

**BEFORE THE HON'BLE NATIONAL GREEN  
TRIBUNAL  
(WESTERN ZONE BENCH) PUNE  
ORIGINAL APPLICATION NO. 37 OF 2013**

IN THE MATTER BETWEEN

Vanashakti Public Trust & Ors. ...Applicants.

Versus

MPCB & Ors. ...Respondents.

**INDEX**

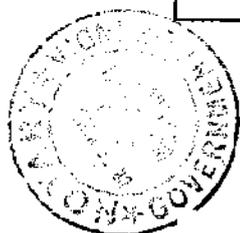
Sr.No.	Particulars	Exhibits	Page No.
1	Affidavit in reply dated <u>18/4/20</u> of Respondent No.9.		1-57
2	Copy of Order dated 19.11.2019 passed by this Hon'ble Tribunal.	A	58-63
3	Copy of Order dated 05.03.2020 passed by this Hon'ble Tribunal.	B	64-66



4	Copy of Order dated 24.06.2020 passed by this Hon'ble Tribunal.	C	67-69
5	Copy of Order dated 05.03.2020 passed by this Hon'ble Tribunal dismissing the Execution Appl. No.08 of 2019.	D	70-72
6	Copy of Order dated 12.02.2014 passed by this Hon'ble Tribunal.	E	73-75
7	Copy of the Affidavit dated 16.02.2015 filed by the Irrigation Dept. in O.A. No.37 of 2013.	F	76-78
8	Copy of the river policy (of the State Govt. of Maharashtra).	G	79-103
9	Copy of the list of 17 types of industries categorized as most polluted industries by the CPCB.	H	104
10	Copy of Certificate of Registration of Respondent No.9 u/s 25 of Companies Act, 1956.	I	105
11	Copy of the Minutes of the Meeting dated 25.02.2002.	J	106-111
12	Copy of an extract of the CEPI Action taken report.	K	112-123
13	Copy of MIDC letter dated 23.02.2017 addressed to This Respondent No.9.	L	124

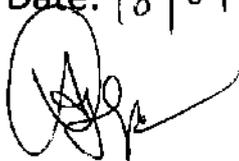


14	Copy of MIDC letter dated 25.01.2019 addressed to This Respondent No.9.	M	125
15	Copies of the Ministry of Environment and Forests Office Memorandum dated 13.1.2010.	N	126-131
16	Copy of letter dated 11.02.2011 addressed to MPCB by Respondent No.1.	O	132-143
17	Copy of office Memorandum dated 15.02.2011.	P	144-146
18	Copy of the extract prepared based on the said report of the MPCB for the Year 2015.	Q	147
19	Copy of letter dated 6.03.2017 of MPCB addressed to the MIDC, by the said letter it was recorded that out of the aforesaid 24 CETPs 17 CETPs are complying to the standards stipulated in the consent.	R	148-152
20	Copy of Minutes of the meeting dated 09.05.2017 attended by Addl. Chief Secretary-Environment and Chairman of MPCB, MIDC officials, MPCB officials and NEERI representatives.	S	153-155



21	Copy of MPCB Status of Action Taken Plan in Dombivili Industrial Area.	T	156-159
22	Copy of Minutes of joint meeting was held on 28.03.2016 between the Officers of the CPCB, MPCB with representatives of CETP of this Respondent No. 09 and other CETPs.	U	160-167
23	Copy of the summary of the NIO report.	V	168-170
24	Copy of the report of a Committee appointed by this Hon'ble Tribunal. The said Committee consisted of the respective officials of the CPCB, MPCB, MIDC, Applicant/ NGO, IIT.	W	171-218
25	Copy of the report of a Committee appointed by the Hon'ble supreme Court of India.	X	219-326
26	Copy of Board Resolution dated 08.07.2017 of this Respondent No.9.	Y	327

Date: 18/04/2022



Mr. Vijay Kumar Aggarwal  
Advocate for Respondent No.9



**BEFORE THE HON'BLE NATIONAL GREEN  
TRIBUNAL  
(WESTERN ZONE BENCH) PUNE  
ORIGINAL APPLICATION NO. 37 OF 2013 (WZ)**

IN THE MATTER BETWEEN

Vanashakti Public Trust & Ors.

..Applicants

Versus

MPCB & Ors.

...Respondents

**AFFIDAVIT-IN-REPLY ON BEHALF OF THE DBESA**  
**i.e. NEWLY ADDED RESPONDENT NO.9.**

I, Mr. Rajesh Rajanibhai Doshi, the Chief Executive Officer/ Authorised Signatory of the Respondent No.9, an adult, Indian Inhabitant, aged 56 years, having my address at Plot No.OS-8, M.I.D.C., Phase 1, Opp. Savitribai Phule Kala Mandir, Dombivli (E) – 421 203, do hereby solemnly affirm and state as under:

1. I say and submit that the Original Applicants No. 1 & 2 herein filed the original application bearing No. 37 of 2013 (WZ) before this Honorable Tribunal on the grounds and for the reliefs mentioned in the said Original Application. This Respondent was not made a party to the said Original Application nor any specific



allegation of any act of omission and/or commission was made against this Respondent herein nor there was any specific relief sought qua this Respondent No. 09 herein.

