

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,**  
**Principal Bench, New Delhi**  
**Original Application No. 64/2016 (WZ)**

**In The Matter of: -**

**Akhil Bhartiya Mangela Samaj & Ors.**

**Applicants**

**Vs.**

**Maharashtra Pollution  
Control Board & Ors.**

**Respondents**

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**(BHARAT K SHARMA)**

Regional Director  
Central Pollution Control Board,  
Regional Directorate, Pune

Date: 27.07.2020  
Place: Delhi

# **REPORT OF SECOND JOINT INSPECTION-CUM- MONITORING OF COMMON EFFLUENT TREATMENT PLANT (CETP) TARAPUR INDUSTRIAL AREA, MAHARSHTRA**

(As per order of the Hon'ble National Green Tribunal (NGT), dated 26.09.2019 read with order dated 22/10/2019 in Original Application NO. 64 of 2016 (WZ) Akhil Bhartiya Mangela Samaj & Ors. Vs Maharashtra Pollution Control Board & Ors. )

Prepared  
By



**CENTRAL POLLUTION CONTROL  
BOARD**



**MAHARASHTRA POLLUTION CONTROL  
BOARD**

**FOR SUBMISSION TO**

**HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

**JULY 2020**

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# REPORT OF SECOND JOINT INSPECTION-CUM- MONITORING OF COMMON EFFLUENT TREATMENT PLANT (CETP) TARAPUR INDUSTRIAL AREA, MAHARASHTRA

## 1. BACKGROUND

The Hon'ble National Green Tribunal, Principal Bench, New Delhi, vide order dated 26.09.2019 read with order dated 22/10/2019 in the matter of Original Application (OA) NO. 64 of 2016 (WZ); Akhil Bhartiya Mangela Samaj & Ors. Vs Maharashtra Pollution Control Board & Ors; passed various directions including constitution of Committee to assess extent of damage; cost of restoration of the environment; individual accountability of CETP and polluting industrial units after giving hearing to polluting units which be provided by Maharashtra Pollution Control Board (MPCB) along with nature and period of violation. Report in this regard has been submitted by CPCB to the Hon'ble Tribunal vide email dated 19/6/2020.

One of the directions of the Hon'ble Tribunal, vide the aforesaid orders under para 7(ix), is that *“CPCB shall undertake jointly with MPCB extensive surveillance and monitoring of the CETP at regular intervals of three months and submit its report to this Tribunal”*.

In compliance with aforesaid orders of the Hon'ble Tribunal, first quarterly joint inspection-cum-monitoring of CETP Tarapur located at Plot No. AM-29, MIDC Tarapur, Dist. Palghar (Maharashtra) by officials of CPCB & MPCB was conducted on 13.11.2019 and the report was submitted to the Hon'ble Tribunal vide email dated 02/1/2020. The second quarterly joint inspection-cum-monitoring of the CETP was conducted on 12.03.2020 by the following officials:

From CPCB:

- Shri Bharat Kumar Sharma, Regional Director (Pune)
- Shri Saket Kumar, Scientist B, Regional Directorate (Vadodara)

From MPCB:

- Shri Manish Holkar, Sub-Regional Officer (Tarapur)
- Shri Utkarsh Shingare, Field Officer (Tarapur)

During the visit of CETP, officials of MIDC Shri R.V. Anasane (Deputy Engineer) & Mr. P.S. Kadam (Assistant Engineer) and representative of TEPS-CETP – Shri G.S. Jadhav (GM) were also present.

## 2. CETP MONITORING & ANALYSIS RESULTS:

The CETP was found operational during visit. Stage wise grab sampling of effluent from various stages of the CETP and inlet & outlet sumps were carried out during the visit of the committee on 12.03.2020. The samples were analyzed at Central Laboratory, MPCB, Navi Mumbai. The sampling locations are given in Table-1 and the analysis results are given in the **Table-2, 3 & 4.**

**Table-1: Sampling locations of CETP and Sumps**

S.N.	Location Description(s)
1	Inlet to CETP (from MIDC Sump-1+ Gravity)
2	Inlet to CETP (from MIDC Sump-3)
3	Inlet to CETP (from MIDC Sump-4)
4	CETP Inlet (mixed influent) (collection tank after O & G trap,)
5	Outlet of Equalization Tanks
6	Outlet of Primary clarifier
7	Outlet of Secondary Clarifier
8	Outlet of CETP (from MIDC Sump-2) (premises near CETP)
9	Outlet of CETP (MIDC BPT) near Navapur seashore

**Table-2: Analysis results of effluent monitoring carried-out at CETP Tarapur – inlet sumps & inlet of CETP (12.03.2020)**

Sampling Locations→ Parameters	CETP Design value	Inlet to CETP (from MIDC Sump 1+ Gravity)	Inlet to CETP (from MIDC Sump-3)	Inlet to CETP (from) MIDC Sump-4	CETP Inlet (mixed influent )	Outlet of Equalization	Inlet Standard as per the Consent
pH	5.5-7	3.6	1.2	4.7	3.3	5.7	6-9
TSS	300-400	126	518	251	401	664	Refer Note below
TDS	--	12572	19660	14763	16313	11152	
BOD	1500	1650	5400	2150	2400	1750	Refer Note below
COD	3500	5280	25600	6720	8400	5400	
Phenols	--	--	7.98	8.99	7.99	10.2	5
Total Ammonical Nitrogen (TAN)	--	275	280	271	274	271	50
Total Kjeldahl's Nitrogen (TKN)	--	456	1282	818	924	512	NS

Phosphate	--	2.15	1.39	1.99	4.33	0.19	NS
Sulphate	--	6705	650	5936	6895	4690	NS
Chloride	--	2769	5598	5648	4914	3089	NS
Fluoride	--	1.3	6.8	5	2.8	1	15

All values are in mg/l except pH; Mode of sampling – Grab; NS – Not Specified

Note: The Consent stipulates CETP Inlet norms for SSI industries (discharge up to 25 m<sup>3</sup>/day) i.e. Industries' Outlet norms- BOD: 1500 mg/l, COD: 3500 mg/l. The SSI (more than 25 m<sup>3</sup>/day), MSI and LSI units, are required to discharge effluent to CETP within stipulated standards in their individual consent (i.e. COD: 250mg/l; BOD 100 mg/l and other parameters & limits specified therein).

**Table-3 Analysis results of stage wise effluent sampling from inlet to outlet of CETP**

S. No.	Sampling Locations → Parameters	CETP Inlet	Outlet of Equalization	Outlet of Primary clarifier	Outlet of Secondary Clarifier	Outlet of CETP (MIDC Sump 2)	Outlet of CETP (MIDC BPT) near Navapur beach	Outlet Standards MPCB
1	pH	3.3	5.7	6.8	7.2	6.7	6.5	6.0 -9.0
2	TSS	401	664	142	432	345	331	100
3	TDS	16313	11152	8183	9919	10904	10936	NS
4	BOD	2400	1750	1525	1200	1450	1350	30
5	COD	8400	5400	4200	3720	4160	4680	250
6	Phenols	7.99	10.2	11.07	11.01	8.50	10.97	5
7	Total Ammonical Nitrogen (TAN)	274	271	328	287.5	184	150.5	50
	Total Kjedaahl's Nitrogen (TKN)	924	512	565.6	484.4	492.8	562.8	50
	Phosphate	4.33	0.19	0.15	1.76	1.92	0.23	NS
	Sulphate	6895	4690	4300	4172	4162	5366	NS
	Chloride	4914	3089	2989.1	2149.3	3324	2179.3	NS
	Fluoride	2.8	1	1.1	0.9	0.9	0.9	15
	Cyanide	--	--	--	--	--	0.39	0.2

Mode of sampling – Grab; NS – Not Specified; All values are in mg/L, except pH

**Table-4: Analysis results of metals in inlet & outlet effluent of CETP inlet and at Outfall**

S. No.	Sampling Locations	Inlet standards (as per Consent)	CETP Inlet	Outlet of CETP (MIDC BPT) near Navapur seashore	Outlet standard S (as per Consent)	
1	Metals	Iron(mg/l)	<b>NS</b>	204	<b>191</b>	<b>3</b>
2		Lead(mg/l)	<b>1</b>	0.09	0.03	<b>0.1</b>
3		Nickel(mg/l)	<b>3</b>	0.33	0.32	<b>3</b>
5		Copper (mg/l)	<b>3</b>	1.66	0	<b>3</b>
7		Zinc(mg/l)	<b>15</b>	3.34	3.98	<b>15</b>
9		Manganese (mg/l)	--	2.86	1.55	<b>2</b>
10		Mercury (mg/l)	<b>0.01</b>	0.002	0.002	<b>0.01</b>

Mode of sampling – Grab; NS – Not Specified

### **3. MONITORING RESULTS ANALYSIS & THEIR COMPARISON WITH PREVIOUS MONITORING RESULTS:**

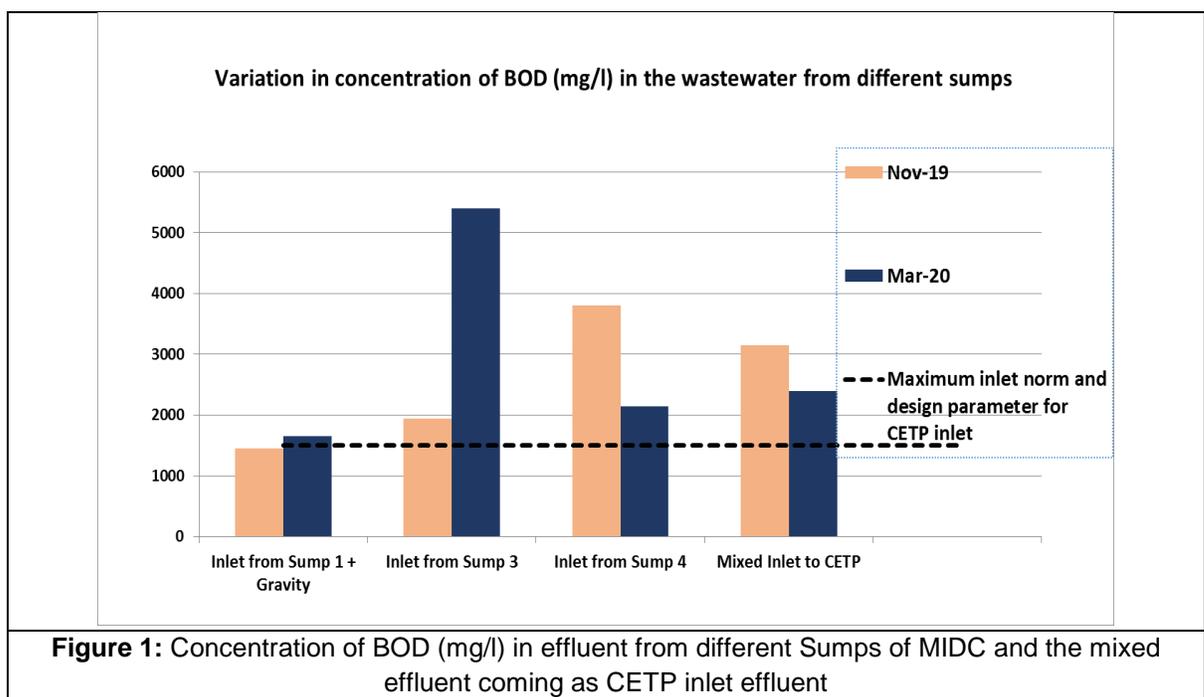
#### **(a) Continued Non-compliance of CETP Inlet Effluent Quality with the Design Norms/Prescribed Limits**

