - 19, Phase I, GIDC, Vapi | | | | | |
| 41 | Creative Textile Mills | 157 & 158, Phase II, GIDC, Vapi | | | | | |
| 42 | Creolon Colours | C1/2612, Phase III, GIDC, Vapi | Krishnakant P. Heble | Partner | 9427108432 | heble_creolon@yahoo.com | |
| 43 | Croptosys Pvt. Ltd. | 5302, Phase IV, GIDC, Vapi | Pankaj Desai | Manager | 9825065577 | pd@croptosys.com | |
| 44 | D D Cone | J - 2330, Phase III, GIDC, Vapi | | | | | |
| 45 | Dalmia Poly Pro Industries Pvt. Ltd | Plot No. 780/3, 40 Shed Area | SHASHI DALMIA | DIRECTOR | 982109667 | shashi@dalmiapolypro.in | |

ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|--|--|------------------------------------|------------------------|--------------------------|-----------------------------|-----------|
| Deven Chemical Industries | 1401/2, GIDC, Vapi | | | | | |
| Dincotex Pvt. Ltd. | 63, Phase I, GIDC, Vapi | | | | | |
| Dy-Mach Pharma | Plot No. C-1/2344, 2343, 2345, 2346, Phase 3 | Dr. A. D. Jeeva President, GIDC | President GIDC | 9726822222 | drmach@vsnl.com | |
| Electra Accumulator Pvt. Ltd. | 261, Phase II, GIDC, Vapi | | | | | |
| Emami Ltd. (Zandu Pharmaceutical Works Ltd.) | Plot No. 82, Phase I, GIDC, Vapi | Delip Kumar Jha | Sr. General Manager | 8128855917 | delip.jha@emamigroup.com | |
| Essar Electroshine | L - 1206/11, Phase III, GIDC, Vapi | | | | | |
| Faze Three Ltd. | Plot NO. 71, J Type Area, Phase 1 | | | | | |
| Friend Hard Mould Paper | H - 5, 6, 7 & Gala 3 & 4, Near Swaminarayan School | | | | | |
| Galvadecoparts Pvt. Ltd. | Plot No. 1702/A, Phase 3 | S. N. Jaha | Manager | 9227750615 9714665501 | joshi-sn@galvadeceparts.com | |
| Gayatri Shakti Paper & Board Pvt. Ltd. | 799/1, Phase III, GIDC, Vapi | Ravindra Singh | Head EHS | 2025805611 | ravindra@gspp.com | |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---------------------------------------|--|------------------|-----------------|--------------------------|---------------------------|-----------|
| 56 | Global Inc (AVS & Bhavini Enterprise) | C-1/1812/4, Phase III, GIDC, Vapi | Vinay Thakkar | Partner | 9324626464 9969130135 | ballpenink@gmail.com | |
| 57 | Grauer & Weil Ltd. | 407, Phase II, GIDC, Vapi | Rajendra Gundlap | DM-Prod. | 9860629514 | vapi@good.com | |
| 58 | Gulshan Sales Corporation | C-1B/784, 40 Shed Area, GIDC, Vapi | | | | | |
| 59 | Gupta Barrel Company | 3604, Phase IV, GIDC, Vapi | | | | | |
| 60 | Gurukant Dye Chem Pvt. Ltd. | 6021, Phase IV, GIDC, Vapi | D.S. Kherr | Director | 9898026779 | - | |
| 61 | H B Dyechem Industries | PLOT NO. C-1B, 2405, 3RD PHASE, GIDC, Vapi | | | | | |
| 62 | Haatkes Chem & Eng Ind | Plot No. C1/85, 100 Shed Area | Parth Solanki | Partner | 9898608998 | haatkeschem.ind@gmail.com | |
| 63 | Harsha Chemicals (Nitesh Barrels) | Plot No. 917, Phase III, GIDC, Vapi | | | | | |
| 64 | Harshita Metal Finisher | C1/1304/9, Phase III, GIDC, Vapi | | | | | |
| 65 | Hemani Industries | 780/1, 2, 40 Shed Area, GIDC, Vapi | L.K. Lad. | Partner myr. | 942611603 | hr.hemani Prod. com | |

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ATTENDANCE SHEET

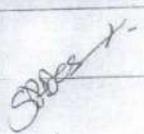
FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|-----------------------------------|------------------------------------|-----------------------|-------------|------------|----------|---|
| 66 | Heranba Industries (Unit I) | 1504 - 1506, Phase III, GIDC, Vapi | M. K. Patkar | Engr. - WWS | 9712993492 | |  |
| 67 | Heranba Industries Ltd. (Unit II) | Plot No. A-2,2214/2215, Phase 3 | XXXXXXXXXX | | | | |

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ATTENDENCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---------------------------------------|--------------------------------------|----------------------|-------------|------------|---------------------------------------|---|
| 68 | Hercules Pigments Pvt. Ltd. | 316/B, Phase II, GIDC, Vapi | Shailash A. Aasen | Manager | 9724343635 | shailash.e herculespigment .com |  |
| 69 | Hercules Pigments Pvt. Ltd. (Unit II) | A1/2106, Phase III, GIDC, Vapi | | | | | |
| 70 | Hiren Enterprises | Plot No. 2327/2, Phase 3 | Hiren N. Shah | Partner | 9576126204 | |  |
| 71 | Hubergroup India Pvt. Ltd. | 808/E, 305/6, 7 GIDC, Vapi | | | | | |
| 72 | Ideal Baking Corporation | A-2/214, Phase III, GIDC, Vapi | | | | | |
| 73 | Ideal Dye Chem (Unit I) | 119, Phase II, GIDC, Vapi | | | | | |
| 74 | Ideal Dye Chem (Unit I) | | | | | | |
| 75 | Ideal Dye Chem (Unit II) | 156, Phase III, GIDC, Vapi | Nandkishore | Partner | 9577026041 | |  |
| 76 | India Gelatine Chemicals Ltd. | Plot No. A - 1, GIDC, Vapi | | | | | |
| 77 | J B Industries | Plot No. 1423, Phase III, GIDC, Vapi | | | | | |

| ATTENDANCE SHEET | | | | | | | |
|--|--------------------|--|-----------------|-------------|------------|----------|-----------|
| FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL | | | | | | | |
| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
| 78 | J K Industries | J/22, Phase I, GIDC, Vapi | | | | | |
| 79 | Jay Balaji Packers | A-1/2209, Phase III, GIDC, Vapi | | | | | |
| 80 | Jay Engineering | Plot No. 761, 40 Shed Area, GIDC, Vapi | | | | | |

Jayshin Chemicals Pvt. Ltd
 Mukesh Patel Director 9328336565 mukesh.patel@micas.co.in *[Signature]*

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---|---|--------------------------------|-----------------------|--------------------------|--|-----------|
| 81 | Jayshiv Chemical Pvt. Ltd. | Plot No. 2807/2, Phase 3 | | | | | |
| 82 | Kamala Chemicals | J - 17, Phase I, GIDC, Vapi J-11, | Pimalkim Mistry | Partner | 9825172207 | kamalanister medetes@ gmaail.com | |
| 83 | Kesar Infra | 150, Phase I, GIDC, Vapi | Ujjay.R. Parihar | Legal Advisor | 8000999914 | kesarinfra @gmail.com | |
| 84 | Keva Fragrances Pvt. Ltd. | Plot No. 170 - 175, 2nd Phase | Pankaj Dandale Anun Koptale | Unit Head EHS Head | 9687969952 | Pankaj.dandale @keva.co.in | |
| 85 | Kewal Kiran Clothing Ltd. | 787/1, 787/2-A 787/3, 40 Shed Area, GIDC, Vapi | G.K. SINGH SURESH SHARMA | GM HR | 9426861274 9858248542 | gksingh@kewal.com ks@kewal.com | |
| 86 | Kherani Paper Mills Pvt. Ltd. | 808/G, Phase III, GIDC, Vapi | Nilesh P. Shel | Comm. manager | 38231822 | nilesh@yspbl.com | |
| 87 | Kinjal Chemicals (Unit II) (Rupani Dyes & Intermediates Pvt. Ltd.) | 149, Phase II, GIDC, Vapi | Satish. Chulkar | Incharge | 913289688 | kinjal chulkar@ 3@gmail.com | |
| 88 | Klipco Pvt. Ltd. | Plot No. 53, Phase I, GIDC, Vapi | | | | | |
| 89 | Krishna Dyes & Chemicals | Plot No. C-1/2615, Phase 2 | Ashish. K. Patel | Incharge | 9898365406 | Krishna dyes 55@gmail.com | |
| 90 | Kunder Chemicals Pvt. Ltd. | 316/A, Phase II, GIDC, Vapi | Veemit Kunder | Director | 9322359600 | info@pigment ajreena | |

ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| S. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|--------|--|--|------------------|-----------------|------------|--------------------------|---|
| 1 | Kwality Paper & Pulp Mills | Plot No. 183, Phase II, GIDC, Vapi | Vijay B. Madhwal | Partner | 9825115549 | val-kwality@yahoo.co.in |  |
| 2 | Mahavir Industries | L - 5310/2, Phase IV, GIDC, Vapi | | | | | |
| 3 | Mahendra Plastic | C18/6112, Phase III, GIDC, Vapi | | | | | |
| 4 | Mangalam Drugs & Organics Ltd. (Unit I) | 187, Phase II, GIDC, Vapi | Piyush Darni | General Manager | 992827158 | Pdesai@Wangulawdrugs.com |  |
| 5 | Mangalam Drugs & Organics Ltd. (Unit II) | 1203, Phase III, GIDC, Vapi | | | | | |
| 6 | Micas Organics Ltd. - Unit 1 | Plot No. 297/4-10, 2nd Phase | Rajul Shah | M.D. | 9341360600 | rajul.shah@micas.co.in |  |
| 7 | Micas Organics Ltd. - Unit - 5 | Plot No. 287/2B | | | | | |
| 8 | Mega Fine Pharma Ltd. | Plot No. 911, Phase III, GIDC, Vapi | | | | | |
| 9 | Micas Industries Ltd. | 508, 509, 510, 100 Shed Area, GIDC, Vapi | R | | | | |
| 10 | Micas Organics Ltd. (Unit II) (Dhiraj Intermediates) | 3101, 3102, 3108, Phase IV, GIDC, Vapi | Rajul Shah | M.D. | 9341360600 | rajul.shah@micas.co.in |  |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---------------------------------------|---|-----------------|-------------|------------|----------------------------|---|
| 101 | Micro Resins Pvt. Ltd. (Tridev Resin) | A-1/2002, Phase IV, GIDC, Vapi | | | | | |
| 102 | Minesh Prints | A-1/726, 727, 746, 40 Shed Area, GIDC, Vapi | | | | | |
| 103 | Mohammed Yunus & Sons | 176/3B, Phase II, GIDC, Vapi | | | | | |
| 104 | Nandosai Chem Industries Pvt. Ltd. | Plot No. 49, Phase I, GIDC, Vapi | | | | | |
| 105 | Nath Industrial Chemicals | 294 - 296, GIDC, Vapi | Mohay Jain | Director | 9374992185 | nathaj1959@gmail.com |  |
| 106 | Netmatrix Ltd. | C-1/77/524, 78/525, C-1/65/649, 100 Shed Area, GIDC, Vapi | | | | | |
| 107 | Nylo Speciality Colors | Plot No. C1B/65/1/1, 100 Shed Area | Rajiv/N. Samiya | Partner | 9324057180 | nylo500@gmail.com |  |
| 108 | Orient Organics | Plot No. 5306/2, Phase 4 | | | | | |
| 109 | Padmavati Chemicals | 5101, Phase III, GIDC, Vapi | Prafull Patel | Partner | 9824136676 | padmavati-chem@yahoo.co.in |  |
| 110 | Padmavati Chemicals Pvt. Ltd. | 5001, Phase IV, GIDC, Vapi | Jayshi Agwila | Director | 9825116207 | padmavati19@gmail.com |  |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|--------------------------|--|-------------------|-----------------|------------|---------------------------------|-----------|
| 111 | Panhas Chemicals | C1/6124 & 6125, Phase IV, GIDC, Vapi | | | | | |
| 112 | Pearl Colour Industries | Plot No. C1/2614, 3rd Phase | Ami Patel | Manager | 9337124161 | pearlcolourindustries@gmail.com | |
| 113 | Pharmachem Industries | 303/8/G, Phase II, GIDC, Vapi | | Manager | 9379955408 | Pharmachemvapi@hotmail.com | |
| 114 | Pharmavet Industries | 2501/2, Phase IV, GIDC, Vapi | S.N. Patel | Prod. In-charge | 9978609901 | - | |
| 115 | Pidilite Industries Ltd. | Plot No. 74,74-1,77-2,78,79, J Type Area | Sanjiv Desai | HEAD IN-CHARGE | 9136123324 | sanjiv.desai@pidilite.com | |
| 116 | PIL Chemicals Pvt. Ltd. | 1207, Phase III, GIDC, Vapi | Satish Mehler | Adm manager | 9925232668 | Satish.Mehler@pilchemicals.com | |
| 117 | Polysperse Chemicals | Plot No. J-2329, Phase 3 | Rajkumar Patel | Proprietor | 9925653557 | bheraya@yahoo.com | |
| 118 | Pooja Barrels & Company | 788, Main Road, 40 Shed Area, GIDC, Vapi | | | | | |
| 119 | Prashant Dye Chem | 303/8/C, GIDC, Vapi | Nilesh Bhandhali | Partner | 9426842700 | - | |
| 120 | Prashant Industries | C1/1504/6, Phase III, GIDC, Vapi | Kunrishi K. Mogre | Prod. | 9925110111 | prashantindustries.com | |

C1/1304/6

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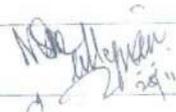
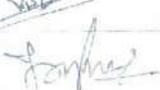
ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|--|--------------------------------------|-------------------|--------------|------------|--------------------------------|-----------|
| 121 | Pravin Industries | Plot No. C1-6118, 4th Phase | Upendra Sheludra | Partner | 9327122944 | shubhraj@kajiml.com | |
| 122 | R3 Crop Care Pvt. Ltd. | Plot No. 72, J Type Area, GIDC, Vapi | Shashikant N. Lad | Director (D) | 998946884 | shashk@r3cropcare.in | |
| 123 | Rainbow Chemicals | Plot No. 8021/A, 4th Phase | Hitesh M. Bhanu | Partner | 9898195250 | hitesh_bhanu@rainbowchem.co.in | |
| 124 | Rama Pulp and Paper Mills | Plot No. 294 - 296, 2nd Phase | Anil Sharma | Director | 9426123771 | A.K.Sharma@Ramapulp.co | |
| 125 | Ramji Paper & Board Mills Pvt. Ltd. | 6308, Phase IV, GIDC, Vapi | Lalit Kary | Dir | 9858012889 | lalitkary@ramjiml.com | |
| 126 | Rathore Pigments Pvt. Ltd. | C1/6020/1, Phase IV, GIDC, Vapi | | | | | |
| 127 | Ratna Products | Plot No. J 758/4, 40 Shed Area | Rajkumar Patel | Director | 9425653557 | bheraiya@ychoo.co.in | |
| 128 | Ratnakar Chemicals | C1/2312, Phase III, GIDC, Vapi | Yogeshkumar Patel | Partner | 9879269155 | | |
| 129 | Remco Paper & Board Industries | 205, Phase II, GIDC, Vapi | Sunny Bhanu | Director | 9327580036 | | |
| 130 | Resins & Allied Chemical Industries (Bombay) Pvt. Ltd. | C1/46, 100 Shed Area, GIDC, Vapi | Yogeshkumar Patel | Partner | 9824370543 | Yogeshkumar@resins.co.in | |

ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

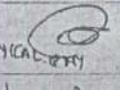
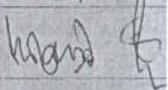
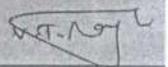
| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|-----------------------------|-----------------------------------|-----------------|---------------------------|------------|----------------------------------|--|
| 131 | Riddhi Industries | 136/4/2 - B, Phase II, GIDC, Vapi | | | | | |
| 132 | Rolex Lanolin Products Ltd. | 6309, Phase IV, GIDC, Vapi | Siva R. Kulkar | Management Representative | 6357654936 | vapi.backoffice@rolexlanolin.com |  |
| 133 | Royal Processor | 282/2, Phase II, GIDC, Vapi | VISHNU KUMAR | manager | 8000959167 | vishnukumar@hmail.com |  |
| 134 | Ruby Red | Plot No. 798/1, 2nd Phase | Hitesh M. Patel | Joint | 9898195286 | hitesh.patel@rubyred.com |  |
| 135 | RVN Paper & Board | 57/A, Phase I, GIDC, Vapi | | | | | |

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ATTENDANCE SHEET

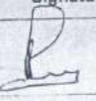
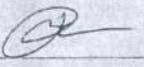
FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|-------------------------------------|---|-----------------|-------------|-------------|---------------------------|---|
| 136 | S S Enterprise | Plot No. 915, Phase IV, GIDC, Vapi | | | | | |
| 137 | Sai Roto C/o J K Industries | J - 22, J Type Area, GIDC, Vapi | | | | | |
| 138 | Samit Writing Aids Pvt. Ltd. | C1B - 7, Phase I, GIDC, Vapi | | | | | |
| 139 | Samit Writing Aids Pvt. Ltd. | C1B - 7, Phase I, GIDC, Vapi | | | | | |
| 140 | Sandhya Organic Chemicals Pvt. Ltd. | 303/B/C. GIDC, Vapi | | | | | |
| 141 | Sarna Chemicals Pvt. Ltd. (Unit I) | 805/2, 3, Phase III, GIDC, Vapi | * | | | | |
| 42 | Sarna Chemicals Pvt. Ltd. (Unit II) | | SSS | CMD | 9099023553 | SSS@SARNACHEMICALS.COM |  |
| 13 | Shah Paper Mill (Unit III) | 792 - 793, 40 Shed Area, GIDC, Vapi | H. G. PATEL | Director | 78241-37408 | investshahpaper.com |  |
| 4 | Ship Breaking - M/s Metro Trading | Plot No. 5, Opp. Parle Godown, Dungi Faliya, Degam Road | | | | | |
| 5 | Shiv Shakti Industries | Plot No. 924, Phase 4 | VIVEK PATEL | DIRECTOR | 9898111200 | Shivshakti.acid@gmail.com |  |

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ATENDENCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sl. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---|--|-----------------|---------------|--------------------------|--------------------------------|---|
| 46 | Shree Chemicals & Shivam Chemicals | Ex 1 & 2, Phase I, GIDC, Vapi | Arvind P. Desai | Partner | 982406800 | Shreeex452 @Yahoo.com |  |
| 147 | Shree Ganesh Acrylite | C-1/1812/2, Phase III, GIDC, Vapi | | | | | |
| 148 | Shree Gurudev Chemicals | A/1/1101, Phase III, GIDC, Vapi | | | | | |
| 149 | Shree Hardik Plating | A/2/6015, Phase IV, GIDC, Vapi | S. N. Doshi | Manager | 9227750617 8714665501 | Joshi.SN@galva @copacth.com |  |
| 150 | Shree Jayvir Organics (Hilton Organic Chem) | A/2/10, Phase I, GIDC, vapi | Vijay. R. Patil | Asst. Manager | 9925433115 | |  |
| 151 | Shree Mahavir Dyes | Plot No. 1401/5, Phase III, GIDC, Vapi | | | | | |
| 152 | Shree Raj Enterprise (A H Traders) | Ex - 13, NH No. 48, GIDC, Vapi | | | | | |
| 153 | Shreeji Corporation | 136 - 1, 2, Phase II, GIDC, Vapi | | | | | |
| 154 | Shreeji Hansraj Plastic (Saptagini Plastic) | L - 2 -602, Phase IV, GIDC, Vapi | | | | | |
| 55 | Shreeji Industries (Vanguard Engineering) | L-1206/14, Phase III, GIDC, Vapi | | | | | |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|-----------------------------------|--|-------------------------------|-----------------------|------------|----------------------------|-----------|
| 156 | Shri Hari Textile Pvt. Ltd. | Plot No. 1205-2 | Satish Singh | Incharge | 9898690958 | — | |
| 157 | Siddharth Wet Processing | Plot No. 49, Phase 2, Opp. Padam Plastic | | | | | |
| 158 | Siddhi Silcal Dyes Pvt. Ltd. | A1/2203, Phase III, GIDC, Vapi | Gaurang M. Desai | Director | 9825698544 | gaurangmdesai@hdfmail.co | |
| 159 | Silcal Laboratories | Plot No. C-1-B-1107/6 | Snehal Desai | Proprietor | 9825141879 | silallabe@gmail.com | |
| 160 | Simi Chemicals | C1/702/8, 40 Shed Area, GIDC, Vapi | Dr. H.M. Hiraspara | Partner | | | |
| 161 | Skyline Polycats Pvt. Ltd. | Plot No. C1B/68, 100 Shed Area | Rajkumar Patel | Branch Representative | 9925653557 | bheraya@7chev.co.in | |
| 162 | Stani Engineering Pvt. Ltd. | 4, 5, 6 & J, J Type Area, GIDC, Vapi | | | | | |
| 163 | Suhan Enterprise | C1-B-5501/2, Phase IV, GIDC, Vapi | | | | | |
| 164 | Sumitomo Chemical India Pvt. Ltd. | Plot No. C-5/185, Next to GPCB | Prakash Desai Rajesh Desai | GM Manager | 9879153227 | rajeshdesai@sumichem.co.in | |
| 65 | Sumukh Synthetics Pvt. Ltd. | A/2722, 40 Shed Area, GIDC, Vapi | Bhuvaneshwar | Sup. | 9375833119 | | |

ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---------------------------------------|------------------------------------|------------------------------|------------------|------------|--------------------------------------|-----------|
| 166 | Suparna Chemicals | 656, 100 Shed Area, GIDC, Vapi | Yogesh Patel | Site Director | 982487259 | vapi.commercial@suparnachemicals.com | |
| 167 | Super Industries | 728/4, 40 Shed Area, GIDC, Vapi | Parthak Thamban | Proprietor | 9825561901 | | |
| 168 | Supreet Chemicals Pvt. Ltd. (Unit I) | A-1/5401 & 2, Phase IV, GIDC, Vapi | Vipul Patel | Manager | 9099044798 | | |
| 169 | Supreet Chemical Pvt. Ltd. (Unit III) | Plot No. 2808, Phase 3 | | | | | |
| 170 | Supriya DyeChem | Plot No. C1B/2604, 3rd Phase | D. S. Bhatt | Barman | 9825714359 | | |
| 171 | Swapnil Organics Pvt. Ltd. | 6306, Phase IV, GIDC, Vapi | R. K. Patel | DIRECTOR | 9824158245 | swapnilorganics.com | |
| 172 | Swati Spentose Pvt. Ltd. | A1/2105, Phase III, GIDC, Vapi | Ravi Sharma Kalash Sharma | Hr. Sec Admin | 7878102001 | works@alcoychem.com | |
| 173 | Toyota Chemicals Pvt. Ltd. | 100, Silvassa Road, GIDC, Vapi | M. G. D2A | | 9825126232 | | |
| 174 | Unimark Remedies | 40 - 42, Phase I, GIDC, Vapi | Anil Patil | Manager | 9512205696 | anil.patil@unimarkremedies.com | |
| 175 | United Barrels Supply Company | 742, 40 Shed Area, GIDC, Vapi | | | | | |