2. The said application was heard and disposed of by this Honorable Tribunal vide its Final Order and Judgment dated 02.07.2015. I crave leave to refer to a copy of the said Final Order & Judgment dated 02.07.2015, when produced.
3. By Order Clause No. 58 (3) of the said order, this Hon'ble Tribunal directed the Dombivili CETP (total 16.5 MLD) to pay the restitution and restoration costs mentioned in the said Clause No. 58 (3) and based on that the Respondent No. 01 (MPCB) called this Respondent No. 09 and the Respondent No. 10 herein to deposit the above-mentioned restoration and restitution cost.
4. Since this Respondent No. 09 was not a party to the original proceedings and the said Order and judgment dated 02.07.2015 was passed without hearing this Respondent No. 09, hence this Respondent No. 09 filed a Civil Writ Petition No. 7208 of 2015 before the Hon'ble Bombay High Court, which stayed the operation of clause 58 (3) of the said Order against this Respondent No. 09. Few of the other Respondents, herein, also filed their respective Writ Petitions and they were also granted same ad-interim reliefs and the hearing of all Writ Petitions was made together. I carve leave to refer



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to and rely upon the said ad-interim stay orders and the proceedings of the said Writ Petition No. 7208 of 2015, when produced.

5. The Applicants herein filed SLPs before the Hon'ble Supreme Court of India against the said ad-interim orders passed by the Hon'ble Bombay High Court and the Hon'ble Supreme Court by common Order dated 05.07.2017 disposed of all the SLPs, whereby this Respondent No. 09 was given liberty to either file Review Application before this Hon'ble Tribunal or to file Statutory Appeal before the Hon'ble Supreme Court. I crave leave to refer to and rely upon a copy of the said Order dated 05.07.2017 when produced.
6. I say and submit that pursuant to the above said Order dated 05.07.2017, this Respondent No. 09 filed a Review Application No. 04 of 2017 before this Hon'ble Tribunal and this Hon'ble Tribunal vide its Order dated 19.11.2019 allowed the said Review Application in terms of the said Order. A copy of the said order dated 19.11.2019 is annexed hereto and is marked as **Exhibit-"A"**.
7. By an order dated 05.03.2020 passed in the above Original Application No. 37 of 2013, this Hon'ble Tribunal was pleased to observe that by said Order dated 19.11.2019, by which the said Review Application No. 04 of 2017 of this Respondent was allowed, which by implication set aside the findings at paragraph 58 (3)



*(Signature)*

of the said judgment dated 02.07.2015 passed in Original Application No. 37/2013 (WZB). A copy of the said Order dated 05.03.2020 is annexed hereto and is marked as **Exhibit-"B"**.

8. By an order dated 24.06.2020, this Hon'ble Tribunal directed the Applicants to implead this Respondent No. 09 to the above Original Application and serve a copy of the amended copy of Original Application and copy of other documents and this Respondent was allowed to file its reply in terms of the said Order dated 24.06.2020. A copy of the said Order dated 24.06.2020 is annexed hereto and is marked as **Exhibit-"C"**.

9. I respectfully and humbly do hereby raise the following preliminary objections as to the maintainability of the present proceedings against this Respondent No. 09 and that the said preliminary objections be kindly considered by this Hon'ble Tribunal before dealing with any other aspect/ issue in the matter against this Respondent No. 09. The preliminary objections are as under:-

- a. The Original Application No. 37 of 2013 is not maintainable against this Respondent No. 09 and is liable to be dismissed.
- b. The Original Application No. 37 of 2013 is bad in law and on facts at least against this Respondent No. 09 and is thus liable to be dismissed with Cost against this Respondent No. 09.



- c. That the Original Application No. 37 of 2013, to the extent it is allegedly concerned with this Respondent No. 09, is beyond the scope of jurisdiction of this Hon'ble Tribunal to pass any Order against this Respondent No. 09.
- d. The Original Application No. 37 of 2013 has been finally disposed of by this Hon'ble Tribunal vide its said Order dated 02.07.2015 and thus nothing remains in the Original Application to be heard.
- e. The concerned Respondents, who were the Parties to the Original Proceedings, when the said Order dated 02.07.2015 was passed, have already filed their respective Statutory Appeals pursuant to the liberty granted by the Hon'ble Supreme Court by said Order dated 05.07.2017 and that the said Appeals are pending.
- f. Pending the said Appeals before the Hon'ble Supreme Court, the Applicants herein filed one Execution Application No.08 of 2019, however in view of the pending of the said Appeals, this Hon'ble Tribunal by its said Order dated 05.03.2020 has dismissed the said Execution Application No. 08 of 2019. A copy of the said Order dated 05.03.2020 is annexed hereto and is marked as **Exhibit-"D"**.
- g. In view of the abovementioned Orders the present Original Application No. 37 of 2013 is not maintainable against this Respondent No. 09.

*(Signature)*



- h. In the amended Original Application No. 37 of 2013, the Original Applicants have only amended the cause title of thereof and save and except impleading this Respondent No. 09 and Respondent No. 10 herein, no other amendment at all is carried in the Original Application. Thus, there is nothing new in the amended Original Application No. 37 of 2013 and the Original Application before amendment has already been disposed of by said Order dated 02.07.2015 and that the Original Applicants have not filed any Appeal against the said Order dated 02.07.2015.
- i. The present Original Application No. 37 of 2013 is not maintainable at least against this Respondent No. 09.

10. Without prejudice to the above preliminary objections, I will now deal in the following manner with the Original Application No. 37 of 2013 filed by the Applicants.