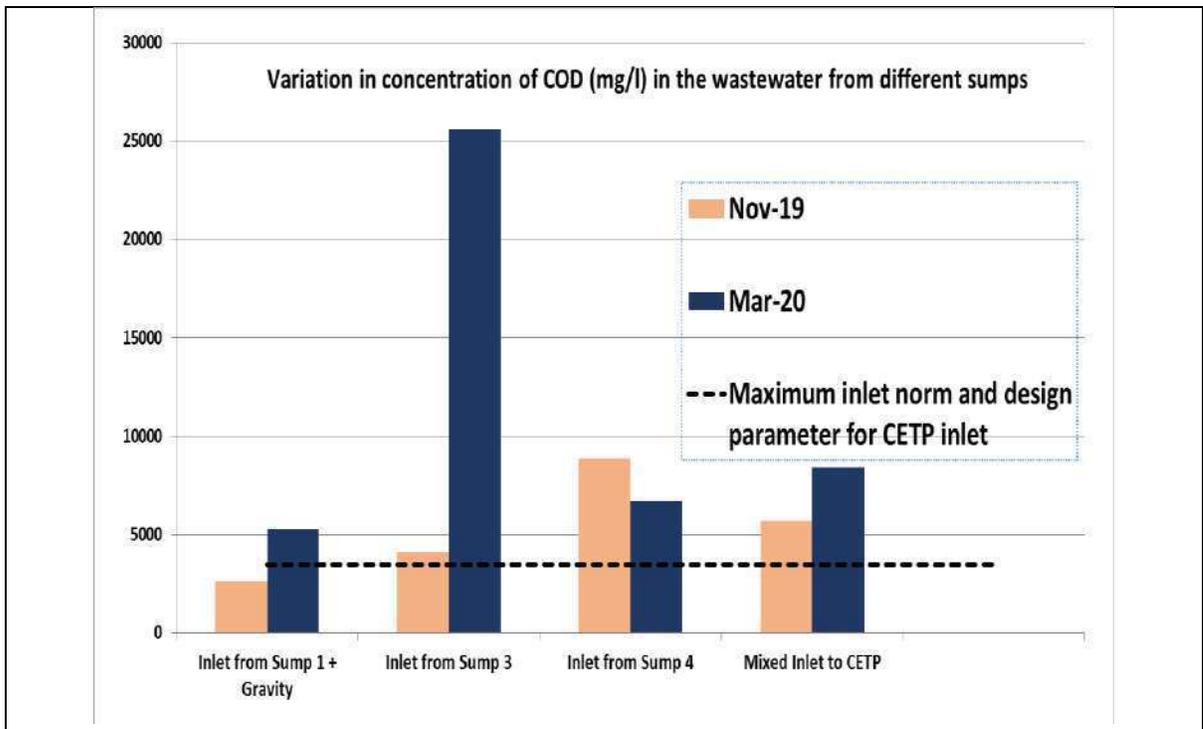
Among the monitored parameters vis-à-vis prescribed CETP inlet effluent parameters' limit stipulated under the Consent to Operate (given at Annexure I) or CETP design norms, the above analysis results of the CETP inlet samples (given at Table 2 and Table 4) taken during the monitoring reveal that:

- (i) Concentration of BOD and COD are not meeting the inlet design norms of the CETP inlet effluent of 1500 mg/l and 3500 mg/l respectively. The same are exceeding 1.6 and 2.4 times the said design norms respectively.
- (ii) Phenol and TAN at the inlet of the CETP are exceeding the prescribed CETP inlet effluent limit under the Consent to Operate of 5 mg/l and 50 mg/l respectively. The same are exceeding 1.6 and 5.5 times the said limit respectively.
- (iii) pH of CETP inlet effluent is not meeting the prescribed range under the Consent to Operate. The same is 3.3 against the said prescribed range of 6-9.
- (iv) However, Fluoride and monitored metals are within the CETP inlet limit prescribed under the Consent to Operate.

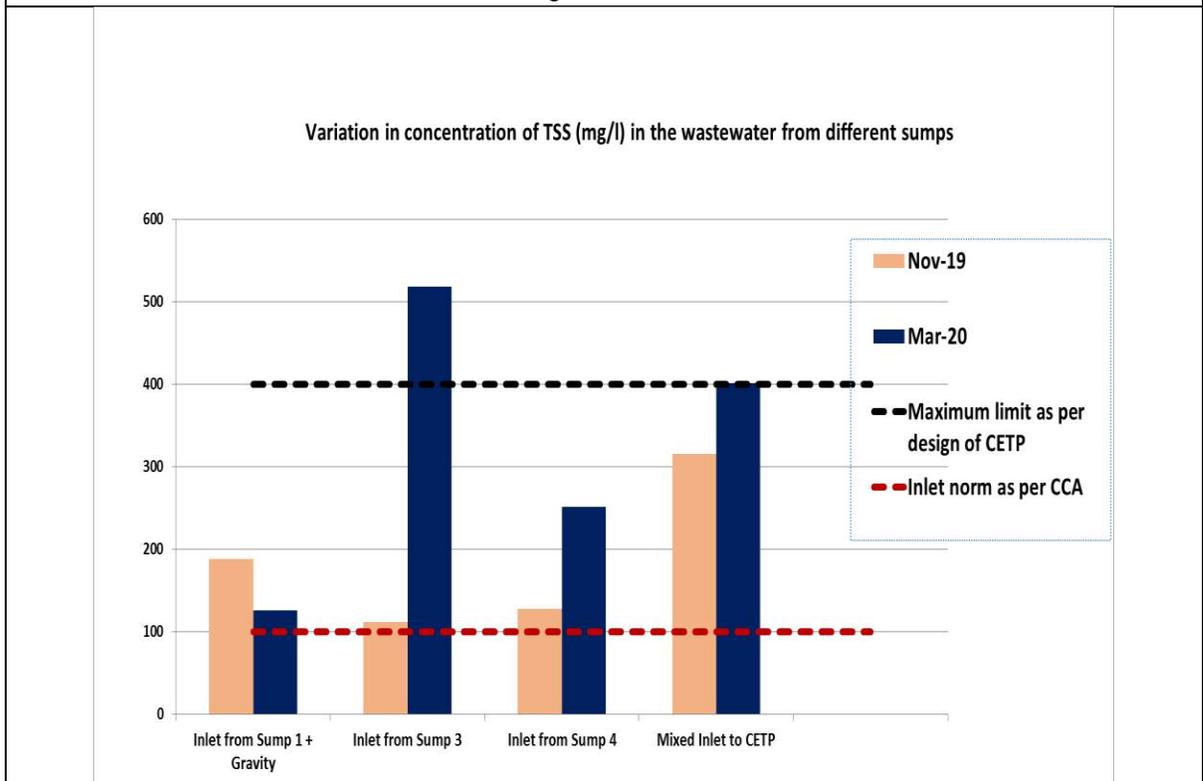
Each of the three inlet effluent sources to the CETP (viz. from MIDC Sump 1+ Gravity; MIDC Sump-3, and MIDC Sump-4) are also exceeding the aforesaid parameters in terms of respective CETP inlet design parameters or limit prescribed under the Consent to Operate and the effluent from MIDC Sump-3 contribute maximum exceedances.

Comparison of concentration of various CETP inlet effluent parameters observed during this sampling on 12.03.2020 and to that of earlier sampling on 13.11.2019 is shown in Figure 1 to Figure 3. The same reveal that there is hardly any improvement in CETP inlet effluent quality.





**Figure 2:** Concentration of COD (mg/l) in effluent from different Sumps of MIDC and the mixed effluent coming as CETP inlet effluent



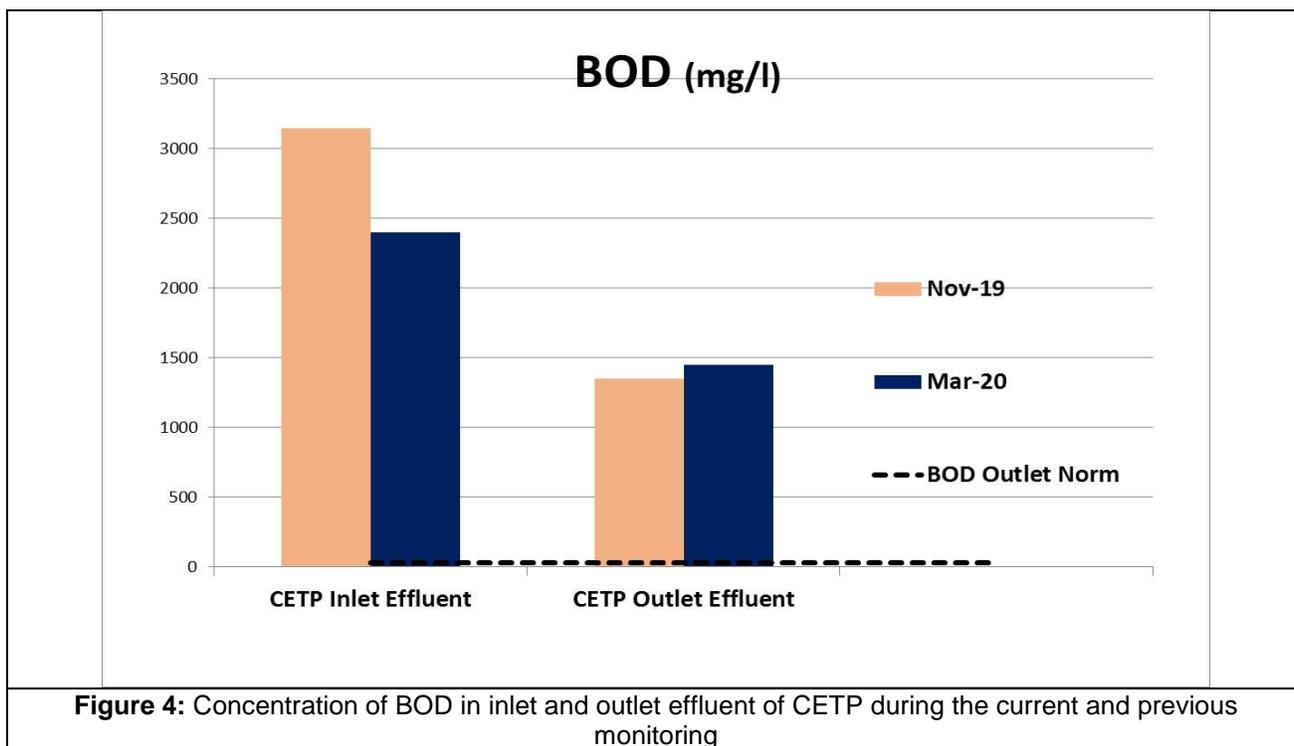
**Figure 3:** Concentration of TSS (mg/l) in effluent from different Sumps of MIDC and the mixed effluent coming as CETP inlet effluent

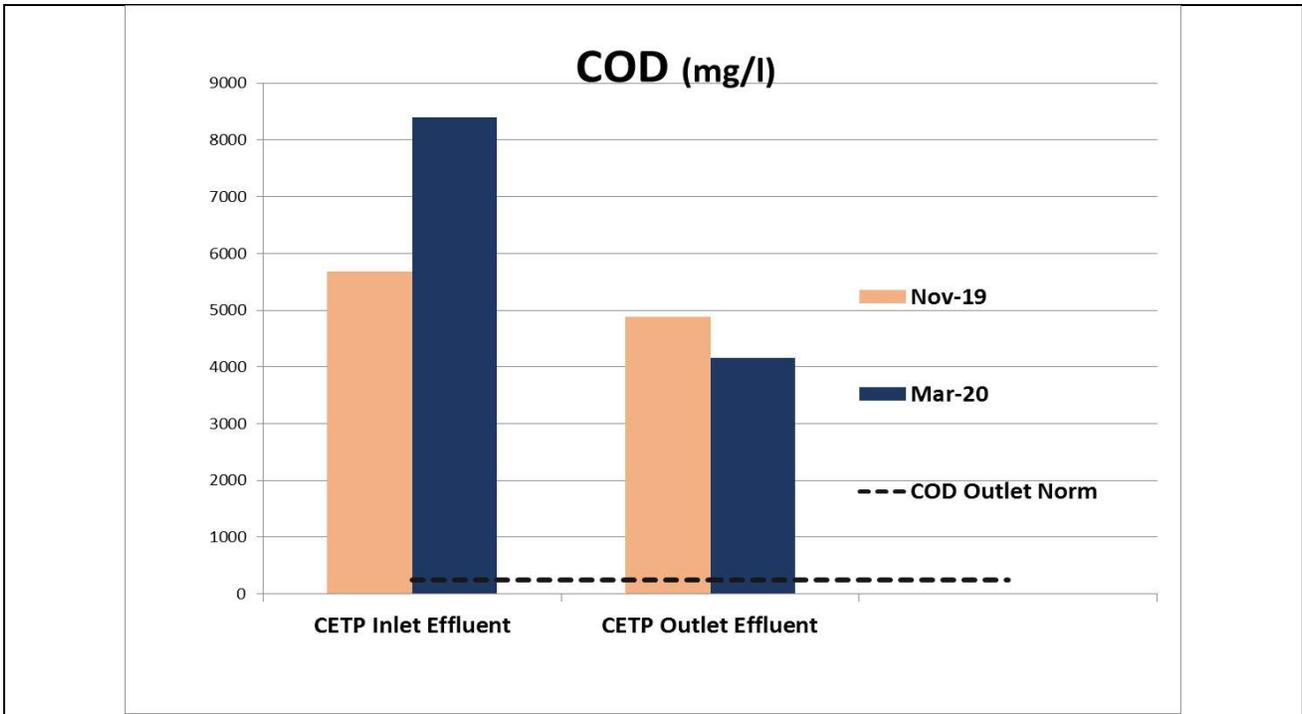
**(b) Continued Non-compliance of CETP Outlet Effluent Quality with the Prescribed Limits**