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ATTENDANCE SHEET

FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sr. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|----------------------------------|--|--------------------|--------------|------------|----------------------|-----------|
| 176 | Valsol Industries | 1204, Phase III, GIDC, Vapi | Lalit Anand | VP | 937768007 | lalitanand@yahoo.com | |
| 177 | Vapi Care Pharma Pvt. Ltd. | Plot No. 225/3 | Parmeshwar | Manager | 9621183740 | | |
| 178 | Vapi Pigment (Unit I) | 795/2, Phase II, GIDC, Vapi | F. M. Patel. | Manager | 7405066024 | | |
| 179 | Vapi Pigment (Unit II) | 795/2, Phase II, GIDC, Vapi | | | | | |
| 180 | Vapi Spectrochem Pvt. Ltd. | 3A & 3B, Phase I, GIDC, Vapi | Parmesh. Darr | Manager | 8141234105 | | |
| 181 | Venkateshwar Filaments Pvt. Ltd. | Plot No. 1201/1, Phase 3 | R. K. Yadav | Manager | 9327699998 | VFDLgroup@jambel.com | |
| 182 | Victory Chemicals | 33 & P1-1, GIDC, Vapi | Vijay Arand. | Incubator | 9426862877 | | |
| 183 | Vital Laboratories Pvt. Ltd. | Plot No. 1710, Phase 3 | Dr. Pradyumn Patel | FHS Incharge | 9737192077 | FHS ch50 vtl lab in | |
| 184 | Vital Healthcare Pvt. Ltd. | 1416-21, 1507/1 & 2, 1601/3 & 4, Phase III, GIDC, Vapi | | | | | |
| 185 | Vivid Intermediates Pvt. Ltd. | 143, Phase III, GIDC, Vapi | Dinesh m-Rahul | Pl incharge | 9979346664 | | |

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ATTENDANCE SHEET
FOR THE MEETING SCHEDULED AT 11:00 A.M. (MONDAY) ON 25/11/2019 AT VIA AUDITORIUM, GIDC VAPI - CPCB, GPCB, VIA & VGEL

| Sl. No. | Company Name | Address | Name of Persons | Designation | Mobile No. | Email ID | Signature |
|---------|---|------------------------------------|-------------------|-------------|------------|----------------------------|--|
| 16 | Vrijesh Natural Fibres & Fabrics Pvt. Ltd. | 363/B, LIC Sector, GIDC, Vapi | Mohandas P. Rai | Manager | 9825671410 | mohandas@vrijesh.com |  |
| 17 | Yasho Industries | 2514 - 2515, Phase III, GIDC, Vapi | Satish R. Purohit | Manager | 9824701863 | satish@yashoindustries.com |  |
| 18 | Yashraj Containers (Muskan Projects Pv. Ltd.) | A1/M52, 100 Shed Area, GIDC, Vapi | | | | | |
| 19 | Zen Pharama Pvt. Ltd. | Plot No. 75/1, Phase 1 | Jethico Patel | Ad-Manager | 9827162118 | admin@zenpharma.com |  |

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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

R.P.A.D

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.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS permissible inlet norms are prescribed in the CC&A order to receive waste water from the member industrial units and to discharge treated industrial waste water at designated point as specified in above referred CC&A.
- (4) AND WHEREAS M/s. Vapi Green Enviro Ltd. was visited on 11/04/2019 and 29/04/2019 under Section-23 of The Water (Prevention and Control of Pollution) Act-1974 by authorized officers of the Board, during said visit it was observed that;
 - i) Final treated effluent from CETP, not meeting with the norms.
 - ii) Analysis Report of sample collected from Inlet of CETP dated 11/04/2019 indicates COD= 1149 mg/l, Ammonical Nitrogen = 54 mg/l and sample collected from Inlet of CETP dated 29/04/2019 indicates COD = 1760 mg/l, BOD = 470 mg/l, Ammonical Nitrogen = 83.84 mg/l, which are beyond the prescribed norms of GPCB.
 - iii) Analysis Report of sample collected from Outlet of CETP dated 11/04/2019 indicates COD= 280 mg/l, BOD = 34 mg/l, and sample collected from outlet of CETP dated 29/04/2019 indicates COD = 311 mg/l, BOD = 38 mg/l, Ammonical Nitrogen = 55.29 mg/l, which are beyond the prescribed norms of GPCB.
- (5) AND WHEREAS looking to the observation during the said visit you have violated provisions of the Environmental laws and you are in non-compliance of the conditions granted to you.

UNDER THE CIRCUMSTANCES, I, Sushil Vegda, Senior Environmental Engineer of the Gujarat Pollution Control Board issue the direction under Section 33(A) of The Water (Prevention and Control of Pollution) Act-1974 as under: -

- 1) To prohibit you from the above said manufacturing activity.
- 2) To close the operation of your industrial plant on the above mentioned premises.
- 3) To prohibit any kind of manufacturing activities through Captive Power Plant and/or D. G. Sets.
- 4) To direct the concerned authority to stop supply of electricity (except single phase) and water with 15 days effect from issue date of this order.
- 5) CETP shall identify member units whose COD, BOD, Ammonical Nitrogen and Colour are not meeting with the prescribed inlet norms of CETP.
- 6) You shall segregate non-biodegradable waste water having higher refractory COD from member units.
- 7) CETP shall appoint Technical Expert from National level reputed institutes like IIT for Evolution of VGEL's effectiveness and performance.
- 8) CETP has failed to implement Sludge Drying system even though directions issued in this regard.
- 9) CETP shall take immediate preventive actions so that inlet and outlet norms shall be maintained.
- 10) CETP shall identify manholes having industrial waste water exceeding the norms and shall identify culprit units discharging waste water exceeding the norms.
- 11) CETP is required to be operated properly & up-graded adequately so as to ensure to discharge the treated effluent, all the time, meeting with the prescribed discharge norms.
- 12) CETP shall monitor that which industries are contributing for not achieving inlet standards of CETP.
- 13) CETP shall submit revised & effective Time Bound Action Plan.

If the above directions are not complied, you are liable for prosecution under Section 41(2) of The Water (Prevention and Control of Pollution) Act-1974 which provides punishment with imprisonment for a term not less than one year and six months and may extend to six years and with fine.



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

This order is issued after approval of competent authority.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(19)/ID: 24764/

Issued to:

The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (Vwemcl))
Plot No. Ext ¼, Near Damanganga River,
Via House, Plot No. 135,
Vapi-396195, .
Tal: Pardi,
Dist: Valsad

COPY TO:

1. The Dy. Engineer (O&M)
Dakshin Gujarat Vij Company Ltd.,
GIDC Sub-division, DGVCL,
GIDC, Vapi,
Dist: Valsad.

With a request to disconnect the supply of Electricity (except single phase) with 15 days effect from issue date of this order of the CETP M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

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2. The Executive Engineer,
Vapi Notified Area, 2nd floor, G.I.D.C.,
Administration Section, Plot No. C-1/501,
G.I.D.C., Industrial Area,
Killa Pardi, Dist: Valsad.

With a request to disconnect the supply of Water with 15 days effect from issue date of this order of the CETP M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

3. The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

You are directed to verify all directions and follow with local authority for compliances of all direction 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

Outward No: 507954.24/05/2019

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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar 382 010

Phone : (079) 23222425

(079) 23232152

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R.P.A.D

AMENDMENT TO CLOSURE 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.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019.
- (4) AND WHEREAS you have applied for revocation of Closure Direction on 01/06/2019 and submitted relevant documents along with notarized undertaking and Revised & Effective Time Bound Action Plan.
- (5) AND WHEREAS Revised Action Plan submitted by you is under implementation.

ORDER

UNDER THE ABOVE CIRCUMSTANCES, I, Sushil Vegda, Senior Environmental Engineer, of Gujarat Pollution Control Board, issue the extension for 15 days of implementation of Closure Directions issued vide order No. GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 with additional direction as under;

1. M/s. Vapi Green Enviro Limited (Vapi- CETP) shall cancel the CETP membership and disconnect the drainage connection in consultation with the GIDC/ Notified Area of those member industries who have not complied with the Hon'ble National Green Tribunal Order dated 11/01/2019 in the matter of O. A. No. 95/2018, Aryavart Foundation Vs. Vapi Green Enviro Limited (Principal Bench, New Delhi) and not deposited interim compensation to CPCB, till they comply.

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Clean Gujarat Green Gujarat

ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

This order is issued after approval of competent authority.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD



(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(19)/ID: 24764/

Issued to:

✓ The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (Vwemcl))
Plot No. Ext ¼, Near Damanganga River,
Via House, Plot No. 135,
Vapi-396195, .
Tal: Pardi,
Dist: Valsad

COPY TO:

1. The Dy. Engineer (O&M)
Dakshin Gujarat Vij Company Ltd.,
GIDC Sub-division, DGVCL,
GIDC, Vapi,
Dist: Valsad.

With a request to disconnect the supply of Electricity (Except Single Phase) after 15 days from the issue date of this order i.e. on 26/06/2019 of the CETP M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly till further order.