- a. That no specific allegation is found raised against this Respondent No. 09. Also, originally this Respondent No.9 (DBESA) was not joined as a party Respondent. It may be appreciated that during the course of the proceedings in the matter before passing the Impugned Order during the course of hearing of the Original Proceedings, the Respondent No. 08, MIDC, herein requested this Hon'ble Tribunal to join the Societies, which were running CETPs in MIDC areas, as Parties,

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however this Hon'ble Tribunal by its order dated 12.02.2014, clarified that there was no need for the same for the reasons mentioned in that Order. A copy of the said Order dated 12.02.2014 of this Hon'ble Tribunal is annexed hereto and is marked as **Exhibit-"E"**.

- b. The above said Order dated 12.02.2014 of this Hon'ble Tribunal shows that there was nothing on record nor in the said Original Application filed by the Applicants against this Respondent No.09 and therefore this Respondent was not impleaded in the original proceedings at the relevant time.
- c. In fact, a bare perusal of the said entire original application, shows that nothing is contended, averred against the CETP of this Respondent nor any specific relief was sought against the CETP of this Respondent.
- d. The said Original Application shows that it was filed in respect of the alleged pollution of the Ulhas River supplying drinking and potable water to Badlapur, Navi Mumbai, various villages etc., whereas it came on record before this Hon'ble Tribunal during the original proceedings itself, that the CETP of this Respondent No.9 was not releasing its treated effluent in any part of the drinking zone of the said river and rather there is no dispute till date that the CETP of this Respondent No.9 releases its treated effluent in the saline zone and the



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was never found mixed up with drinking, potable water and thus there was no reason for making reference in the said original application to the CETP of this Respondent No.9 nor there is any report even as on day on record before this Hon'ble Tribunal that the CETP of this Respondent No. 09 is causing any pollution to the drinking, potable water of the Ulhas River. It is submitted that even as per the Irrigation Department and the River Policy of the Govt. of Maharashtra, it would be evident that the CETP of this Respondent No.09 has never discharged its finally treated effluent into the drinking water at any stage nor it was even discharged in the Ulhas/ Waldhuni River. A copy of the Affidavit dated 16.02.2015 of the Irrigation Dept. filed in the proceedings and a copy of the said River Policy are annexed hereto and are marked respectively as **Exhibit-"F" & "G"**.

- e. The said Original Application shows that it was filed by raising specific contention that various Industries were discharging their untreated trade/ industrial effluent directly into the drainages and nullah eventually flowing into Ulhas River and thereby making the same and surrounding atmosphere highly toxic and noxious, whereas the CETP of this Respondent is discharging the treated effluent and that also discharging the same in the saline zone and thus the alleged contentions of the Applicants were not referable to this Respondent No.9.

BAK



- f. It is humbly submitted that the CETP of this Respondent No.09 is discharging its treated effluent in the Ulhas Creek/ in saline water zone which is completely different from discharging the treated effluent in the Ulhas River and that the Applicant is trying to mix up both and thus trying to misguide this Hon'ble Tribunal to believe as if the CETP of this Respondent No. 09 is mixing its treated effluent in the Drinking water and thus causing pollution, which is completely incorrect and false. It is humbly submitted that in the ordinary and day- to-day life, the term "River" is considered as a "Water Body having drinking/ sweet water" and further that a bare perusal of the Original Application, will also show that as if the Applicants have also meant the same. Even As per the facts on record of this Hon'ble Court, would show that it is an admitted fact that the CETP of this Respondent No. 09 is discharging its treated effluent in the Ulhas Creek/ Saline Zone and not in the drinking/ water zone at any stage/ point of time.
- g. Another contention in the Original Application as an alleged reason of pollution was mentioned that MIDC i.e. the Respondent No. 08 herein was required as duty bound under law, to construct the pipe line to carry the treated effluent from CETPs in its areas to the disposal point recommended by the NIO to dispose in the Ulhas river but no such carrier pipe lines were constructed.



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This alleged contention of the Applicant itself shows that the responsibility to construct such pipelines were that of the Respondent No. 08 and not that of this Respondent No.9. Thus, the contentions of the Applicant as to construction of pipe-lines and upon failure thereof as to consequences, were not referable to this Respondent No.9.

- h. The said Original Application refers some Industries against which alleged Show Cause Notices were claimed to be issued but there is no averment that as if any show cause notice was issued to the CETP of this Respondent No.09. Thus, the contentions of the Applicants as to alleged show cause notices were not referable to this Respondent No.09.
- i. The Applicants have referred and have relied upon some alleged reports, annexed to the Original Application, and such reports were claimed to be prepared by authorities based on sample taken from certain locations. These reports themselves show that no sample was at all taken from the CETP of this Respondent No.09 and thus those alleged reports were also not referable to this Respondent No. 09.
- j. In para 9 of the said Original Application, there are specific contentions made, which clearly show that the said Original Application was never filed alleging any



breach on the part of the CETP of this Respondent No.09 and thus the said Original Application was not referable to this Respondent No. 09.

- k. There is clearly allegation in the Original Application, that the Respondent No.1 was engaged in routine sampling of discharges, which was done on a predetermined date, which enabled the violators to clean up any trace of the illegal and toxic discharges at the points where the sampling was being done and that those alleged discharges were done by bypassing the CETP path and by directly discharging into storm water drains which were meant to allow excess rain to drain out from the city and such discharges carried acidic type of emissions resulting in severe deterioration of air quality in the inhabited areas to the river. As per the Applicants, as the Respondent No.1 was not properly discharging its duty, thus the Applicants themselves collected the samples of the above said discharges and found that the results were alarming and that they informed the Respondent No.1 and other concerned authorities about the same. The point, which this Respondent No. 9 is making from the above is that, the Applicants referred to some industries violating the rules and discharging their untreated trade effluents directly in the Ulhas River and bypassing the path of the CETP, which itself shows that these contentions, samples, results etc. were also not referable to this Respondent



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No.9, who is running a CETP of its Members and that there is no finding against this Respondent No.9 that this Respondent have ever directly discharged untreated trade effluent in the river. No allegation raised against this Respondent No. 09.