Among the monitored parameters vis-à-vis prescribed CETP outlet effluent parameters' limit stipulated under the Consent to Operate (given at Annexure I), the above analysis results of the CETP outlet samples (given at Table 3 and Table 4) taken during monitoring reveal that:

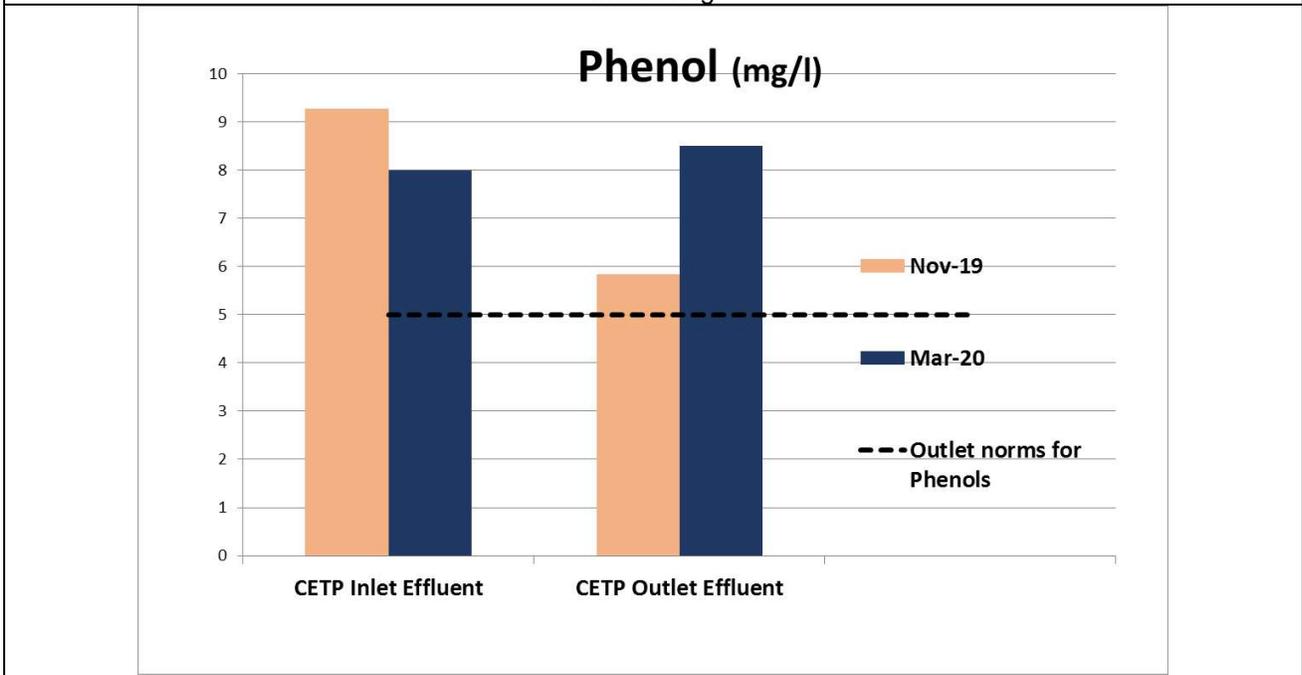
- (i) BOD, COD, TKN, TAN and Phenols are exceeding the prescribed CETP outlet effluent limit under the Consent to Operate of 30 mg/l, 250 mg/l, 50 mg/l, 50 mg/l and 5 mg/l respectively. The same are exceeding 48.3, 16.6, 9.9, 3.7 and 1.7 times the said outlet limit respectively.
- (ii) However, pH and Fluoride are within the prescribed outlet limit under the Consent to Operate.

Comparison of concentration of various CETP outlet effluent parameters observed during this sampling on 12.03.2020 and to that of earlier sampling on 13.11.2019 is shown in Figure 4 to Figure 6. The same reveal that there is hardly any improvement in CETP outlet effluent quality and thus performance of CETP.





**Figure 5:** Concentration of COD in inlet and outlet effluent of CETP during the current and previous monitoring



**Figure 6:** Concentration of Phenol in inlet and outlet effluent of CETP during the current and previous monitoring

**(c) Continued exceedance of Hydraulic Load of CETP to the Design/Prescribed Limit and illegal Discharges**

The CETP is designed for 25 MLD capacity. The Consent to Operate (given at Annexure I) also stipulates that daily quantity of effluent to be treated shall not exceed 25 MLD and the treated effluent of 25 MLD shall be disposed at the Marine outfall point.

Overflows from equalisation tank and one aeration tank (Tank No. C) was observed. The overflow from the equalisation tank is being channelized to Sump no. 2 (which is used for pumping treated effluent to Navapur Marine Outfall) with temporary arrangement since 07/03/2020. Prior to that this overflow was discharged into the storm water drain (originating from plot No. E-13 and further meeting into Navapur-Dandi creek through Salvad village). Overflow from the aeration tank is being discharged into the same storm water drain meeting into Navapur-Dandi creek.

The only flow meter, as CETP inlet flow measurement, has been provided after equalisation tanks. Therefore, the hydraulic load coming to CETP and overflow of untreated effluent could not be ascertained though the CETP operator informed that 28 MLD is being received at CETP of which about 3 MLD is the overflow.

Further, overflow from the said Sump No. 2 (for pumping treated effluent to Navapur outfall) was also observed. The overflow is discharged into the same storm water drain meeting to Navapur- Dandi creek.

There is no proper arrangement of flow meter for measuring CETP outlet also. Flow meter has been operating in only one line of the two lines used for conveying CETP treated effluent to the Navapur Marine Outfall. However, based on pump capacity and pump operation duration records available at Sump No. 2, it reveal that only about 12 MLD is being pumped to Navapur outfall since 27/12/2019. Therefore, the expected remaining treated effluent (not conforming to the prescribed standards) of about 13 MLD is also being discharged as overflow from Sump No. 2 to the aforesaid drain meeting into Navapur-Dandi Creek.

Effluent samples from the aforesaid drain adjacent to the said Sump No. 2 was also taken by the inspecting team and analysed at Central Laboratory, MPCB, Navi Mumbai, and the analysis results are given at Annexure II.

Another overflow in Sump No. 3 (used to pump the effluent to CETP ) was also observed and the overflow goes to drain originating at plot no. N-27, MIDC Tarapur and meeting to Murbhe-Kharekuram creek. The MIDC officials and CETP operator informed that the overflow in Sump no.III happens usually once or twice in a week.

The above observations and findings reveal that the CETP is consistently not complying with design norms/consented capacity of 25 MLD and receiving effluent exceeding to the said capacity by about 3 MLD. Flow meters are not adequate to monitor inlet and outlet of CETP. The excess 3 MLD is being discharged into the adjacent storm water drain (originating from plot No. E-13 and further meeting into Navapur-Dandi creek through Salvad village). Further, about 13 MLD of the CETP outlet effluent not conforming to the prescribed standard is also discharged through the said storm water drain into the Navapur-Dandi Creek violating to the consent condition that treated CETP effluent to be disposed at the designated Marine outfall point.

Further, overflow from Sump No. 3 (used to pump the effluent to CETP ) also occurs intermittently and the same flows into the drain originating at Plot No. N-27, MIDC Tarapur and meeting to Murbhe-Kharekuram creek.

**(d) Poor CETP Sludge Management and inconsistency in CETP Sludge Generation**

Among the 10 nos. of sludge drying beds which are located near Sump-4, 04 nos. of sludge drying beds were empty and 06 nos. beds were filled with the CETP sludge beyond capacity as shown in photos in Annexure III. Moreover, sludge was found indiscriminately scattered in areas across Sump No. 2, Equalisation Tank and Sump No. 4 which may be because of overflows or poor management of sludge.

The CETP sludge sent to the CHWTSDF during Jan, Feb and till March 17th of 2020 are 415.43 Tonnes, 328.24 Tonnes and 108.93 Tonnes respectively. Such wide variation indicate inconsistency in CETP sludge sent to common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF), Taloja. It indicates that either CETP is not operated uniformly/regularly or there is wide variation in CETP inlet effluent quality.

**4. CONTINUED IMPROPER OPERATION OF ALL MAJOR TREATMENT UNITS OF CETP & SLUDGE DEPOSITIONS:**

Observations on working condition of treatment units of the CETP are given in Table 5 below:

**Table 5: Observation on working condition of treatment units of the CETP**

<b>Treatment Unit</b>	<b>Observation</b>
Equalization Tank	<ul style="list-style-type: none"> <li>• One of the four floating mixers provided in the equalization tank for uniform mixing of wastewater was not operational since long.</li> <li>• The equalization tank is expected to be accumulated with sludge deposition quantity of which needs to be assessed and removed by the CETP operator.</li> </ul>
Primary Clarifiers (02 nos.)	(i) Only one of two nos. of Primary clarifiers viz. Primary Clarifier-II was operational during visit. The other Primary Clarifier-I is not operational for more than a year due to sludge accumulation and mechanical damage.
Aeration Tank (04 nos.)	<p>(ii) 04 nos. of aeration tank is provided with 09 aspirators in each tank (total 36 aspirators) for aeration and agitation. However, only 04 nos. of aspirators were operational in each of the 04 aeration tanks. Further, proper air diffusion was observed only in 04 nos. of aspirators out of the said 16 operational aspirators.</p> <p>(iii) Dissolved oxygen monitoring system was not operational.</p> <p>(iv) The aeration tanks are expected to be accumulated with sludge deposition quantity of which needs to be assessed and removed by the CETP operator.</p>
Secondary Clarifier (02 nos.)	(v) One of the 02 nos. of Secondary clarifiers (I & II) i.e. Secondary Clarifier no. I was not in operation since past 12 months due to sludge accumulation and mechanical damage.
Hypo-chlorite Oxidation Tank	(vi) The oxidation system was not operational since a week.
PSF and ACF (04 nos.)	(vii) The filters are not operational since long and are defunct.

Observations outlined in the above Table 5 reveal that none of the major treatment units of the CETP are functioning properly whereas PSF and ACFs are completely defunct as also reported in the report of previous joint inspection report conducted on 13/11/2019. Further, there could be sludge accumulation in equalization tank and aeration tanks and such accumulated quantity need to be assessed and removed by the CETP operator.

**5. CONTINUED IMPROPER CETP INLET & OUTLET FLOW MEASUREMENT & NON-OPERATIONAL ONLINE CONTINUOUS MONITORING SYSTEM**

- (i) Online continuous monitoring system (OCMS) provided at CETP inlet and outlet were found not in operation and in working condition.

- (ii) The flow meters provided as CETP inlet and outlet effluent measurement are not representing actual inlet and outlet flows as – (i) the CETP inlet flow meter is installed after equalisation tanks which do not measure actual inlet flow due to overflow from equalization tank, and (ii) CETP outlet flow meter has been provided in only one of the two 2 lines from Sump No. 2 which convey effluent to the designated marine outfall point.