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, **Gandhinagar** 382 010

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(079) 23232152

Fax : (079) 23232156

Website : www.gpcb.gov.in

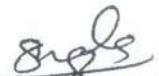
2. The Executive Engineer,
Vapi Notified Area, 2nd floor, G.I.D.C.,
Administration Section, Plot No. C-1/501,
G.I.D.C., Industrial Area,
Killa Pardi, Dist: Valsad.

With a request to disconnect the supply of Electricity (Except Single Phase) after 15 days from the issue date of this order i.e. on 26/06/2019 of the CETP M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly till further order.

3. The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

- (i) You are directed to pursue this matter with CETP and GIDC Authority and to confirm the cancellation of membership certificate and as well as drainage connection of those industries who has not complied with the Hon'ble National Green Tribunal Order dated 11/01/2019 in the matter of O. A. No. 95/2018, Aryavart Foundation Vs. Vapi Green Enviro Limited (Principal Bench, New Delhi) and not deposited interim compensation to CPCB.
- (ii) You are directed to verify all directions and follow with local authority for compliances of all direction in complete manner and then after please send report for further action.
- (iii) Also submit compliance of all action points in percentage matrix.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD


(Sushil Vegda)

Senior Environmental Engineer

Outward No: 509508, 11/06/2019

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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

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R.P.A.D.

REVOCATION ORDER OF CLOSURE ORDER ISSUED UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 and subsequently extended for another 15 days i.e. up to 26/06/2019.
- (4) AND WHEREAS you have applied for revocation of Closure Direction on 01/06/2019 and submitted relevant documents along with notarized undertaking and Revised & Effective Time Bound Action Plan.
- (5) AND WHEREAS Revised Action Plan submitted by you is under implementation.
- (6) AND WHEREAS you have given notarized undertaking on stamp paper of Rs.100/- and submitted bank guarantee of Rs. 50,00,000/- which is valid till the date 23.05.2020.

AND WHEREAS your unit was visited on 18/06/2019 by the authorized officers of Board, during the said visit it was observed that following corrective measures are taken by the unit;

1. Final treated effluent collected from CETP, meeting with the norms.
2. Analysis Report of Sample collected from Final Outlet of CETP indicates COD= 247 mg/l, BOD =18 mg/l, which indicates parameters are within prescribed norms of GPCB.

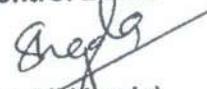
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Under the circumstances, I, Sushil Vegda, Senior Environmental Engineer, Gujarat Pollution Control Board revoke the closure direction issued vide letter No. GPCB/CCA-VSD-1180/ID-23632/502840 dated: 18/04/2019 for **one month from the issue date of this order with following specific condition.**

1. CETP shall comply all pending action points as per Report submitted vide Letter No. VGEL-CETP/GPCB/2019-20/0303 dated 24/06/2019.

This order is issued after approval of competent authority.

For and on behalf of
Gujarat Pollution Control Board


(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(19)/ID: 24764/

Issued to:

✓ The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (Vwemcl))
Plot No. Ext ¼, Near Damanganga River,
Via House, Plot No. 135,
Vapi-396195, .
Tal: Pardi,
Dist: Valsad

COPY TO: -

- 1) The Deputy Engineer (O & M)
Dakshin Gujarat Vij Company Limited,
G.I.D.C. Sub-Division Office,
Near G.I.D.C. Post Office,
Char Rasta, Vapi-396195.

With a request to re-connect the supply of Electricity with immediate effect for **one month** to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar 382 010

Phone : (079) 23222425

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Fax : (079) 23232156

Website : www.gpcb.gov.in

- 2) The Executive Engineer,
Vapi Notified Area
Administrative Section,
Plot No: C-1/ 501, 2nd Floor,
GIDC Vapi, Killa Pardi,
Dist: Valsad

With a request to re-connect the supply of Electricity with immediate effect for **one month** to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 3) The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad..... To carry out inspection and sampling weekly basis to verify the performance of inlet and outlet of CETP and send report to Head Office.

For and on behalf of
Gujarat Pollution Control Board

Sushil Vegda
(Sushil Vegda)

Senior Environmental Engineer

Outward No: 511221, 25/06/2019

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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

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R.P.A.D.

REVOCATION ORDER OF CLOSURE ORDER ISSUED UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. AWH: 95700 dated 14/09/2018 having validity up to 30/03/2023.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 and subsequently extended for another 15 days i.e. up to 26/06/2019.
- (4) AND WHEREAS Gujarat Pollution Control Board has issued Revocation vide order No. GPCB/CCA-VSD-237(19)/ID:24764/511211 dated 25/06/2019 for one month i.e. up to 25/07/2019.
- (5) AND WHEREAS you have applied for revocation dated 18/07/2019 and submitted relevant documents along with notarized undertaking and Revised & Effective Time Bound Action Plan.
- (6) AND WHEREAS Revised Action Plan submitted by you is under implementation.

AND WHEREAS your unit was visited on 29/06/2019, 04/07/2019 and 11/07/2019 by the authorized officers of Board, during the said visit it was observed that following corrective measures are taken by the unit;

1. Final treated effluent collected from CETP, meeting with the norms.
2. Analysis Report of Sample collected dated 11/07/2019 from Final Outlet of CETP indicates COD= 198 mg/l, BOD =23 mg/l, which indicates parameters are within prescribed norms of GPCB.
3. Analysis Report of Sample collected dated 04/07/2019 from Final Outlet of CETP indicates COD= 208 mg/l, BOD =21 mg/l, which indicates parameters are within prescribed norms of GPCB.

Clean Gujarat Green Gujarat

200

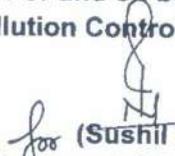
4. Analysis Report of Sample collected dated 29/06/2019 from Final Outlet of CETP indicates COD= 215 mg/l, BOD =23 mg/l, which indicates parameters are within prescribed norms of GPCB.

Under the circumstances, I, Sushil Vegda, Senior Environmental Engineer, Gujarat Pollution Control Board revoke the closure direction issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/507954 dated: 24/05/2019 and amendment to closure directions issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/511211 dated 11/06/2019 which was earlier revoked on 25/06/2019 and now is further revoked for **one month from the issue date of this order with following specific condition.**

1. CETP shall comply all pending action points as per Report submitted vide Letter No. VGEL-CETP/GPCB/2019-20/0359 dated 18/07/2019.

This order is issued after approval of competent authority.

For and on behalf of
Gujarat Pollution Control Board


(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(20)/ID: 24764/

Issued to:

✓ The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (VWEMCL))
Plot No. Ext ¼, Near Damanganga River,
VIA House, Plot No. 135,
Vapi- 396195,
Tal: Pardi,
Dist: Valsad

Outward No: 51260/2019

201



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

COPY TO: -

- 1) The Deputy Engineer (O & M)
Dakshin Gujarat Vij Company Limited,
G.I.D.C. Sub-Division Office,
Near G.I.D.C. Post Office,
Char Rasta, Vapi-396195.

With a request to re-connect the supply of Electricity with immediate effect for **one month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

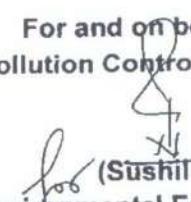
- 2) The Executive Engineer,
Vapi Notified Area
Administrative Section,
Plot No: C-1/ 501, 2nd Floor,
GIDC Vapi, Killa Pardi,
Dist; Valsad

With a request to re-connect the supply of Water with immediate effect for **one month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 3) The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

To carry out inspection and sampling weekly basis to verify the performance of inlet and outlet of CETP and send report to Head Office.

For and on behalf of
Gujarat Pollution Control Board


(Sushil Végda)
Senior Environmental Engineer

Outward No: 515260, 3070



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, **Gandhinagar** 382 010

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Website : www.gpcb.gov.in

R.P.A.D.