- I. Without prejudice, it is submitted that as per the Applicant itself, it has carried out/ done several site visits for inspection and collection of samples of various individual industries along with various Govt. Agencies/ expert including MPCB, MIDC, CPCB, IIT, NEERI etc., however no case was pointed out against the CETP of this Respondent No. 09 nor against any of the Member Industry of this Respondent No. 09, which might have found discharging its respective treated/ untreated industrial effluent directly into the nullah as alleged or at all. It is submitted that rather it is on record that the Members Industrial Units of this Respondent No.09 are sending their industrial effluents in closed MIDC Pipe-Line to the CETP of this Respondent No. 09, who in turn after treatment discharges the same in the Ulhas Creek/ Saline Water Zone through the pipe line of the MIDC and thus the same does not mix/ meet the nullah or the sweet water zone etc. at any stage/ point/ time.

- m. The Applicants in para 10 of their Original Application have referred alleged joint sampling with Respondent No.1 and based on that also claimed to have conducted



tests privately. However, the alleged reports claimed by the Applicants show that alleged samples were submitted to the lab by the Applicants and not by the Respondent No.1. In fact the Applicants themselves admitted that the results of the tests conducted by them through private labs were nowhere near to the alleged test results of the Respondents No.1 and/or 4. In fact, as per the Applicants themselves, the concerned authorities also rejected the alleged results of the tests conducted by the Applicants through some private lab and as per the Applicants themselves, the authorities wanted joint sampling and testing through some reputed academic institution and thus ruling out the test results of the Somaiya Vidyavihar Private Lab. Thus, these alleged test results were also not referable to this Respondent No.9.

- n. Without prejudice to what is stated in last preceding paragraph, I humbly submit that the officers, representatives, staff etc. of this Respondent No.9 were never informed about any such alleged joint sampling nor as to the knowledge of this Respondent, any such joint sampling was ever taken from the CETP of this Respondent nor copy of test result of any such sampling was ever given to this Respondent No.9. Thus, the alleged joint sampling, its alleged test results were also never referable to this Respondent No. 09. Without prejudice, it is submitted that although the MPCB,



during the original proceedings before passing of the Impugned Order and Judgment dated 02.07.2015 by this Hon'ble Tribunal, has submitted extensive data of samplings done by MPCB, however, to the best of the knowledge of this Respondent No. 09, no adverse finding against this Respondent No. 09 is found by this Hon'ble Tribunal based on the alleged data of the MPCB.

- o. A further perusal of the Original Application would show that the Applicants have cited examples of few individual industries contending that they found causing pollution and the Applicants made written complaints with authorities, but no action was taken. I humbly submit that no such any allegation as to causing any pollution is found made against the CETP of this Respondent No.9.
- p. The remaining paragraphs of the Original Application would show that based on the above mentioned violations allegedly caused either by few individual industries or by those industries who were found discharging their untreated trade effluent directly in Ulhas River by bypassing the CETP, the Applicants have sought various reliefs and since there was no reference to this Respondent No.9 as to causing any pollution thus consequently there could also not been any relief sought by the Applicants against this Respondent No.9.

RRR



- q. Grounds (a) to (j) in the said Original Application show that the same were also based on the contentions of the Applicants as mentioned above i.e. (a) individual polluting industries and no action against them by concerned authority, (b) discharge of untreated trade effluents from individual industries directly in Ulhas River and by bypassing the CETP, (c) failure of construction of pipe line to carry treated discharge to the designated banks of river, (d) results of said alleged sample tests, which were even rejected by all authorities etc. and thus none of the ground was also referable to this Respondent No. 09.
- r. The Applicants have sought as many as 23 reliefs including main and interim ones and out of those sought only one following relief pertaining to the CETPs falling in the areas of the MPCB i.e. the Respondent No. 1 and the relief sought was as under:

*"To direct the MPCB to appoint an officer who will monitor the work of the CETP and the Applicants be given access for random joint samplings to be carried out for a period of one year or as deemed fit by this Hon'ble Tribunal"*

Pertinently, in the final order dated 02.07.2015, only the Monitoring of all CETPs in MPCB areas was directed by MPCB but the Applicant was not allowed for any joint



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inspection/ sampling etc. as was sought. Thus save and except the above prayer/ relief, even no other prayer/ relief was also referable to this Respondent No. 09.

- s. Save and except a copy of the said Original Application, this Respondent No. 9 is not served with any other Affidavit etc. of the Applicants and therefore I presume that the Applicants have not filed their any other affidavit etc. in the above matter. Thus, in case any other affidavit etc. of the Applicants is found in the proceedings, I crave leave of this Hon'ble Tribunal to file additional affidavit in reply dealing with the said affidavit etc. of the Applicants.
- t. It is thus humbly and respectfully submitted that the said Original Application was not referable to this Respondent No.9. Without prejudice, I say and submit that direction of this Hon'ble Tribunal by final Order dated 02.07.2015 as to monitoring of all CETPs from time to time is a general direction and not only for the CETP of this Respondent No. 9 in isolation. Thus, it is evident that the Original Application was not referable to this Respondent No.9 and that is the reason that this Hon'ble Tribunal rightfully by its said order dated 12.02.2014 rejected the application of the MIDC, Respondent No. 08, to implead the Societies, which included this Respondent No.9 also, running the CETPs.