## **6. OTHER OBSERVATIONS**

- The CETP operator has provided display board regarding wastewater discharge, quantity and quality of hazardous waste, etc., which is required as per Hon'ble Supreme Court's order in WP(C) 657/1995 and Hon'ble NGT order in OA 804/2017. However, updated information on the same such as waste water handled, hazardous waste generated and sent to common TSDf, etc. are not being provided in the display board.
- One bore well having 3 HP pump was found installed within the CETP premises without having requisite permission from concerned authority. The operator informed that the water from bore well is used preparing for lime slurry for use in neutralisation tank and flash mixing.
- It was informed by TEPS CETP and MIDC officials that in sump No. 3 and Sump No. 4 (used for effluent inlet to CETP), sludge of about 102 M.T. and 10 M.T. are accumulated respectively occupying at 60 % & 23 % of the sump capacity. The same needs to be assessed and removed.
- The Consent to Operate and Authorisation dated 24/12/2019 have been issued by MPCB to the new CETP at Plot No. OS-30(pt), MIDC Tarapur, for 25 MLD of the proposed 50MLD. Copy of the same is given at Annexure IV.  
However, the new CETP is yet to be operational. Diffused Air Protection Unit of the CETP for removal of Suspended Solids has not been installed and pipeline for conveying treated effluent for disposal has also not been completed.

## **7. ACTION TAKEN BY CETP OPERATOR AFTER PREVIOUS VISIT OF THE JOINT INSPECTION ON 13.11.2019:**

The actions taken by the CETP operator after joint inspection-cum-monitoring of CPCB and MPCB on 13.11.2019 are as below:

- (i) 01 decanter centrifuge of capacity 30 m<sup>3</sup>/hr has been provided for de-sludging Sump No. 2 used for storage of treated wastewater. The sludge separated is stored on nearby ground over a HDPE liner for drying. The de-sludging operation has been started since November 2019. The CETP has disposed 1012.65 MT of sludge from Sump No. 2 to CHWTSDF Taloja and around 250 MT separated sludge was kept for drying.

**Table 6: Sludge disposal data of Sump-2 to CHWTSDF**

<b>Month-Year</b>	<b>Amount of sludge disposed to CHWTSDF Taloja (MT)</b>
Nov-19	127.55
Dec-19	322.66
Jan-20	162.92
Feb-20	202.08
Mar-20 (till 17.03.2020)	197.44
<b>Total</b>	<b>1012.65 MT</b>

- (ii) M/s Tesla Innovations Ltd. (IIT Bombay) has been as technical consultant for preparing and executing an action plan for CETP with regard to capability assessment study, training of manpower of CETP & small scale industries, monitoring of outlet of member industries, sludge management at CETP, treatment upgradation at CETP for high TDS & high COD effluent etc. However, the CETP operator couldn't inform action plan or action taken so far in this regard.

## **8. ACTION TAKEN BY MPCB AFTER PREVIOUS VISIT OF THE JOINT INSPECTION ON 13.11.2019:**

MPCB informed that closure direction dated 06/3/2020 (copy is given at Annexure V) has been issued to the CETP operator under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, for negligent towards pollution prevention, no intention to improve the operation & maintenance of the CETP, discharging highly polluted into the creek and causing serious pollution in saline zone. Vide the said closure direction, the CETP operator was directed to stop receiving any effluent from the member industries immediately.

Thereafter, a personal hearing was given to the CETP operator on 09/3/2020 upon representation from the CETP operator. As per decisions taken during the said hearing given, the CETP was permitted to operate. Direction dated 14/3/2020 has been issued to the CETP operator under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 directing the CETP operator:

- To receive effluent quantity of 11 MLD and discharge treated effluent as per consented standards & ensure inlet COD will be 3500 mg/ltr.
- Take new CETP in operational condition & discharged treated effluent as per consented standards & ensure receiving quantity will be 14 MLD by 20.03.2020 & ensure inlet COD will be 3500 mg/ltr.
- Not to exceed the effluent quantity of 25 MLD received at both existing and new CETP
- Provide flow meter at inlet & outlet of CETP & connect the same to SCADA system.
- Ensure lock & key arrangement with strainer / mesh to all effluent generating units by 31.03.2020.
- Monitor High COD stream discharge in individual industries to CHWT SDF.
- Communicate the list of all defaulters / violating industries & submit list of industries whose strainer / mesh has damaged.
- Upgrade / modernize old 25 MLD CETP within 45-days starting from 20.03.2020.
- Not to accept effluent from ZLD units
- Ensure the disconnection of outlet connections from ZLD units.
- Ensure that industries shall not action water through tankers.
- Not to accept effluent through tankers.
- To provide online monitoring system at both the inlet and outlet and connect the same to MPCB and CPCB server.
- To keep daily record of chemicals consumed / energy consumed and send daily report to SRO Tarapur-I.
- Not to received effluent from the industries in case of disturbance to the performance of CETP due to shock load or any other unforeseen reason.

MPCB informed that compliance of the said directions dated 14/3/2020 (copy is given at Annexure VI) is under process.

Further, it was also informed that as part of surveillance mechanism and complaints management, MPCB conducted survey/inspection of 589 industrial units in Tarapur MIDC during Nov 2019 to March 2020. Based on the said survey, 35 Closure Directions; 13 Proposed Directions; 09 Show-cause notices and 23 Conditional Restart orders have been issued to 34 units since the last joint inspection conducted on 13/11/2019 till this joint inspection of 12/3/2020

under the Water (Prevention and Control of Pollution) Act, 1974/ Air (Prevention and Control of Pollution) Act, 1981/ Environment (Protection) Act, 1986. Issuance of such directions or other actions to other surveyed units are in progress.

## **9. CONCLUSIONS:**

The analysis results of various effluent samples of CETP collected during the joint inspection-cum-monitoring on 12/3/2020 and various observations made under preceding paras reveal that no improvement has been made by the CETP operator to upgrade or improve performance of the CETP since the previous joint inspection conducted on 13/11/2019 except that of on-going de-sludging activities in Sump No. 2.

Therefore, the gross violations, also reported in earlier joint inspection report conducted on 13/11/2019, continue to be occurring in CETP operation as below:

### **(a) Continued Non-compliance of CETP Inlet Effluent Quality with the Design Norms/Prescribed Limits**

BOD and COD in CETP inlet effluent are exceeding 1.6 and 2.4 times the inlet design norms respectively; Phenol and TAN exceeding 1.6 and 5.5 times respectively and pH is 3.3 against the range of 6-9 prescribed under the Consent to Operate.

Each of the three inlet effluent sources to the CETP (viz. from MIDC Sump 1+ Gravity; MIDC Sump-3, and MIDC Sump-4) are also exceeding the aforesaid parameters in terms of respective CETP inlet design parameters/limit prescribed under the Consent to Operate and the effluent from MIDC Sump-3 contribute maximum exceedances among the three sources. (details given under para 3(a) of this report)

### **(b) Continued Non-compliance of CETP Outlet Effluent Quality with the Prescribed Limits**

BOD, COD, TKN, TAN and Phenols in CETP outlet effluent are exceeding 48.3, 16.6, 9.9, 3.7 and 1.7 times respectively than the outlet limit prescribed under the Consent to Operate (details given under para 3(b) of this report)

**(c) Continued exceedance of Hydraulic Load of CETP to the Design/Prescribed Limit and illegal Discharges**

CETP is consistently not complying with design/consented capacity of 25 MLD and receiving excess effluent by about 3 MLD to the said capacity. The excess 3 MLD is being discharged into the adjacent storm water drain (originating from plot No. E-13 and further meeting into Navapur-Dandi creek through Salvad village).

Further, about 13 MLD of the CETP outlet effluent not conforming to the prescribed standard is also discharged through the said storm water drain into the Navapur-Dandi Creek violating to the consent condition that treated CETP effluent to be disposed at the designated Marine outfall point.

Other overflow from Sump No. 3 (used to pump the effluent to CETP ) also occurs intermittently and the same flows into the drain originating at Plot No. N-27, MIDC Tarapur and meeting to Murbhe-Kharekuram creek.

The above overflows may be causing further damages to the waterbodies which have been reported along with remediation measures in the report of the Committee submitted to the Hon'ble NGT vide email dated 19/6/2020 in compliance with orders dated 26/9/2019 read with order dated 22/10/2019 in the matter of Original Application No. 64/2016 (WZ); Akhil Bhartiya Mangela Samaj & Ors. Versus Maharashtra Pollution Control Board & Ors.

(details given under para 3(c) of this report)

**(d) Poor CETP Sludge Management and inconsistency in CETP Sludge Generation**

Inconsistency in CETP sludge sent to common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF), Taloja, indicates that either CETP is not operated uniformly/regularly or there is wide variation in CETP inlet effluent quality or sludge is not sent to the CHWTSDF regularly.

Further, there is poor management of sludge drying beds and sludge was found indiscriminately scattered in areas across Sump No. 2, Equalisation Tank and Sump No. 4 which may be because of overflows or poor management of sludge.

(details given under para 3(d) of this report)

**(e) Continued Improper Operation of all Major Treatment Units of CETP & Sludge Depositions**

None of the major treatment units of the CETP (viz. Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier and Hypo-chlorite Oxidation Tank) are functioning properly whereas Pressure Sand Filter and Activated Carbon Filters are completely defunct. Further,

there could be sludge accumulation in equalization tank and aeration tanks due to poor operation.

(details given under para 4 of this report)

**(f) Continued Improper CETP Inlet & Outlet Flow Meter Measurement and Non-operational Online Continuous Monitoring System**

Online continuous monitoring system (OCMS) provided at CETP inlet and outlet are not in operation and in working condition. The flow meters provided as CETP inlet and outlet effluent measurement are installed at in appropriate places and, hence, not representing actual inlet and outlet flows.

(details given under para 5 of this report)

**(g) Other Observations**

- Updated information such as waste water handled, hazardous waste generated and sent to common TSDF, etc. are not being displayed in the display board (installed near entry of the CETP) as per the Hon'ble Supreme Court's order in WP(C) 657/1995 and Hon'ble NGT order in OA 804/2017
- A bore well is installed within the CETP premises without having requisite permission from concerned authority.
- About 102 M.T. and 10 M.T. of sludge are accumulated in sump No. 3 and Sump No. 4 (used for effluent inlet to CETP) occupying 60 % & 23 % of the sump capacity respectively. The same needs to be assessed and removed.
- The Consent to Operate and Authorisation dated 24/12/2019 have been issued by MPCB to the new CETP at Plot No. OS-30(pt), MIDC Tarapur, for 25 MLD of the proposed 50MLD. However, the new CETP has not yet been made operational.

(details given under para 6 of this report)

**10. RECOMMENDATIONS:**

In view of the consistent gross violation of the CETP w.r.t. quantity and quality both exceeding the CETP inlet design/standards parameters; outlet effluent quality grossly exceeding the prescribed outlet standards; significant illegal discharges of high concentrated effluent as overflows which may be causing further damages to the already damaged/affected waterbodies; etc., the recommended immediate and other measures in the report of previous joint

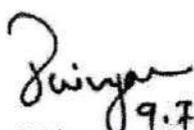
inspection conducted on 13/11/2019 and submitted to the Hon'ble NGT vide email dated 02/1/2020 may be implemented.

Such measures outline various actions to be taken by CETP operator; MIDC and MPCB w.r.t. CETP assessment in terms of hydraulic load and inlet effluent quality; limiting the CETP inlet effluent as per the said assessment; removal of deposited sludge in various Sumps and tanks of CETP; non-operation of any bore wells in MIDC Tarapur; no overflowing/leakages from pumps/tanks etc.; identification of units discharging higher quantity and/or higher concentration effluent and/or higher quantity effluent to CETP and stopping the same; segregating high concentrated effluent; surveillance & penalty mechanism with recovery of environmental Compensation and prosecution of industries; improvement in overall scientific operation & maintenance of CETP; need of common facilities such as Common MEE and Common Spray Dryer for High COD and High TDS effluent; replacing underground drainage (from industrial premises to the MIDC drainage sump/pipeline) with over ground pipeline along with SCADA system; etc. including closure of the CETP in case the immediate measures are not implemented within Jan 31, 2020.