REVOCATION ORDER OF CLOSURE ORDER ISSUED UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 and subsequently extended for another 15 days i.e. up to 26/06/2019.
- (4) AND WHEREAS Gujarat Pollution Control Board has issued Revocation vide order No. GPCB/CCA-VSD-237(19)/ID:24764/511211 dated 25/06/2019 for one month i.e. up to 25/07/2019 and then after subsequently it was again extended for another 30 days, i.e. up to 30/08/2019.
- (5) AND WHEREAS you have applied for revocation dated 22/08/2019 and submitted relevant documents along with notarized undertaking and Revised & Effective Time Bound Action Plan.

AND WHEREAS your unit was visited on 22/07/2019, 28/07/2019 and 09/08/2019 by the authorized officers of Board, during the said visit it was observed that following corrective measures are taken by the unit;

1. Final treated effluent collected from CETP, meeting with the norms.
2. Analysis Report of Sample collected dated 22/07/2019 from Final Outlet of CETP indicates COD= 241 mg/l, BOD =24 mg/l, which indicates parameters are within prescribed norms of GPCB.
3. Analysis Report of Sample collected dated 28/07/2019 from Final Outlet of CETP indicates COD= 230 mg/l, BOD = 26 mg/l, which indicates parameters are within prescribed norms of GPCB.

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4. Analysis Report of Sample collected dated 09/08/2019 from Final Outlet of CETP indicates COD= 247 mg/l, BOD =26 mg/l, which indicates parameters are within prescribed norms of GPCB.

AND WHEREAS as per Hon'ble NGT Order in the matter of O.A. No. 95/2018, Aryavart Foundation Vs. M/s. Vapi Green Enviro Ltd. & Ors., CPCB and GPCB jointly inspected CETP Vapi on dated 20/05/2019 and given following recommendations:

- 1) Vapi CETP should upgrade the treatment system / put more efforts in operation for meeting with outlet norms.
- 2) Vapi CETP needs to regulate the discharge of member units to meet the inlet standard, especially concentration of FDS parameter is more than 3.5 times than the prescribed standards.
- 3) Proper Calibration and continual maintenance of OCEMS needs to be done to ensure reliable results of monitored parameters.
- 4) List of defaulting industries should be regularly (monthly) share with GPCB for taking suitable action against these industries.
- 5) Vapi CETP should regularly send the sludge and salt (generated from Common Spray Dryer) to CHWTSDf for proper disposal.

Vapi CETP shall comply above directions within 15 days & submit reply.

Under the circumstances, I, Sushil Vegda, Senior Environmental Engineer, Gujarat Pollution Control Board revoke the closure direction issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/507954 dated: 24/05/2019 and amendment to closure directions issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/511211 dated 11/06/2019 which was earlier revoked on 25/06/2019 and 30/07/2019 and now is further revoked for **one month from the issue date of this order with following specific condition.**

1. CETP shall comply all pending action points as per Report submitted vide Letter No. VGEL-CETP/GPCB/2019-20/0416 dated 21/08/2019.

Outward No: 5181/2019



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

This order is issued after approval of competent authority.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)

Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(20)/ID: 24764/

Issued to:

The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (VWEMCL))
Plot No. Ext ¼, Near Damanganga River,
VIA House, Plot No. 135,
Vapi- 396195,
Tal: Pardi,
Dist: Valsad

COPY TO: -

- 1) The Deputy Engineer (O & M)
Dakshin Gujarat Vij Company Limited,
G.I.D.C. Sub-Division Office,
Near G.I.D.C. Post Office,
Char Rasta, Vapi-396195.

With a request to re-connect the supply of Electricity with immediate effect for **one month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

Outward No. 51/2019

20/5

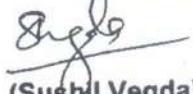
- 2) The Executive Engineer,
Vapi Notified Area
Administrative Section,
Plot No: C-1/ 501, 2nd Floor,
GIDC Vapi, Killa Pardi,
Dist; Valsad

With a request to re-connect the supply of Water with immediate effect for **one month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 3) The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

To carry out inspection and sampling weekly basis to verify the performance of inlet and outlet of CETP and send report to Head Office.

For and on behalf of
Gujarat Pollution Control Board



(Sushil Vegda)

Senior Environmental Engineer

Outward No: 518170, 24/08/2019



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar 382 010

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Website : www.gpcb.gov.in

R.P.A.D.

REVOCATION ORDER OF CLOSURE ORDER ISSUED UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 and subsequently extended for another 15 days i.e. up to 26/06/2019.
- (4) AND WHEREAS Gujarat Pollution Control Board has issued Revocation vide order No. GPCB/CCA-VSD-237(19)/ID:24764/511211 dated 25/06/2019 for one month i.e. up to 25/07/2019 and then after subsequently it was again extended for another 30 days, i.e. up to 30/08/2019 and then after subsequently it was again extended for another 30 days, i.e. up to 24/09/2019.
- (5) AND WHEREAS you have applied for revocation dated 13/09/2019 and submitted relevant documents along with notarized undertaking and Time bound Action Plan.

AND WHEREAS your unit was visited on 20/08/2019, 26/08/2019 and 09/09/2019 by the authorized officers of Board, during the said visit it was observed that following corrective measures are taken by the CETP;

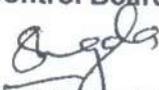
1. Final treated effluent collected from CETP, meeting with the norms.
2. Analysis Report of Sample collected dated 20/08/2019 from Final Outlet of CETP indicates COD= 247 mg/l, BOD =29 mg/l, which indicates parameters are within prescribed norms of GPCB.

3. Analysis Report of Sample collected dated 26/08/2019 from Final Outlet of CETP indicates COD= 245 mg/l, BOD = 29 mg/l, which indicates parameters are within prescribed norms of GPCB.
4. Analysis Report of Sample collected dated 09/09/2019 from Final Outlet of CETP indicates COD= 219 mg/l, BOD =24 mg/l, which indicates parameters are within prescribed norms of GPCB.

Under the circumstances, I, Sushil Vegda, Senior Environmental Engineer, Gujarat Pollution Control Board revoke the closure direction issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/507954 dated: 24/05/2019 and amendment to closure directions issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/511211 dated 11/06/2019 which was earlier revoked on 25/06/2019, 30/07/2019, 24/08/2019 and now is further revoked for **three month from the issue date of this order.**

This order is issued after approval of competent authority.

For and on behalf of
Gujarat Pollution Control Board


(Sushil Vegda)
Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(20)/ID: 24764/

Issued to:

✓ The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (VWEMCL))
Plot No. Ext ¼, Near Damanganga River,
VIA House, Plot No. 135,
Vapi- 396195,
Tal: Pardi,
Dist: Valsad



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

COPY TO: -

- 1) The Deputy Engineer (O & M)
Dakshin Gujarat Vij Company Limited,
G.I.D.C. Sub-Division Office,
Near G.I.D.C. Post Office,
Char Rasta, Vapi-396195.

With a request to continue the supply of Electricity with immediate effect for **three month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

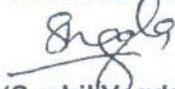
- 2) The Executive Engineer,
Vapi Notified Area
Administrative Section,
Plot No: C-1/ 501, 2nd Floor,
GIDC Vapi, Killa Pardi,
Dist; Valsad

With a request to continue the supply of Water with immediate effect for **three month** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 3) The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

To carry out inspection and sampling weekly basis to verify the performance of inlet and outlet of CETP and send report to Head Office.

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



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

R.P.A.D.

REVOCAION ORDER OF CLOSURE ORDER ISSUED UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974.

- (1) WHEREAS the Common Effluent Treatment Plant i.e. M/s. Vapi Green Enviro Ltd. (CETP- Vapi) located at Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent order no. **AWH: 95700 dated 14/09/2018** having validity up to **30/03/2023**.
- (3) AND WHEREAS Gujarat Pollution Control Board has issued Closure Directions effective on 15th day vide order No GPCB/CCA-VSD-237(19)/ID:24764 dated 24/05/2019 and subsequently extended for another 15 days i.e. up to 26/06/2019.
- (4) AND WHEREAS Gujarat Pollution Control Board has issued Revocation vide order No. GPCB/CCA-VSD-237(19)/ID:24764/511211 dated 25/06/2019 for one month i.e. up to 25/07/2019 and then after subsequently it was again extended for another 30 days, i.e. up to 30/08/2019 and then after subsequently it was again extended for another 30 days, i.e. up to 24/09/2019 and then after subsequently it was again extended for another 3 months, i.e. up to 23/12/2019
- (5) AND WHEREAS you have applied for revocation dated 19/12/2019 and submitted relevant documents along with notarized undertaking and Revised & Effective Time Bound Action Plan.