11. With reference to the various Affidavits of the Respondent No.1, copies of which are served on this Respondent No.09, I am dealing with only those contentions of the Respondent No.1, which are concerned with this Respondent No.09. Rest of the contentions of the Respondent No.1 are not deemed to be admitted by this Respondent No.09.

- a. That as per Respondent No.1 (MPCB) the CETP of this Respondent No. 09 (DBESA) has a capacity of 16 MLD, whereas the actual effluent received at the relevant time was only about 12 MLD.
- b. As per the MPCB, the treated effluent of the CETP of this Respondent No. 09 was discharged into Ulhas Creek. The pipeline from CETP of this Respondent No. 09 to Ulhas Creek to carry treated effluent was to be provided by the Respondent No.8 i.e. MIDC but for certain reasons, the same was delayed. Thus, in my humble and respectful submission, this delay could not be held attributable to this Respondent No. 09.
- c. As per the MPCB, there were many sources of water pollution in Ulhas River basin, which mainly included the several illegal industrial units like Jean Washing Units in Ulhasnagar, which generated significant quantity of



*(Signature)*

industrial effluents. I humbly submit that these Jean Washing Industries are not members of this Respondent.

- d. As per the MPCB, the other main source of water pollution was untreated huge domestic sewage from various urban areas and directly discharge thereof in into Ulhas River or in Waldhuni River, whereas it is on record that the CETP of this Respondent No.09 has never discharged any untreated effluent in the Waldhuni River.
- e. As per the MPCB, the Water quality of Waldhuni River was abused by dumping of wastes in the river stretching and the quantity of such dumped waste was not quantified. There is no allegation that the CETP of this Respondent No.9 was discharging its treated/ untreated effluent in Waldhuni River or in its stretch. This Respondent has never discharged at any place any untreated effluent.
- f. I humbly submit that due to non-availability of the essential infrastructure/network, which was to be provided by the Respondent No.08, as to segregation of industrial effluent of textile units from that of chemical units and accordingly collection thereof and to carry the same to respective concerned CETP, the outlet norms as to COD/ BOD of the CETP of this Respondent



No.9 got disturbed for no fault attributable to this Respondent No.9.

- g. I submit that I could not find any allegation raised by the MPCB in respect of the CETP of this Respondent No. 09 for which this Respondent No. 09 could be held responsible.

**12. With reference to the Affidavit of the Respondent No.2:**

- a. It seems that by the said Affidavit, the Respondent No.2 have submitted before this Hon'ble Tribunal as to various directions given to various authorities for water pollution monitoring, appointment of expert agencies etc.
- b. There was not any contention raised about the CETP of this Respondent No.9.
- c. Thus, no case of pollution by the CETP of this Respondent No.09 was made out.
13. This Respondent No.9 is not served with copy of any affidavit of the Respondent No.3 i.e. **MoEF, Govt. of India**. Therefore, in case any affidavit is found filed by the Respondent No.3 and in that affidavit any allegation/ contention is found raised in respect of this Respondent No.09, then I reserve my right to file additional affidavit with liberty of this Hon'ble Tribunal to deal with such affidavit of the Respondent No.3.



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**14. With reference to the Affidavit dated 18.02.2015 of the Respondent No. 4 i.e. CPCB:**

- a. CPCB filed its action taken report by that affidavit.
- b. As per CPCB, the MPCB apart from various other proposals, also submitted before CPCB as to importance of laying of treated effluent disposal pipe-line from CETP to Creek.
- c. Periodic review of the implementation of the action plans for CPAs, SPCBs etc.
- d. Both the CETPs as Dombivli including the CETP of this Respondent No.9 (Textile CETP-DBESA) indicate exceeding COD/ BOD values than standard norms and thus directed MPCB for regular monitoring.
- e. I say and submit that the reason for exceeding the prescribed values of COD/ BOD by the CETP of this Respondent No.09 has already come above in the various affidavits filed by the MPCB itself, whereby the MPCB has submitted and this Hon'ble Tribunal have recorded in the said Order dated 02.07.2015 that the MIDC was required to provide the infrastructure to segregate industrial effluents (textile from chemical) and to carry the same to the designated CETP and also to provide the pipe line from CETP outlet to discharge point i.e. Creek and since none of them was provided, thus this Respondent No. 09 can-not be held responsible for the exceeding values of the COD/ BOD as more particularly submitted in the later part of this affidavit especially, when the said Pipe line work/ network

*(Signature)*



(required to be done by MIDC) is not yet completed as per the NIO Report.

15. **With reference to the respective Affidavits of the Respondent No. 5, i.e. KDMC, Respondent No.6, i.e. Ulhasnagar Municipal Corporation and the Respondent No.7 i.e. the Respondent No. 7 i.e. Badlapur Municipal Council:** I submit that no allegation is raised against this Respondent No.09 and therefore I am not dealing with the same.