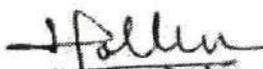
Copy of the said recommendations as recommended in the report of previous joint inspection conducted on 13/11/2019 and submitted to the Hon'ble NGT vide email dated 02/1/2020 is given at Annexure VII. The same may be enforced by CETP operator; MIDC and MPCB on priority and time bound manner including taking actions against other non-compliance observed in this inspection viz. updating information on the display board installed near gate of the CETP, installation of proper flow meters, making OCMS operational by the CETP operator and sealing the bore well at CETP and desludging Sump No. 3 and 4 by MIDC.

Though MPCB has taken actions as outlined under para 8 of the report but enforcement of the same needs to be expedited.

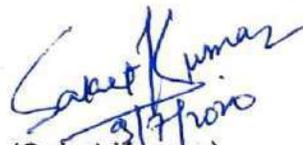
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(Utkarsh Shingare)  
9.7.2020

FO, MPCB, Tarapur

  
(Manish Holkar)  
09/07/2020

SRO, MPCB, Tarapur

  
(Saket Kumar)  
21/7/2020

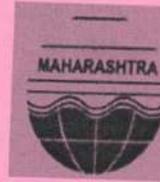
Sc.B, CPCB, Vadodara

  
(Bharat K. Sharma)

Regional Director,  
CPCB, RD Pune

## MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 4010437/4020781  
/4037124/4035273  
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Kalpataru Point, 3rd & 4th floor, Sion-  
Matunga Scheme Road No. 8, Opp. PVR  
Cinema, Near Sion Circle, Sion (E),  
Mumbai - 400 022

**Red/SSI**

Consent No: BO/JD(WPC)/ UAN No-0000062174/R/HOD/

Date: 29/11/2019

1911001395

To,  
M/s. Tarapur Environmental Protection Society,  
Common Effluent Treatment Plant (25 MLD),  
Plot No AM 29 (pt), MIDC Tarapur,  
Boisar, Dist Palghar.

**Subject: Renewal of Consent to Operate for Common Effluent Treatment Plant under RED category.**

- Ref:**
1. Earlier consent granted vide no. BO/JD(WPC)/ UAN No-0000017747/R/CC-1703002119 dtd 31.03.2017 valid till 31.12.2017.
  2. Your application for renewal of consent dtd 08/12/2018

**For: Renewal of Consent to Operate for CETP under RED category.**  
under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous & Other Wastes (M & T M) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent is granted for a period from 31/12/2017 upto 31/12/2020
2. The actual capital investment of the industry is Rs. 20.67 Crs.  
(As per the C.A. Certificate submitted by industry)

3. The Consent is valid for the manufacture of -

Sr. No.	Treatment Facility	Maximum Quantity	UOM
1	Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed	25	MLD

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1	Trade effluent	25.0 MLD	As per Schedule -I	Marine outfall, at a point to be specified by National Institute of Oceanography
2	Domestic effluent	5.0 CMD	As per Schedule -I	Marine outfall, at a point to be specified by National Institute of Oceanography

5. Conditions under Air (P & CP) Act, 1981 for air emissions:

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1	D.G Set (625 KVA)	01	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
--N.A.--				

7. Conditions under Hazardous Waste (M, H & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type Of Waste	Category	Quantity	UOM	Treatment	Disposal
1	CETP Sludge	35.3	7	MT/D	—	CHWTSDF

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. This renewal of grant of consent is issued without prejudice to order being passed by the Appellate Authority in the appeal filed vide letter dtd 15.04.2019..
11. This renewal of grant of consent is issued without prejudice to Hon'ble NGT order passed or being passed in the application No 64/2016.

For and on behalf of the  
Maharashtra Pollution Control Board



Dr. Y. B. Sontakke  
Joint Director(WPC)

Received Consent fee of -

Sr. No.	Amount (Rs.)	Transaction No.	Date
1	50000	NEFT DR 7618540	11.12.2018
2	100000	TXN1911001559	20.11.32019

Copy to:

1. Regional Officer -Pune and Sub-Regional Officer-Pune- I MPCB, they are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. EIC desk- for record & website updation purposes.

### Schedule-I

#### Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have provided Common Effluent Treatment Plant (CETP) with the design capacity of 25.0 MLD.

B] The Consent is valid for collection, storage and treatment of Industrial and Domestic Effluent conforming to the inlet standards specified hereunder:-

Sr. No.	Parameters	Standards prescribed by Board (If any) Limiting Concentration in mg/l, except for pH & Temperature
1.	pH	6.0 to 9.0
2	Temperature	45 °C
3	Oil & Grease	20
4	Phenolic Compounds	5.0
5	Ammonical Nitrogen (as N)	50
6	Cyanide (as CN)	0.2
7	Hexavalent Chromium ( as Cr <sup>+6</sup> )	2.0
8	Total Chromium (as Cr)	2.0
9	Copper (as Cu)	3.0
10	Lead (as Pb)	1.0
11	Nickel (as Ni)	3.0
12	Zinc (as Zn)	15
13	Arsenic (as As)	0.2
14	Mercury (as Hg)	0.01
15	Cadmium	1.0
16	Selenium (as Se)	0.05
17	Fluoride (as F)	15
18	Boron (as B)	2.0

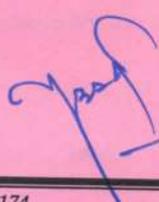
In case of SSI unit, BOD of maximum of 1500 mg/l and COD of maximum 3500 mg/l will be allowed. In case of other primary and secondary treatment is required

Note : i) These standards apply to the small scale industries i.e. total discharge up to 25 M<sup>3</sup>.

ii) All small Scale Units generating effluent quantity more than 25 m<sup>3</sup>/day and Medium & Large Scale Units irrespective of the quantity of effluent will have to achieve the standards as prescribed in the letter of Consent issued to them individually under the Water (P & CP) Act 1974, Air (P & CP) Act 1981, Hazardous Waste (M, H & TM) Amendment thereto before discharging the effluent into CETP.

C] Treatment and disposal for combined Industrial and Domestic effluent.

**Treatment:** The CETP authority shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality for strong stream and weak stream and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:


Sr No.	Parameters	Standards prescribed by Board (If any)
<b>I. General Parameters</b>		
		Max permissible values ( in mg/l, except for pH& Temperature)
01	pH	6.0 to 9.0
02	BOD 3 Days 27 Deg.C	30
03	COD	250
04	Suspended Solids	100
05	Fixed Dissolved Solids	Not Specified
<b>II. Specific Parameters</b>		
		Max permissible values ( in mg/l, except for pH& Temperature)
06	Temperature	Shall not exceed more than 5° C above ambient water temperature
07	Oil & Grease	10
08	Ammonical Nitrogen (as N)	50
09	T.K.N	50
10	Nitrate Nitrogen	50
11	Phosphate as P	Not Specified
12	Chlorides	Not Specified
13	Sulphate (as SO <sub>4</sub> )	Not Specified
14	Fluoride (as F)	15
15	Sulphide (as S)	5
16	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	5
17	Total Residue Chlorine	1
18	Zinc (as Zn)	15
19	Iron	3
20	Copper (as Cu)	3
21	Trivalent Chromium	2
22	Manganese	2
23	Nickel	3
24	Arsenic (as As)	0.2
25	Cyanide (as CN)	0.2
26	Vanadium	0.2
27	Lead (as Pb)	0.1
28	Hexavalent Chromium	0.1
29	Selenium (as Se)	0.05
30	Cadmium (as Cd)	0.05
31	Mercury (as Hg)	0.01
32	Bio Assay Test	90 % survival of fish after 96 hrs in 100 % effluent

Note:-

- All efforts should be made to remove colour and unpleasant odour as per as possible.
- If the CETP is not able to achieve the outlet parameters, then all the members and the said Society would be individually and jointly responsible and liable for legal actions under the provisions of sections 47 of the Water (Prevention & Control of Pollution) Act, 1974.

D ] Disposal: The treated effluent shall be connected to sewerage system provided by MIDC and finally discharged into Marine Outfall, at a point designated by National Institute of Oceanography.

2) A.] As per your consent application, you have provided STP for the Domestic effluent.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

(1)	Suspended Solids.	Not to exceed	100	mg/l.
(2)	BOD 3 days 27°C.	Not to exceed	100	mg/l.

C] The treated sewage shall be disposed on land for gardening/irrigation.

3) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	Nil
2.	Domestic purpose	6.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	Nil
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	Nil

4) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance.



**Schedule-II**

**Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and also erected following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO <sub>2</sub> Kg/Day
1	D.G. Set (625 KVA) - 1 Nos.	-----	5.0*	Diesel	80 Lit./Hr	1.0%	26.88

(\*Above the roof of the building in which it is installed)

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time.
3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate matter	Not to exceed	150mg/Nm <sup>3</sup> .
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4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



**Schedule-III**  
**Details of Bank Guarantees**

**Proposed Bank Guarantee:**

Sr. No	Consent (C to E/O/R)	BG Guarantee	Submission Period	Consent conditions	Compliance period	Validity
1	C to R	Rs.10.0 Lakhs	15 Days	Operation and Maintenance of CETP	Continuous	30.04.2021
2	C to R	Rs.2.5 Lakhs	15 Days	Treatability Study	Continuous	30.04.2021
3	C to R	Rs.2.5 Lakhs	15 Days	Improvement in existing plants including sludge Removal	Continuous	30.04.2021



#### **Schedule-IV**

#### **General Conditions:**

- 1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) Industry should monitor effluent quality, stack emissions and ambient air quality quarterly.
- 3) The applicant shall provide ports in the chimney(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- 5) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 6) The firm shall submit to this office, the 30th day of September every year , the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 7) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous & Other Waste (M & TM) Rules, 2016, which can be recycled /processed/reused/recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 8) The industry should comply with the Hazardous & Other Waste (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous & Other Waste (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30<sup>th</sup> June of every year.
- 9) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 10) **The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.**
- 11) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website([www.mpcb.gov.in](http://www.mpcb.gov.in)).
- 12) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 13) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 14) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 15) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 16) Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.



- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
- f) D.G. Set shall be operated only in case of power failure.
- g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
- 17) The industry should not cause any nuisance in surrounding area.
- 18) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 19) The applicant shall maintain good housekeeping.
- 20) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a statement on available open plot area, number of trees surviving as on 31<sup>st</sup> March of the year and number of trees planted by September end, with the Environment Statement.
- 21) The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 22) The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 23) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 24) The industry shall submit quarterly statement in respect of industries' obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can be downloaded from MPCB official site).
- 25) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.
- 27) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 28) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

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## ANNEXURE II

### Analysis result of Effluent Sample taken from the Drain\* flowing adjacent to Sump No. 2

S. No.	Sampling Locations→ Parameters	Effluent Sample taken from the Drain* flowing adjacent to Sump No. 2
1	pH	6.7
2	TSS	53
3	FDS	11608
4	BOD	950
5	COD	2720
6	Phenols	6.35
7	Total Ammonical Nitrogen (TAN)	327.5
8.	Total Kjedadahl's Nitrogen (TKN)	537.6
9.	Phosphate	0.29
10.	Sulphate	4766
11.	Chloride	3334
12.	Fluoride	1.3
13.	Cyanide	0.09

Note: All values are in mg/L, except pH

\* Storm water drain originating from plot No. E-13 and further meeting into Navapur-Dandi creek through Salvad village. The samples were drawn from a point after addition of overflow from the said Sump No. 2.