AND WHEREAS your unit was visited on 01/10/2019, 12/10/2019, 17/10/2019, 11/11/2019, 22/11/2019 and 09/12/2019 by the authorized officers of Board, during the said visit it was observed that following corrective measures are taken by the unit;

1. Final treated effluent collected from CETP, meeting with the norms.
2. Analysis Report of Sample collected dated 01/10/2019 from Final Outlet of CETP indicates COD= 248 mg/l, BOD =29 mg/l, which indicates parameters are within prescribed norms of GPCB.
3. Analysis Report of Sample collected dated 12/10/2019 from Final Outlet of CETP indicates COD= 245 mg/l, BOD = 29 mg/l, which indicates parameters are within prescribed norms of GPCB.

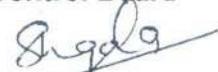
4. Analysis Report of Sample collected dated 17/10/2019 from Final Outlet of CETP indicates COD= 240 mg/l, BOD =21 mg/l, which indicates parameters are within prescribed norms of GPCB.
5. Analysis Report of Sample collected dated 11/11/2019 from Final Outlet of CETP indicates COD= 246 mg/l, BOD =26 mg/l, which indicates parameters are within prescribed norms of GPCB.
6. Analysis Report of Sample collected dated 22/11/2019 from Final Outlet of CETP indicates COD= 240 mg/l, BOD =27 mg/l, which indicates parameters are within prescribed norms of GPCB.
7. Analysis Report of Sample collected dated 09/12/2019 from Final Outlet of CETP indicates COD= 242 mg/l, BOD =24 mg/l, which indicates parameters are within prescribed norms of GPCB.

Under the circumstances, I, Sushil Vegda, Senior Environmental Engineer, Gujarat Pollution Control Board revoke the closure direction issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/507954 dated: 24/05/2019 and amendment to closure directions issued vide letter No. GPCB/CCA-VSD-237(19)/ID-24764/511211 dated 11/06/2019 which was earlier revoked on 25/06/2019, 30/07/2019, 24/08/2019, 23/09/2019 and now is further revoked for **three months from the issue date of this order with following specific condition.**

1. CETP shall comply all pending action points as per Report submitted vide Letter No. VGEL-CETP/GPCB/2019-20/0608 dated 19/12/2019.

This order is issued after approval of competent authority.

For and on behalf of
Gujarat Pollution Control Board



(Sushil Vegda)

Senior Environmental Engineer

NO: GPCB/CCA-VSD-237(21)/ID: 24764/

Issued to:

✓ The Chief Executive Officer,
Vapi Green Enviro Limited (VGEL),
(Old Name: M/S Vapi Waste & Effluent Management Co. Ltd (VWEMCL))
Plot No. Ext ¼, Near Damanganga River,
VIA House, Plot No. 135,
Vapi- 396195,
Tal: Pardi,
Dist: Valsad



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

COPY TO: -

- 1) The Deputy Engineer (O & M)
Dakshin Gujarat Vij Company Limited,
G.I.D.C. Sub-Division Office,
Near G.I.D.C. Post Office,
Char Rasta, Vapi-396195.

With a request to continue the supply of Electricity with immediate effect for **three months** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 2) The Executive Engineer,
Vapi Notified Area
Administrative Section,
Plot No: C-1/ 501, 2nd Floor,
GIDC Vapi, Killa Pardi,
Dist: Valsad

With a request to continue the supply of Water with immediate effect for **three months** from the issue date of this order to the CETP, M/s. Vapi Green Enviro Ltd., located at Plot No. Ext ¼, NEAR DAMANGANGA RIVER, VIA HOUSE, PLOT NO. 135, VAPI-396195, TAL: PARDI, DIST: VALSAD and intimate to us accordingly.

- 3) The Regional Officer,
G.P.C.B.-Vapi,
Plot No. C-5/124, N.H. No.-8,
Near Hotel Pritam, GIDC Vapi,
Dist: Valsad.....

To carry out inspection and sampling weekly basis to verify the performance of inlet and outlet of CETP and send report to Head Office.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)

Senior Environmental Engineer

Clean Gujarat Green Gujarat

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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010

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Fax : (079) 23232156

Website : www.gpcb.gov.in

RPAD

No. GPCB/LGT:NGT:Vapi:94(3)/2019/ 524759 /

Date

18 OCT 2019

To,
GIDC/ Notified area Authority
Plot No. C/5, 101,
Nr. Telephone exchange,
New Office Building, Cross Road,
GIDC Industrial estate,
Vapi- 396195

Sub. Regarding compliance of directions passed in Hon'ble NGT Order
dated 28/08/2019

Ref. Hon'ble NGT Order dated 28/08/2019 (Attached herewith Annexure- A)

Sir,

Hon'ble National Green Tribunal has passed various orders in the matter of
O.A. No. 95/2018, Principal Bench New Delhi (Arayavart Foundation Vs. M/s.
Vapi Green Enviro Limited & Ors.).

WHEREAS, Committee framed under Hon'ble NGT Order dated 11/01/2019
has submitted revised committee report dated 05/08/2019 and mentioned
actions to be undertaken by various authorities i.e. GIDC, Notified area
Authority, local body as mentioned below for the restoration of River Daman
Ganga:

WHEREAS, Hon'ble National Green Tribunal has passed an order dated 28/08/2019 and in Para 11 mentioned various points related to restoration of River Daman Ganga.

WHEREAS attention has been drawn for the following points and you are hereby directed to comply with following points mentioned in the Hon'ble NGT Order dated 28/08/2019:

- (i) "To provide the surface/over ground pipeline from industries to CETP for proper conveyance of effluent wherever technically feasible by removing existing underground pipeline.
- (ii) Restoration of any damaged storm water drains to prevent entry of wastewater into the natural drains in the industrial estate and prevention of entry of industrial wastewater in Bill khadi and its flow downstream to GIDC estate.
- (iii) Proper design and construction of storm water drains within the industrial estate where it is not provided particularly in low lying areas to (i) prevent stagnation of storm water contaminated with industrial wastes (ii) to prevent indiscriminate entry of contaminated storm water into natural drains."

Further for more details, copy of the referred order is enclosed herewith for ready reference and for compliances at your end within stipulated time limit.

This letter is issued after approval of competent authority.


(N.M. Tabhani)

Member Secretary

**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**ENCL:**

1. Annexure-1- Copy of Hon'ble NGT Order dated 28/08/2019

Copy To;

1. GIDC, Head Office, Block No. 3,4,5, Udyog Bhavan, Sector-11, Gandhinagar-382011- For necessary actions please.
2. Regional Office- Vapi, Gujarat Pollution Control Board - For necessary actions please.



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

RPAD

Date 18 OCT 2019

No. GPCB/LGT:NGT:Vapi:94(3)/2019/524753/

To,
Vapi Nagarpalika (Vapi Municipality)
Desaiwad Road,
Behind Police Station, Vapi- 396191,
Gujarat

Sub. Regarding compliance of directions passed in Hon'ble NGT Order
dated 28/08/2019

Ref. Hon'ble NGT Order dated 28/08/2019 (Attached herewith Annexure- A)

Sir,

Hon'ble National Green Tribunal has passed various orders in the matter of
O.A. No. 95/2018, Principal Bench New Delhi (Arayavart Foundation Vs. M/s.
Vapi Green Enviro Limited & Ors.).

WHEREAS, Committee framed under Hon'ble NGT Order dated 11/01/2019
has submitted revised committee report dated 05/08/2019 and mentioned
actions to be undertaken by various authorities i.e. GIDC, Notified area
Authority, local body as mentioned below for the restoration of River Daman
Ganga:

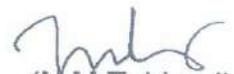
WHEREAS, Hon'ble National Green Tribunal has passed an order dated
28/08/2019 and in Para 11 mentioned various points related to restoration of
River Daman Ganga.