16. **With reference to the Affidavits of the Respondent No. 8 i.e. MIDC:**

- a. The MIDC itself stated that it is their function to provide the infrastructure as to proper collection and segregation system for industrial effluents from various Industrial Units and also to provide pipe-line to carry the same to CETP for treatment and that MIDC is taking steps to improve and maintain the collection/ segregation system etc.
- b. MIDC also admitted that laying the pipeline from CETP to creek, discharge point is its responsibility and that MIDC was taking steps for the same.
- c. The MPCB in its affidavits submitted that the MIDC was taking steps to provide infrastructure to segregate textile effluent from chemical



effluent and also to carry the same by underground pipeline from the respective industrial units to the designated CETP.

- d. It is humbly submitted that the Members of this Respondent No.09 are the textile industries and they do not release toxicants and that the CETP of this Respondent No. 09 is satisfactorily meeting prescribed norms of COD/ BOD.
- e. Thus, even the affidavits of the MIDC show that the CETP of this Respondent No.9 could not get the required essential collection system/ segregation of effluent, underground pipeline to carry the effluent to CETP and pipeline to carry the treated effluent from CETP to discharge point in Ulhas Creek. However, now the Respondent No.08, have initiated steps to provide the said network as to collection and/or segregation of effluents to carry to concerned CETP and then to carry the treated effluent from outlet point of the CETP to the point of discharge as recommended by the NIO and this would be completed, the results of the CETP of this Respondent No. 09 are fairly and satisfactorily improved and would further be improved.
- f. It is thus submitted that in the absence of the above-mentioned infrastructure as to collection, segregation and discharge, this

PPA



Respondent No.9 cannot be held responsible for any alleged non-compliance with the prescribed values of COD/ BOD at all times.

17. **BRIEF FACTS: Relevant facts in brief are as under:**

- a. The MIDC formed the Industrial Areas of Dombivali some-where in and about the year of 1965-1966 and after its formation, the Textile Units came to be started and mainly of them the SSI Units. Pertinently even before formation of MIDC, in the Area of Dombivali and Kalyan there were many Chemical Industries and few of them of Large Scale, and in the absence of any effluent treatment facility, they were discharging their untreated Industrial Waste and Effluent Ulhas Creek. It may be appreciated by this Hon'ble Tribunal that toxic chemicals are used in Chemical Industries and not in the Textile Industries, and member industries of This Respondent are Textile Industries and none of them is using any toxic chemicals. Pertinently, as to the knowledge of this Respondent No.09, that no material was placed before this Hon'ble Tribunal to show that any toxic/ hazardous elements was/ were found in the treated effluent of the CETP of this Respondent No. 09.
- b. The CPCB categorized 17 types of Industries as highly polluting industries. The Textile Industry does not fall in



AAA

that list. Some of the type of industries falling in that list, were/ are also situated in MIDC Area. A copy of the said list of said 17 types of industries categorized as most polluted industries by the CPCB is annexed hereto and is marked as **EXHIBIT-"H"**.

- c. This Respondent is a company registered under Section 25 of the Indian Companies Act, 1956 having its office at the address mentioned in the cause title of the Petition. A copy of Certificate of Registration of This Respondent, showing it is registered under section 25 is annexed herewith and is marked as **EXHIBIT-"I"**.
- d. This Respondent was formed on or around 20.08.1997. This was formed to install and run a COMMON EFFLUENT TREATMENT PLANT (CETP) to treat industrial effluent from the Textile Industries in MIDC Phase-I, Dombivali and to discharge the treated effluent into the MIDC Drainage System and from there it is taken to Arabian Sea through Saline Water Zone of Ulhas Creek by the MIDC. As on day there are about 147 Textile Industries, which are the members of this Respondent and they are MSME Textile Industries and out of which as on day about 40 Industries are closed for one reason or the other. None of the Textile Industry Member of this Respondent is using any toxic nor any hazardous/ refractory/ calcitrant chemicals and thus such chemicals

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are not found in the effluent discharged from the Member Industries of This Respondent.

- e. It is submitted that all the shares of this Respondent Company are owned by its Textile Member Units and that the entire Managing Body/ Board of Directors/ Office bearers of this Respondent are out of the Owners of some of the Member Units and that all of them are Honorary Members and are not withdrawing any remuneration nor any fees nor any salary etc. All the policy decisions of this Respondent are taken in the General Body meeting of all the Shareholders i.e. owners of all Member Textile Units and accordingly the Office Bearers/ Board of Directors/ Management Body implements the policy decision taken in the General Body meeting. It is submitted that each Member Unit is responsible to run the CETP and also is responsible to bear the obligation or liability if any faced by this Respondent.
- f. This Respondent was given plot of land by Respondent No.8 somewhere in 2001. Subsequently CETP was constructed by this Respondent and the same was commissioned in 2003. **The CETP of this Respondent was formed and designed only to treat textile industrial effluent. However, subsequently since the MPCB had issued closure notice to about 267 industries including almost all textile industries**