Photographs taken during visit



Display board at the entrance gate of CETP



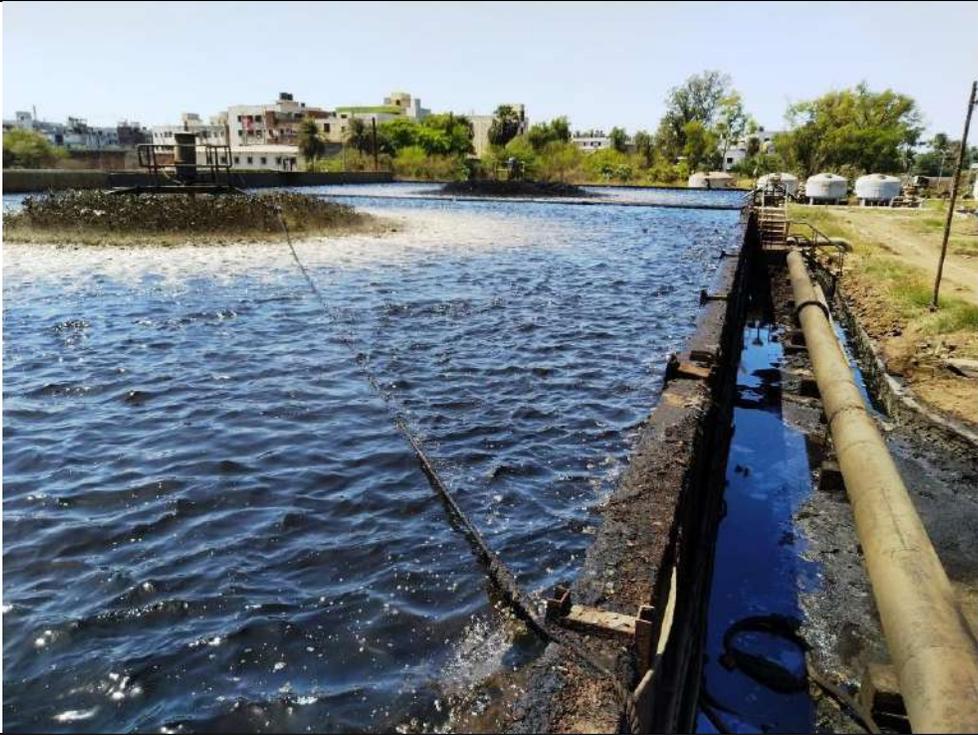
De-sludging of Sump-2



**Overflow of effluent near Sump-2**



**Sludge drying beds: 04 empty and 06 overflowing**



**Overflowing of wastewater from Equalization tank**



**Sludge dumped near Sump-4**



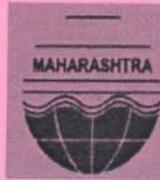
**Overflow from Aeration Tank**



**Sludge scattered inside CETP premises**

**MAHARASHTRA POLLUTION CONTROL BOARD**

Phone : 4010437/4020781  
/4037124/4035273  
Fax : 24044532/4024068 /4023516  
Email : [jdwater@mpcb.gov.in](mailto:jdwater@mpcb.gov.in)  
Visit At : <http://mpcb.gov.in>



Kalpataru Point, 3rd & 4th floor, Sion-  
Matunga Scheme Road No. 8, Opp. PVR  
Cinema, Near Sion Circle, Sion (E),  
Mumbai - 400 022

**Red/LSI****Date: 24/12/2019****Consent No: BO/JD(WPC)/ UAN No-0000072872/1st O/CC/1912001A76**

To,  
M/s. Tarapur Environmental Protection Society,  
Common Effluent Treatment Plant (25 MLD),  
Plot No OS-30 (pt), MIDC Tarapur,  
Boisar, Dist Palghar.

**Subject: 1<sup>st</sup> part Consent to Operate under RED category for Common Effluent Treatment Plant of 25 MLD out of 50 MLD capacity.**

- Ref:**
1. Consent to establish granted vide no. BO/JD(WPC)/ EIC-TN-4978-14/E/CC-5450 dtd 05.06.2014 valid till CoU or 5 Years whichever is earlier.
  2. Your application for grant of 1<sup>st</sup> part consent to operate dtd 10.05.2019
  3. Minutes of 10<sup>th</sup> Consent Committee meeting held on 13.12.2019.

**For: Consent to Operate for 25 MLD out of 50 MLD capacity CETP under RED category.**

under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous & Other Wastes (M & T M) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent is granted for a period up to: 30.11.2020
2. The actual capital investment of the industry is Rs. 110.79 Crs.  
(As per the C.A. Certificate submitted by industry)
3. The Consent is valid for the manufacture of -

Sr. No.	Treatment Facility	Maximum Quantity	UOM
1	Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed	25 out of 50	MLD

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1	Trade effluent	25.0 MLD	As per Schedule -I	Sewerage line provided by MIDC for further disposal to Marine Coastal Area, at a point to be specified by National Institute of Oceanography
2	Domestic effluent	4.5 CMD	As per Schedule -I	On land for gardening

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1	D.G Set (4000 KVA)	01	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
--N.A.--				

7. Conditions under Hazardous Waste (M, H & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type Of Waste	Category	Quantity	UOM	Treatment	Disposal
1	CETP Sludge	35.3	20	MT/D	—	CHWTSDf

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. The applicant shall carryout performance evaluation study of CETP from IIT, Mumbai/NEERI.
11. The CETP shall explore possibilities of segregation and separate treatment of effluent from various industrial sectors viz textile, chemical, dyeing etc in different module of CETP.
12. The applicant shall comply with the conditions stipulated in Environment Clearance granted vide no SEAC2012/CR-760/TC-2 dtd 24.03.2015.

For and on behalf of the  
Maharashtra Pollution Control Board

(E. Ravendiran, IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	Transaction No.	Date
1	245260.00	RTGS 5451398	13.05.2019
2	51320.00	TXN1907001014	12.07.2019

Copy to:

1. Regional Officer -Thane and Sub-Regional Officer-Tarapur-I: They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. EIC desk- for record & website updation purposes.

### Schedule-I

#### Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have provided Common Effluent Treatment Plant (CETP) with the design capacity of 25 MLD operational out of 50.0 MLD.

B] The Consent is valid for collection, storage and treatment of Industrial and Domestic Effluent conforming to the inlet standards specified hereunder:-

Sr. No.	Parameters	Standards prescribed by Board (If any) Limiting Concentration in mg/l, except for pH & Temperature
1.	pH	5.5 to 9.0
2	Temperature	45 °C
3	Oil & Grease	20
4	Phenolic Compounds	5.0
5	Ammonical Nitrogen (as N)	50
6	Cyanide (as CN)	0.2
7	Hexavalent Chromium ( as Cr <sup>+6</sup> )	2.0
8	Total Chromium (as Cr)	2.0
9	Copper (as Cu)	3.0
10	Lead (as Pb)	1.0
11	Nickel (as Ni)	3.0
12	Zinc (as Zn)	15
13	Arsenic (as As)	0.2
14	Mercury (as Hg)	0.01
15	Cadmium	1.0
16	Selenium (as Se)	0.05
17	Fluoride (as F)	15
18	Boron (as B)	2.0

In case of SSI unit, BOD of maximum of 1500 mg/l and COD of maximum 3500 mg/l will be allowed. In case of other, primary and secondary treatment is required.

Note : i) These standards apply to the small scale industries i.e. total discharge up to 25 M<sup>3</sup>.

ii) All small Scale Units generating effluent quantity more than 25 m<sup>3</sup>/day and Medium & Large Scale Units irrespective of the quantity of effluent will have to achieve the standards as prescribed in the letter of Consent issued to them individually under the Water (P & CP) Act 1974, Air (P & CP) Act 1981, Hazardous Waste (M, H & TM) Amendment thereto before discharging the effluent into CETP.

C] Treatment and disposal for combined Industrial and Domestic effluent.

**Treatment:** The CETP authority shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality for strong stream and weak stream and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:



Sr No.	Parameters	Standards prescribed by Board (If any)
<b>I. General Parameters</b>		<b>Max permissible values ( in mg/l, except for pH&amp; Temperature)</b>
01	pH	6.0 to 9.0
02	BOD 3 Days 27 Deg.C	100
03	COD	250
04	Suspended Solids	100
05	Fixed Dissolved Solids	Not Specified
<b>II. Specific Parameters</b>		<b>Max permissible values ( in mg/l, except for pH&amp; Temperature)</b>
06	Temperature	Shall not exceed more than 5 <sup>o</sup> C above ambient water temperature
07	Oil & Grease	10
08	Ammonical Nitrogen (as N)	50
09	T.K.N	50
10	Nitrate Nitrogen	50
11	Phosphate as P	Not Specified
12	Chlorides	Not Specified
13	Sulphate (as SO <sub>4</sub> )	Not Specified
14	Fluoride (as F)	15
15	Sulphide (as S)	5
16	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	5
17	Total Residue Chlorine	1
18	Zinc (as Zn)	15
19	Iron	3
20	Copper (as Cu)	3
21	Trivalent Chromium	2
22	Manganese	2
23	Nickel	3
24	Arsenic (as As)	0.2
25	Cyanide (as CN)	0.2
26	Vanadium	0.2
27	Lead (as Pb )	0.1
28	Hexavalent Chromium	0.1
29	Selenium (as Se)	0.05
30	Cadmium (as Cd )	0.05
31	Mercury (as Hg)	0.01
32	Bio Assay Test	90 % survival of fish after 96 hrs in 100 % effluent

Note:-

- i) All efforts should be made to remove colour and unpleasant odour as per as possible.
- ii) If the CETP is not able to achieve the outlet parameters, then all the members and the said Society would be individually and jointly responsible and liable for legal actions under the provisions of sections 47 of the Water (Prevention & Control of Pollution) Act, 1974.

**D ] Disposal:** The treated effluent shall be connected to sewerage system provided by MIDC and finally discharged into Marine coastal area, at a point designated by National Institute of Oceanography.

2) A] As per your consent application, you have provided septic tank for the Domestic effluent.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

(1)	Suspended Solids.	Not to exceed	100	mg/l.
(2)	BOD 3 days 27oC.	Not to exceed	100	mg/l.

C] The treated sewage shall be disposed on land for gardening/irrigation.

3) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	Nil
2.	Domestic purpose	4.5
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	Nil
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	Nil

4) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance.

**Schedule-II**

**Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and also erected following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO <sub>2</sub> Kg/Day
1	D.G. Set (4000 KVA) – 1 Nos.	Acoustic Enclosure	30	Diesel	825 Lit./Hr	2.0%	16.5

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time.
3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate matter	Not to exceed	150mg/Nm <sup>3</sup> .
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4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



**Schedule-III**  
**Details of Bank Guarantees**

**Proposed Bank Guarantee:**

Sr. No	Consent (C to E/O/R)	BG Guarantee	Submission Period	Consent conditions	Compliance period	Validity
1	C to O	Rs.10.0 Lakhs	15 Days	Operation and Maintenance of CETP	Continuous	31.03.2021

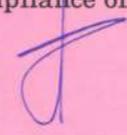
Maharashtra Pollution Control Board

**Schedule-IV**  
**General Conditions:**

- 1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) Industry should monitor effluent quality, stack emissions and ambient air quality quarterly.
- 3) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- 5) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 6) The firm shall submit to this office, the 30th day of September every year , the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 7) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous & Other Waste (M & TM) Rules, 2016, which can be recycled /processed/reused/recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 8) The industry should comply with the Hazardous & Other Waste (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous & Other Waste (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30<sup>th</sup> June of every year.
- 9) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 10) **The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.**
- 11) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website([www.mpcb.gov.in](http://www.mpcb.gov.in)).
- 12) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 13) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 14) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 15) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 16) Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
- f) D.G. Set shall be operated only in case of power failure.
- g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
- 17) The industry should not cause any nuisance in surrounding area.
- 18) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 19) The applicant shall maintain good housekeeping.
- 20) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a statement on available open plot area, number of trees surviving as on 31<sup>st</sup> March of the year and number of trees planted by September end, with the Environment Statement.
- 21) The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 22) The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 23) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 24) The industry shall submit quarterly statement in respect of industries' obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can be downloaded from MPCB official site).
- 25) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.
- 27) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 28) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

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# MAHARASHTRA POLLUTION CONTROL BOARD

Tel : 25802272		Regional Office, Thane
Fax : 25805398		5 <sup>th</sup> Floor, Office Complex Bldg.,
Website: <a href="http://mpcb.gov.in">http://mpcb.gov.in</a>		Near Mulund Check Naka,
E-mail Id: rothane@mpcb.gov.in		Wagale Estate, Thane-400 604.