WHEREAS attention has been drawn for the following points and you are hereby directed to comply with following points mentioned in the Hon'ble NGT Order dated 28/08/2019:

- (i) "Proper design and construction of storm water drains and sewerage network within the local bodies where it is not provided particularly (i) in low lying areas to prevent stagnation of storm water contaminated with wastes (ii) to prevent indiscriminate entry of contaminated storm water into natural drains and finally river Damanganga.
- (ii) Control domestic/commercial wastewater (sewage) discharges into the River through proper collection and treatment from residential and commercial areas and treatment through STPs. The STPs shall be designed to reuse of treated sewage for industrial reuse/ landscaping / firefighting and agriculture purpose.
- (iii) Prevent dumping of solid waste from towns and villages on the banks of river.
- (iv) Identification of plots for solid waste landfill development. The appropriate authority should take care of their concern projects for restoring the environment."

Further for more details, copy of the referred order is enclosed herewith for ready reference and for compliances at your end within stipulated time limit.

This letter is issued after approval of competent authority.


(N.M. Tabhani)

Member Secretary

2/7



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

ENCL:

1. Annexure-1- Copy of Hon'ble NGT Order dated 28/08/2019

Copy To;

1. Regional Office- Vapi- For necessary actions please

ANNEXURE- K

JOINT MONITORING OF CETP -M/S VAPI GREEN ENVIRO LTD., GIDC VAPI BY CPCB & GPCB

AS PER ORDER OF HON'BLE NGT, PB, NEW DELHI DATED 11.01.2019 IN OA NO. 95 OF 2018

(ARYAVART FOUNDATION VS M/S VAPI GREEN ENVIRO LTD. (CETP, VAPI) & ORS

| Sampling Location(s) | Date of sampling | pH | TSS | TDS | BOD | COD | O & G | NH ₃ -N | Phenols | S ⁻² | CN ⁻ |
|----------------------|------------------|---------|-----|-------|-----|------|-------|--------------------|---------|-----------------|-----------------|
| Inlet/Design Norms→ | | 6.5-8.5 | 300 | 2100 | 400 | 1000 | 10 | 50 | 1 | 2 | 0.2 |
| Inlet to CETP | 12.02.2019 | 8.02 | 188 | 4714* | 288 | 1184 | -- | 55 | 2.37 | -- | -- |
| | 20.05.2019 | 7.64 | 188 | 7318 | 242 | 884 | 3.5 | 26 | 0.83 | 2.4 | 0.11 |
| | 13.08.2019 | 7.48 | 564 | 7384 | 804 | 1665 | 5.3 | 46.5 | 0.67 | 3 | 0.1 |
| | 13.11.2019 | 7.17 | 400 | 6724 | 538 | 1377 | 3.09 | 23.72 | 13.86 | 2.79 | 0.1 |
| Final Outlet | 12.02.2019 | 7.21 | 34 | 4852 | 28 | 258 | -- | 43 | 0.84 | -- | -- |
| | 20.05.2019 | 7.05 | 124 | 5556 | 65 | 404 | 5.3 | 44.3 | 0.24 | 0.7 | 0.16 |
| | 13.08.2019 | 6.98 | 77 | 6861 | 36 | 255 | 3.1 | 29 | 0.27 | 0.13 | 0.06 |
| | 13.11.2019 | 7 | 72 | 8260 | 35 | 249 | 0.91 | 20.8 | 0.25 | 0.47 | 0.057 |
| GPCB Standards | | 6.5-8.5 | 100 | 2100 | 30 | 250 | 10 | 50 | 1.0 | 2.0 | 0.2 |

Note:

- Mode of sampling: Grab.
- All the parameters are expressed in mg/l, except pH.
- *FDS

ANNEXURE- L

MONITORING OF CETP -M/S VAPI GREEN ENVIRO LTD., GIDC VAPI BY GPCB, RO, VAPI

| Date of Sampling | BOD | | COD | | NH ₃ -N | | pH | | SS | |
|------------------|------------|-----------|-------------|------------|--------------------|-----------|----------------|----------------|------------|------------|
| | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet |
| Norms→ | 400 | 30 | 1000 | 250 | 50 | 50 | 6.5-8.5 | 6.5-8.5 | 300 | 100 |
| 08-05-19 | 440 | 33 | 1640 | 298 | 70 | 67 | 6.69 | 7.17 | 112 | 66 |
| 23-05-19 | 252 | 32 | 1189 | 292 | 45 | 41 | 8.17 | 8.01 | 142 | 72 |
| 27-05-19 | 293 | 30 | 1165 | 272 | 86 | 48 | 7.53 | 7.49 | 78 | 64 |
| 06-06-19 | 235 | 29 | 1009 | 245 | 85 | 39 | 8.29 | 8.11 | 98 | 76 |
| 10-06-19 | 238 | 27 | 990 | 241 | 38 | 32 | 7.69 | 7.14 | 178 | 56 |
| 18-06-19 | 218 | 18 | 1029 | 247 | 58 | 41 | 7.95 | 7.18 | 134 | 88 |
| 29-06-19 | 130 | 23 | 659 | 215 | 12 | 18 | 7.53 | 7.61 | 88 | 82 |
| 04-07-19 | 201 | 21 | 849 | 208 | 54 | 34 | 7.81 | 7.35 | 78 | 62 |
| 11-07-19 | 170 | 23 | 652 | 198 | 15 | 27 | 7.96 | 8.02 | 142 | 50 |
| 22-07-19 | 245 | 24 | 1023 | 241 | 38 | 41 | 7.96 | 7.51 | 42 | 48 |
| 28-07-19 | 195 | 26 | 863 | 230 | 21 | 31 | 8.07 | 7.32 | 72 | 44 |
| 09-08-19 | 360 | 26 | 1251 | 247 | 54 | 44 | 8.21 | 8.04 | 138 | 70 |
| 20-08-19 | 254 | 29 | 907 | 247 | 46 | 41 | 7.98 | 7.47 | 82 | 70 |
| 26-08-19 | 315 | 29 | 1241 | 245 | 42 | 48 | 7.53 | 7.21 | 56 | 48 |

Annexure-LContd..GPCB Monitoring Results-

| Date of Sampling | BOD | | COD | | NH ₃ -N | | pH | | SS | |
|------------------|------------|-----------|-------------|------------|--------------------|-----------|----------------|----------------|------------|------------|
| | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet |
| Norms→ | 400 | 30 | 1000 | 250 | 50 | 50 | 6.5-8.5 | 6.5-8.5 | 300 | 100 |
| 09-09-19 | 210 | 24 | 858 | 219 | 39.59 | 36.86 | 6.81 | 7.31 | 84 | 62 |
| 19-09-19 | -- | 27 | 863 | 243 | 48 | 44 | 8.31 | 8.07 | 86 | 54 |
| 01-10-19 | 264 | 29 | 1198 | 248 | 46 | 43 | 8.11 | 7.74 | 112 | 86 |
| 12-10-19 | 215 | 29 | 824 | 245 | 48 | 46 | 7.17 | 7.43 | 94 | 72 |
| 17-10-19 | 293 | 21 | 1164 | 240 | 58 | 46 | 8.41 | 7.45 | 94 | 40 |
| 11-11-19 | 308 | 26 | 1184 | 246 | 45 | 41 | 7.15 | 7.66 | 154 | 76 |
| 22-11-19 | 263 | 27 | 1139 | 240 | 48 | 43 | 7.42 | 7.51 | 96 | 84 |
| 09-12-19 | 215 | 24 | 912 | 242 | 48 | 42 | 7.85 | 7.55 | 88 | 66 |
| 20-12-19 | 247 | 28 | 1058 | 244 | 49 | 35 | 7.26 | 7.43 | 86 | 82 |
| 25-12-19 | 330 | 26 | 1240 | 244 | 44.3 | 40.7 | 7.75 | 7.42 | 192 | 88 |
| 27-12-19 | 345 | 24 | 1282 | 235 | 48.02 | 46.05 | 7.44 | 7.07 | 114 | 70 |
| 29-12-19 | 308 | 26 | 1107 | 243 | 43.14 | 39.42 | 7.73 | 7.16 | 88 | 78 |