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(Members of this Respondent) and insisted that unless and until this Respondent confirms to even treat the chemical industrial effluent, the members industries of this Respondent will not be allowed to be reopened. This Respondent No. 09 was not at all willing to accept this condition since this Respondent CETP was not designed to treat effluent of chemical industries and then the MPCB in the meeting held on 25.02.2002 assured this Respondent that there will be a very meagre quantity of the industrial effluent discharged by chemical industries which will not adversely affect the functioning nor the overall load on the CETP of this Respondent will be much varying than the designed parameters and therefore it should easily take the chemical effluent load and therefore treatment of combined effluent would be possible and further that in the said meeting this Respondent was pressurized to agree for amalgamation of the CETP of this Respondent (Textile Effluent) with CETP of the Respondent No. 10 (Chemical Effluent). This meeting was also attended and participated by the officials of the MIDC, Respondent No.8. This Respondent was also under tremendous pressure to commission CETP by 31.03.2002 else to face penal water charges, which is 200% of the applicable water charges for relevant period. As water for textile industries is one of the major



raw materials, therefore feared that water would be supplied at penal water charges. This would have proved fatal to the textile industry even to survive. It is submitted that under these circumstances and having no other option, this Respondent No. 09 agreed to treat the industrial effluent discharged by chemical industries. Initially the inlet COD norms for which the CETP of this Respondent was designed, was to receive the effluent having COD upto 700 mg/l but subsequently planned to expand 700 COD to 1200 COD to treat textile effluent only but under above mentioned compelling conditions it was increased to 1600 COD by accepting to treat chemical effluent also. A copy of the Minutes of the said Meeting dated 25.02.2002, is annexed hereto and is marked as **EXHIBIT-"J"**. I crave leave to refer to and rely upon copy of few closure notices as mentioned above, when produced.

- g. It is submitted that **in the MPCB CEPI Action Plan-2010 for Dombivli (in long term action plan section) recommended segregation of the textile effluent from chemical effluent and this act was required to be done by the Respondent No. 08 and also specifically ruled out the amalgamation of the said both CETPs as was sought by the MPCB during the said Meeting dated 25.02.2002.** Further the MPCB CEPI Action Taken Report 2013 for Dombivli shows that the aforesaid work of segregation was not



done. This Action taken report again ruled out the amalgamation of the said both CETPs. An extract of the said CEPI Action taken Report-2013 is annexed hereto and is marked as **EXHIBIT-"K"**.

- h. It is submitted that the MIDC by its letter dated 23.02.2017 has informed this Respondent that it has started the work for providing HDPE drainage lines and construction of chambers for separation of textile and chemical effluents. I submit that the Respondent No. 08, MIDC, by its letter dated 25.01.2019, informed this Respondent No. 09 that the work of segregation of effluent carrying pipeline of textile and chemical effluents is completed to the extent of 90% and is in progress and that the stipulated dated of completion as per tender is 05.02.2019. It is submitted that however the said work is not even till date completed and thus the segregation facility is still not made available to the CETP of this Respondent No. 09. A copy of the said letter dated 23.02.2017 is annexed hereto and is marked as **EXHIBIT -"L"** and a copy of the said letter dated 25.01.2019 is annexed hereto and is marked as **EXHIBIT- "M"**

- i. I say and submit that from the above it is evident that during the said meeting 25.02.2002, this Respondent No.9 was pressurized to agree to receive combined effluents of textile and chemical and to treat the same



and also to agree for the amalgamation of the CETP of this Respondent (Textile Effluent) with the CETP of the Respondent No. 10 (Chemical Effluent), whereas both were found by the MPCB itself as non-feasible and not scientifically possible.

- j. It is submitted that the CETP of this Respondent was installed somewhere in the year of October, 2000 and since then this Respondent is upgrading its CETP in regular interval of certain years by utilizing the best available and feasible upto date technology and technics in the field and for doing so this Respondent has spent on such upgradation several crores of rupees since October 2000. I crave leave to refer to and rely upon the chart of regular upgradation of the CETP of this Respondent along with the details of the expenditure incurred by this Respondent No. 09 along with copies of the relevant supporting documents, when produced.
- k. This Respondent is regularly maintaining and upgrading its CETP. This Respondent is also incurring huge cost and expenses on the operation of the CETP. I crave leave to refer to and rely upon a copy of chart showing details of such cost with copies of the relevant supporting documents, when produced.
- l. The CETP (Textiles) of this Respondent is discharging its treated effluent through the MIDC Drainage System in



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Ulhas Creek in Saline Water Zone and it does not come in contact at any point of time with sweet water/ drinking water zone. There is no finding in the said Order that the CETP of this Respondent is discharging its effluent in sweet water zone or in Waldhuni River.

- m. It may be appreciated that in MIDC Area, there is no separate carrier pipe-line for chemical effluent and the same is mixed in the pipe line meant only for textile effluent. This separate line is to be provided for by the MIDC, the Respondent No.8 and till this is done, the pipe-line of textile industries is burdened with effluent of chemical industries, which to greater extent further pollute the textile effluent. However, the MIDC has now finally initiated the steps for providing the infrastructure to segregate the industrial effluent of chemical industries from that of the effluent of textile industries and once it will be done, the results of the CETP of this Respondent No.09 are expected to be improved.
- n. Further for having second effluent collection system, the MIDC, Respondent No. 8 put a condition that cost of the same as well as cost of allied works to be incurred by this Respondent, whereas it was the duty and obligation of the Respondent No. 8 to provide the same on its own cost and expenses and especially in the circumstances, when apart from water charges, the Respondent No. 8 is collecting drainage cess charges for providing and maintaining the drainage/ sewage systems.