No. MPCB/ROT/CD/2138

Date: 06/03/2020

To,  
M/s. Tarapur Environment Protection Society CETP,  
Plot No: AM-29, MIDC Tarapur,  
Dist: Palghar.

**Sub:- Closure Directions under section 33A of the Water (P&CP) Act, 1974 & under section 31A of the Air (P&CP) Act, 1981 and Hazardous & Other Wastes (M&TM) Rules, 2016.**

- Ref:-**
- 1) Consent granted by the Board dated 29/11/2019.
  - 2) Directions issued from time to time towards non compliances.
  - 3) JVS analysis reports of CETP
  - 4) Personal hearing extended by the Board on 27/09/2019.
  - 5) Incidences of untreated effluent overflow /discharge.
  - 6) Regular complaints and news appeared in Newspapers.

**WHEREAS**, you are operating the CETP in Water & Air pollution prevention area declared under Water (P&CP) Act, 1974 Air (P&CP) Act, 1981 and Hazardous & other wastes (M&TM) Rules, 2016. **WHEREAS**, the Maharashtra Pollution Control Board has granted conditional consent to operate for Common Effluent Treatment Plant (CETP) at Plot No: AM-29, MIDC, Tarapur Dist: Palghar subject to certain terms and conditions including to maintain and operate it properly so as to achieve the standards prescribed in consent order dt: 29/11/2019. **AND WHEREAS**, it is obligatory on your part to comply with the conditions and provide necessary water & air pollution control devices and operate the same continuously and efficiently so as to meet the prescribed standards by the Board at all times.

**AND WHEREAS**, the Maharashtra Pollution Control Board has granted you conditional consent to operate for new 25 MLD out of 50 MLD capacity Common Effluent Treatment Plant at Plot No: OS-30, MIDC, Tarapur Dist: Palghar subject to certain terms and conditions including important condition to maintain and operate the same properly so as to achieve the consented standards.

**AND WHEREAS**, on account of not operating and maintaining old CETP of capacity 25 MLD, you are discharging highly polluted effluent into creek having COD of 3000 mg/lit on 14/1/2020 and so on, thereby causing serious pollution in the area. **AND WHEREAS**, the capacity of your CETP is 25 MLD and you are collecting and treating more than the consented capacity, thereby the CETP is overflowing at most of the time, which in turn resulted inadequate treatment the effluent which further leads to nearby nalla and Navapur Creek creating potential environmental damages. **AND** also, you have failed to maintain online monitoring system at both inlet and outlet of CETP.

..2/-

**AND WHEREAS**, personal hearing was extended to you by the Board. **AND**, no specific action plan was submitted to secure the compliance of the discharge standards. Also failed to inform the list of defaulting member units.

**AND WHEREAS**, after going through the results of CETP outlet for most of the time, it has been observed that CETP management has totally failed and found negligent towards pollution prevention and causing continuous pollution in the surrounding area even after giving opportunities to improve the performance of CETP.

**AND WHEREAS**, after examining all the reports and records available with this office, I have come to the conclusion that you are knowingly and willfully violating the consent conditions under the provisions of Water (P & CP) Act, 1974 and Air (P & CP) Act, 1981.

**NOW THEREFORE**, in the exercise of the powers conferred u/s 33A of Water (Prevention & Control of Pollution) Act 1974, and 31A of Air (Prevention & Control of Pollution) Act, 1981. I, Regional Officer, MPCB, Thane has come to conclusion that your management was not only negligent towards pollution prevention, but also has no intention to improve the operation and maintenance of CETP, thereby discharging highly polluted effluent into creek and causing serious pollution in saline zone. I therefore, hereby direct you to stop receiving effluent from member industries immediately. The directions of closure hereby makes it clear that you should not receive any effluent from your member industries or any other industries into old CETP of capacity 25 MLD located at AM-29 pt for further treatment and disposal. You are further directed to bring these directions to the notice of your member units, informing them not to discharge any under treated or untreated effluent into inlet of CETP or in the nearby area. It shall also be noted that competent authorities are directed to disconnect electricity and water supply of CETP.

In case of your failure to comply with these directions, further suitable action which may deem fit as per the provisions of the Environmental Act's will be initiated against you, which may be noted.

This is issued with the approval from competent authority of the Board.



(Dr. R.A. Rajput)  
Regional Officer, Thane

**Copy submitted in favor of information to**

1. The Hon'ble Chairman, M.P.C.Board, Mumbai.
2. The Member Secretary, M. P. C. Board, Mumbai

**Copy submitted to:**

1. The Joint Director (Water), M. P. C. Board, Sion, Mumbai.
2. The Principal Scientific Officer, M. P. C. Board, Sion, Mumbai.

**Copy to:**

1. The Executive Engineer, MSEDCL, Palghar

- He is directed to disconnect electric supply of above mentioned CETP: **Plot No: AM-29, MIDC Tarapur** immediately and report compliance accordingly.

..3/-

: 3 :

2. The Executive Engineer, Water Supply, MIDC, Wagle Estate, Thane / Deputy Engineer (Water Supply), MIDC Tarapur – They are directed to disconnect water supply of CETP: **Plot No: AM-29, MIDC Tarapur** immediately and report compliance accordingly.

3. Sub- Regional Officer, Tarapur-I, MPC Board, Tarapur.

- You are directed to serve these directions to the CETP: **Plot No: AM-29, MIDC Tarapur** and ensure the compliance of the directions.

4. Master file.

**MAHARASHTRA POLLUTION CONTROL BOARD**

Tel : 25802272		Regional Office, Thane
Fax : 25805398		5 <sup>th</sup> Floor, Office Complex Bldg.,
Website: <a href="http://mpcb.gov.in">http://mpcb.gov.in</a>		Near Mulund Check Naka,
E-mail Id: rothane@mpcb.gov.in		Wagale Estate, Thane-400 604.

No. MPCB/ROT/Dir/ 150

Date: 14/03/2020

To,  
M/s. Tarapur Environment Protection Society CETP,  
Plot No: AM-29, MIDC Tarapur,  
Dist: Palghar.

**Sub: Directions under section 33A of the Water (P&CP) Act, 1974 and under section 31A of the Air (P&CP) Act, 1981 – Reg.**

**Ref :-** 1) Consent granted by Board.  
2) Closure Direction issued dtd. 06/03/2020.  
3) Personal hearing extended on 09/03/2020.

This refers to the Closure Directions issued by Board vide above reference no: 2 to your unit due to non-compliance causing environmental pollution.

In exercise of the powers conferred upon me under section 33A of the Water (Prevention & Control of Pollution) Act, 1974 and in continuation of earlier directions issued and minutes of personal hearing held before Hon'ble Member Secretary on 09/03/2020, you are hereby directed,

- 1) You shall not exceed the total effluent quantity of 25 MLD received at both existing and New CETP.
- 2) You shall ensure Lock and Key arrangement with strainer/ mesh to all effluent generating units by 31.03.2020.
- 3) You shall take New CETP in operational condition and discharge treated effluent as per consented standards and ensure receiving quantity will be 14.0 MLD by 20th March 2020 and ensure inlet COD will be 3500 mg / ltr.
- 4) You shall receive effluent quantity 11.0 MLD and discharge treated effluent as per consent standards and ensure inlet COD will be 3500 mg / ltr.
- 5) You shall provide flow meter at inlet & outlet of CETP and connect the same to SCADA so as to monitor same by MPCB officials.
- 6) You shall submit list of employees with their educational qualification, experience and nature of work for both the CETPs within three days.
- 7) You shall submit the quantity of sludge generation and disposal periodically once in 15-days to SRO, Tarapur-I.
- 8) You shall Monitor high COD stream discharging individual industries to CHWTSDF.
- 9) You shall communicate the list of all defaulter/ violating industries and submit list of industries whose strainer/ mesh has damaged.
- 10) You shall upgrade / modernize old 25 MLD CETP within 45-days starting from 20.03.2020.
- 11) You shall not receive excess quantity of effluent as per earlier directions.
- 12) You shall not accept effluent from the ZLD unit.
- 13) You shall ensure the disconnection of outlet connection from ZLD units.
- 14) You shall ensure that industries shall not accept water through tankers and shall not use borewell water.
- 15) You shall not accept effluent through tankers.

...2

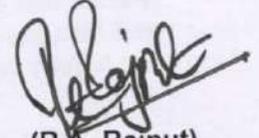
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- 16) You shall provide online Monitoring system at both the inlet and outlet and connect the same to MPCB and CPCB server.
- 17) You shall keep the daily record of chemicals consumed / energy consumed and send daily report to SRO Tarapur-I.
- 18) You shall not receive effluent from the industries in case of disturbance to the performance of CETP due to shock load or any other unforeseen reason.

The decision regarding revoking / reviewing of Closure Directions issued dated 06.03.2020 will be reviewed after satisfactory compliance of above directions.

This is issued without pre-judices of the Hon'ble NGT orders passed or being passed in Application No. 64/2016 filed by Akhil Bhartiya Mangela Samaj & Ors. V/s. MPCB & Ors.

You shall comply with above directions failing which the Board will have no option than to initiate appropriate legal action against you, which please note.



(R.A. Rajput)  
Regional Officer, Thane

**Copy Submitted to:**

- 1) Hon'ble Chairman, M.P.C. Board, Sion, Mumbai.
- 2) Hon'ble Member Secretary, M.P.C. Board, Sion, Mumbai.
- 3) Principal Scientific Officer, M.P.C. Board, Mumbai

**Copy to:**

- 1) The Executive Engineer, Water Supply, MIDC, Wagle Estate, Thane / Deputy Engineer (Water Supply), MIDC Tarapur – You shall ensure the disconnection of outlet connection from ZLD units.

**Copy to:-**

- 1) Sub-Regional Officer, MPC Board, Tarapur-I – You are instructed to serve the copy of direction & submit compliance immediately and you shall ensure the disconnection of outlet connection from ZLD units.
- 2) Master file

## ANNEXURE VII

### **Recommendations as recommended in the report of previous joint inspection conducted on 13/11/2019 and submitted to the Hon'ble NGT vide email dated 02/1/2020**

#### **1. Immediate measures:**

- (a) The capability of CETP be immediately assessed in terms of hydraulic load and inlet effluent quality that the CETP is able to meet the outlet norms (stipulated under the Consent to Operate by MPCB) as per the existing infrastructures. The said assessment studies may be carried out by MPCB through expert institute.
- (b) Based on the above assessment, the CETP shall receive only such limited hydraulic load and influent quality as prescribed in the said assessment. In order to ensure the same, the following may need to be enforced immediately after the said assessment:
- (c) MIDC to:
  - (i) remove deposited sludge (approx.-2400 MT) in the MIDC Sump-2 (10.56 Million Liters-capacity) where treated effluent is collected.
  - (ii) ensure that no bore wells operate in MIDC Tarapur;
  - (iii) ensure that no overflowing/leakages from pumps/tanks etc. takes place from this sump to nearby natural drain which meets with Navapur Creek and further to the Arabian Sea.
  - (iv) ensure that supply of water to MIDC Tarapur is so reduced (as compared to the current supply) and distributed that inlet quantity to CETP does not exceed the above prescribed CETP hydraulic load;
- (d) MPCB in association with CETP shall identify units not having adequate facilities to meet the aforesaid assessed CETP inlet effluent quality and such units be directed to segregate their high concentrated effluent and be stored separately at existing CETP or new CETP in case such storage is available or disposed in Common TSDF Taloja for incineration. Such storage should not be allowed beyond 06 months. Storage and disposal of the same should be closely monitored by MPCB at regular interval.
- (e) CETP must also initiate actions to identify units who are discharging higher concentration effluent and/or higher quantity effluent to CETP and shall stop such units from discharge into CETP immediately. The same shall immediately be reported to MPCB who may close such units. The CETP should also develop round the clock surveillance mechanism to identify the member units discharging more than higher concentration at inlet of CETP.

MPCB shall also monitor CETP inlet and outlet effluent preferably on daily basis or on alternate day.

**In case if the above measures are not implemented effectively and CETP (either existing or new) continues to perform non-compliance to the inlet/outlet norms from Jan 31, 2020, and in case no alternate arrangement is in place, MPCB may close operation of CETP and its member units who discharge their effluent to the CETP till the compliance is achieved.**

2. CETP shall take all necessary measures to control the influent quality & quantity besides improvement in overall scientific operation & maintenance of CETP with trained manpower and adequate analytical facility to keep watch on operational parameters at every stage of operation on regular basis.
3. There should be proper surveillance of all units and penalty mechanism for defaulter units to be derived by M/s TEPS –CETP for member industries in addition to inspections of MPCB to ensure that all the member industries discharge the trade effluent meeting the norms as per their consents.  
In case of non-compliance observed during M/s TEPS-CETP monitoring surveillance, the list of defaulting industries should be provided to MPCB from time to time for necessary action against such units. MPCB should take stringent action against industries as found in surveillance of MPCB & TEPS including recovery of environmental Compensation and prosecution of industries as per environmental laws.
4. There is urgent need of common facilities such as Common MEE and Common Spray Dryer for High COD and High TDS effluent and such types of effluent should be separately collected and transferred to common MEE and Spray Dryer facilities with identification of such industries.
5. The underground drainage from industrial premises to the MIDC drainage sump/pipeline be converted into over ground pipeline along with SCADA system for monitoring of quality and quantity of individual member industry.  
MIDC along with TIMA and CETP operator shall evolve time bound action plan for the same and be submitted to MPCB before execution.
6. CETP shall regularly send the CETP sludge to CHWTSDF for proper disposal.
7. The 55 units of 1216 industrial units in MIDC Tarapur, which are not member of the CETP, may be examined by MPCB w.r.t. waste water generation from their processes. Necessary action be taken by MPCB if it is found that their processes generate waste water.
8. MPCB to review authorization of CETP in terms of sludge quantity. Further dry weight or wet weight should be specified in the authorization.
9. CETP is also required to work upon housekeeping of entire premises with cleanliness, plantation, internal roads etc.

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Item No. 07

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
(Through Video Conferencing)**

Original Application No. 64/2016 (WZ)  
(M.A. No. 400/2016)

Akhil Bhartiya Mangela Samaj & Ors. Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors. Respondent(s)

Date of hearing: 26.09.2019

**CORAM : 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): Ms. Gayatri Singh, Senior Advocate along  
with Ms. Meenaz Kakalia, Advocate

For Respondent (s): Mr. Rahul Garg, Advocate for MoEF & CC  
Mr. Kanetkar, Senior Counsel alongwith  
Ms. Manasi Joshi, Advocate for  
Respondent No. 1  
Mr. Pradnyesh Oregaonkar i/b Little & Co.  
Mr. Sudhir Amlrive, Executive Engineer,  
MIDC, and Mr. Rajendra Totala, Dy.  
Engineer, MIDC, Tarapur for Respondent  
No. 2  
Mr. Ruturaj Bathe, Advocate for  
Respondent No. 3

**ORDER**

1. The grievance expressed by the applicant is severe environmental and ecological degradation of the water bodies situated in the vicinity of the Tarapur MIDC caused by the discharge of untreated sewage and industrial effluent in MIDC and the release of

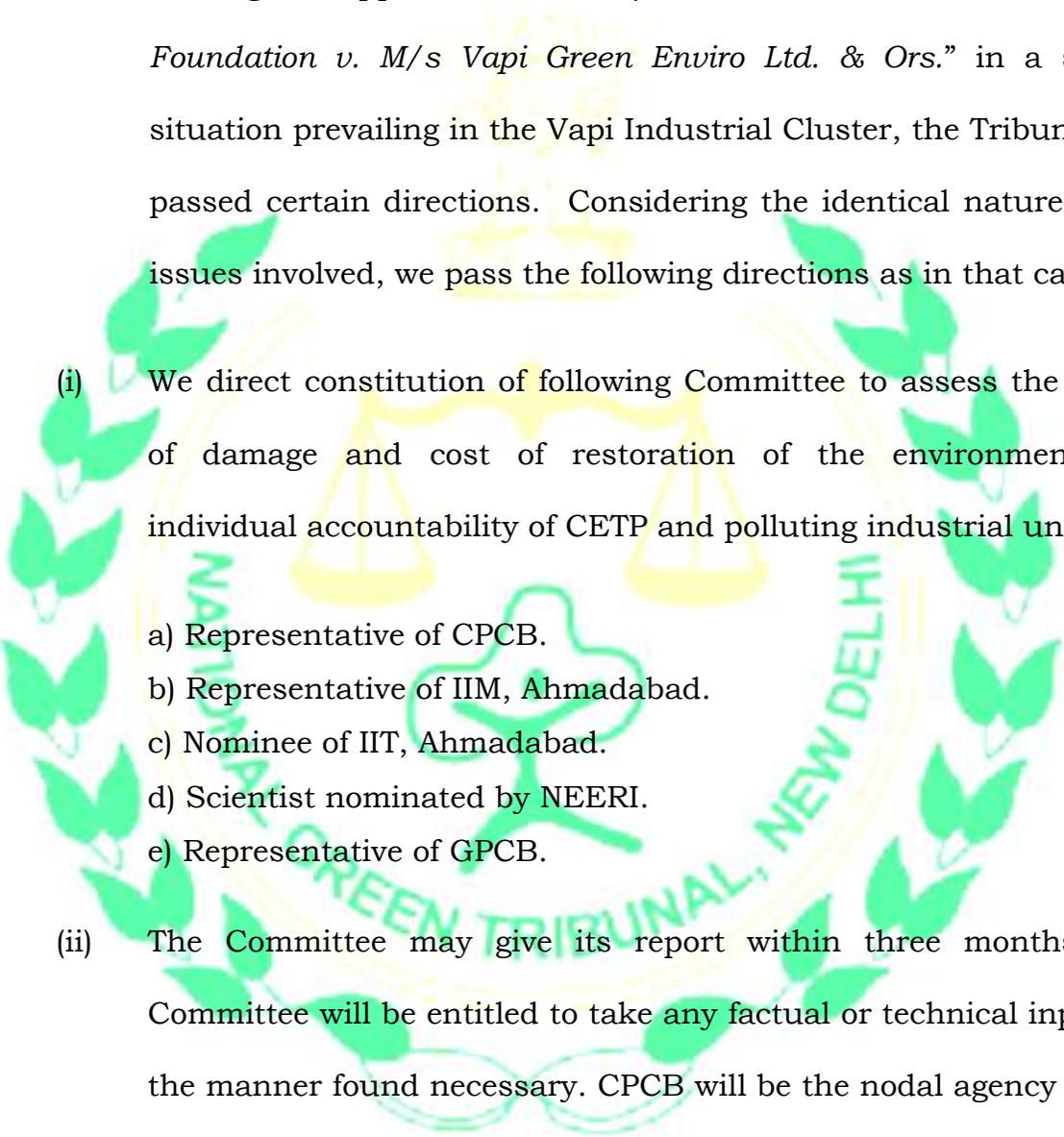
unauthorised volume of effluent in excess of the permitted limit by the Maharashtra Pollution Control Board in the Arabian Sea at Navapur as well as in the water bodies in the vicinity of Tarapur MIDC from the Common Effluent Treatment Plant. This has impacted the livelihood of the fisherfolk and the health of the people in habiting this area and caused degradation of the aquatic ecology. The affected water bodies include Murbe creek running through Murbe till Mahagaon, Murbe-Satpati creek and the Navapur-Dandi creek. The villages affected include Tarapur, Kamboda, Ghivali, Uchchheli, Dandi, Navapur, Alevadi, Murabe, Kharekuran, Satapati, Shirganv, Wadarai, Tembi, Dadara, Mahim and Kelave. The Tarapur Environment Protection Society (TEPS-CETP), the Respondent No. 3, comprises of industries of industries located in the Tarapur MIDC and was formed for taking care of matters relating to environmental protection and pollution control in Tarapur MIDC industrial area. It was commissioned as a primary treatment plant with a capacity of 20 MLD in 2006 which was subsequently enhanced to 25 MLD in 2009. A 59 kilometre effluent carrying pipeline runs throughout the industrial area to dispose treated/partially treated effluent to Arabian Sea at Navapur which is about 8 km away from MIDC.

2. It is stated that the Tarapur MIDC has a long history of being one of the most polluted industrial area in the country ever since it began functioning in 1972, showing flagrant violations of prescribed norms for industries.

3. The industrial area was identified as a critically polluted area in 1996 by the Central Pollution Control Board. The Central Pollution Control Board conducted a performance status of the CETPs in India which included the Tarapur CETP. It was recorded that *'Tarapur CETP (Maharashtra) has four-stage treatment but still these plants were not meeting standards. This reflects gross neglect in operation.'*
4. There have been frequent leakages from the CETP which have been recorded in several reports, resulting in high pollution levels in the water bodies that lie in its vicinity.
5. In 2010, the Central Pollution Control Board in association with the Indian Institute of Technology, Delhi, carried out an environmental assessment of the industrial clusters across the country with the aim of identifying polluted industrial clusters and prioritizing planning need for intervention to improve the quality of the environment in these industrial clusters. The Assessment was based on the Comprehensive Environmental Pollution Index (CEPI).
6. As per the CEPI index, industrial cluster within aggregate score of 70 and above are to be considered to be critically polluted. The aggregate CEPI score of Tarapur was found to be 72.01 and, therefore, identified as critically polluted. The Maharashtra Pollution Control Board is stated to have failed to monitor to ensure that the industries conform to the consent orders and, the Respondent No. 2 had failed to provide the requisite infrastructure for operations, repairs and upgradation of the effluent collection

system. In other words, the regulatory authorities like the SPCBs have not been as effective as expected as noted by the Hon'ble Supreme Court in *Techi Tagi Tara vs. Rajendra Singh Bhandari & Ors.* (supra).

7. In Original Application No. 95/2018 in the matter of "*Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.*" in a similar situation prevailing in the Vapi Industrial Cluster, the Tribunal had passed certain directions. Considering the identical nature of the issues involved, we pass the following directions as in that case:

- 
- (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.
  - (ii) 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.
  - (iii) 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.

- (iv) The GPCB may inform the defaulting units for compliance of this order.
- (v) The GPCB may also consider exercise of its statutory powers of prosecution which power is coupled with duty.
- (vi) Having regard to the entirety of the fact situation in the present case, we direct that, except for the green and white categories of industries, other category of defaulting industries connected to the CETP, shall deposit with the CPCB the following amounts towards interim compensation within one month:
  - a) Large Industries – Rs. 1 Crore each.
  - b) Medium Industries – Rs. 50 Lakhs each.
  - c) Small Industries – Rs. 25 Lakhs each.
- (vii) The CETP on its part shall deposit a sum of Rs. 10 Crores with the CPCB towards interim compensation within one month.
- (viii) The amount may be utilized by the CPCB for restoration of the environment.
- (ix) The CPCB shall undertake jointly with GPCB extensive surveillance and monitoring of the CETP at regular intervals of three months and submit its report to this Tribunal.
- (x) 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 [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in)

8. In order to ensure uniformity in the proceedings, it is felt appropriate that the matter should be heard in Court No. 1 where

similar cases including Original Application No. 95/2018: *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.* is under consideration.

9. We accordingly direct that this case be listed in Court No. 1 on 07.01.2020.

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

26<sup>th</sup> September, 2019  
O.A. 64/2016 (WZ)  
MN



Upon Mentioning

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
(Through Video Conferencing)**

Original Application No. 64/2016 (WZ)

Akhil Bhartiya Mangela Samaj & Ors.

Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors.

Respondent(s)

Date of hearing: 22.10.2019

**CORAM: 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 Respondent (s): Ms. Manasi Joshi, Advocate for Respondent No. 1.

**ORDER**

1. On being mentioned by Ms. Manasi Joshi learned counsel for Gujarat Pollution Control Board, this case has been taken up.
2. It is submitted that on all places where the name of Gujarat Pollution Control Board appears, name of Maharashtra Pollution Control Board be inserted by substitution.
3. Let the above correction be made and the corrected order uploaded in the website.

S. P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

October 22, 2019  
Original Application No. 64/2016 (WZ)