- o. As to the issue of treatment of chemical effluent by CETP of this Respondent, it was clearly told to this Respondent that the chemical load shall be of very meagre quantity, which will not affect the functioning nor the results of CETP of this Respondent. However, the same was not found correct and in the absence of availability of the proper collection and segregation network, the CETP of this Respondent No. 09 was heavily burdened with undesired industrial effluent of chemical industries and which not only had potential but actually and adversely affected the functioning and results of CETP of this Respondent No. 09.
- p. The effluent of chemical industries to a great extent pollutes the textile effluent. This being so, there was/ is a grave need for providing two separate pipelines for chemical effluent and for textile effluent and the same have till date not been provided by Respondent No.8 and thereby adversely affecting the performance of the CETP of this Respondent No. 09.
- q. That even small-scale units of chemical industries having effluent quantity less than 25 CMD were discharging COD of as high as of 5000 mg/l (in some cases even about 20000 COD) whereas the CETP run by this Respondent No. 09 is designed to treat the industrial effluent having COD up to 1600 mg/l. It may also be understood that the Inlet COD norms of the



CETP of this Respondent No.09 (which is designed and approved to treat effluent from textile industrial units) are totally different from that of the Inlet COD norms of the Chemical CETP, like that of the CETP of the Respondent No. 10 herein, which is designed and approved to treat effluent from chemical industrial units). The Inlet COD norms for Textile CETP (Respondent No. 09) are very less/ low in comparison with the Chemical CETP i.e. the CETP to treat industrial effluent of chemical industries.

- r. That the industrial effluent discharged by the textile industries members of this Respondent No. 09 do not contain any toxic/ heavy chemicals. It may be appreciated that the scientific meaning of refractory/ recalcitrant COD means the quality of industrial effluent discharged is not biodegradable, whereas the quality of the industrial effluent discharged by the CETP of this Respondent No. 09 is biodegradable.
- s. It may be appreciated that the industrial effluents of the members of this Respondent are connected with CETP (Textiles) through drainage pipe network provided by MIDC and that they do not come in contact at any point of time with sweet water/ drinking water zone or supply resource. From the CETP Textile the treated effluent is also discharged through drainage line provided by MIDC. Thus, at no point of time, the untreated (partially treated) effluent coming to the inlet point of the CETP-



Textiles or the treated effluent going from the outlet point of the CETP Textile mixes with/ pollutes the sweet water/ drinking water.

- t. It is humbly submitted that in the original proceedings, an Executive Engineer, Irrigation Department Thane filed its affidavit dated 16.02.2015 (Exh-'F' hereto) before this Hon'ble Tribunal. By the said affidavit 4 outlets for disposal of waste flowing in Ulhas River was submitted and that out of them 3 outlets being in saline water, which is not usable. The CETP of this Respondent comes in saline zone. The above contentions of this Respondent also find support from the river policy, Exh-'G' hereto, (of the State Govt. of Maharashtra) and a copy of the map provided by MIDC.
- u. The Ministry of Environment and Forests vide Office Memorandum dated 13.01.2010 based on Comprehensive Environment Pollution Index (CEPI) during year 2009-2010 declared Dombivali as critically polluted area and imposed temporary moratorium on establishment of new industries and expansion of existing industries in Dombivali area. However, subsequently, the MPCB, conducted CEPI and it found substantial improvement in Dombivili area. Based on this improvement, the Respondent No.1, vide its letter dated 11.02.2011 addressed to the CPCB, requested lifting of moratorium based on action taken report in respect of areas falling under 4 CEPI including Dombivali.



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and thereafter the said moratorium was successfully lifted by the same Ministry, who imposed it, vide Office Memorandum dated 15.2.2011. It seems that this fact was not placed before this Hon'ble Tribunal. Copies of the said Office Memorandum dated 13.1.2010, said letter dated 11.2.2011 and the said Office Memorandum dated 15.02.2011 are Annexed hereto and are respectively marked as **EXHIBIT-"N", "O" & "P"** **respectively.**

v. It is submitted that the MPCB officials during a meeting held on 3/7/2015 informed representatives of various CETPs, that they had carried out survey of Dombivli area in 2011-12 and the CEPI was found to be about 54 which is much less than CEPI of 78 in 2009 as reported by CPCB. The said Original Application was filed in the year of 2013 and the said Order was passed on 2.7.2015. Thus, it is evident that before even filing the said Original Application, the conditions in Dombivli area had substantially been improved but it seems that this Hon'ble Tribunal was not updated about the same and this Hon'ble Tribunal was misguided by producing old results before this Hon'ble Tribunal.

w. As per CPCB the Water CEPI for 2009 for Dombivli area was however high as 63.5, which subsequently came down substantially to 39.0 as per MPCB report for the year 2015. This extract will show the CEPI score for Dombivli had become 54.44. A copy of the extract



prepared based on the said report of the MPCB for the Year 2015 is annexed hereto and is marked **EXHIBIT-"Q"**.

- x. The CETP-Textiles is also in the process of upgradation and modernization to achieve revised BOD standards. This Respondent No. 09 has already initiated working on that project and have already appointed the expert agency/ IIT-Powai, to prepare detailed project report. The DPR has been submitted with concerned authority including MIDC and MPCB for approval in February 2015. This Respondent expects that after getting all necessary approvals, this Respondent would be able to further improve results in phase manner.
- y. It may be appreciated that as per the scheme of CETP Installation, upgradation, expansion etc., if the CETP is operated by an association/ society etc. of the industries, whose effluent to be treated, then 50% of the cost to be paid by the Central Govt. in the form of subsidy, 25% by the State Govt. in the form of subsidy and the remaining 25% by the concerned operator. Thus, in the case of the CETP of this Respondent No. 09, only 25% of the total cost to be borne and paid by this Respondent and remaining 75% by the Govt. Subsidies as mentioned above. For the present DPR implementation also, this Respondent No.09 have collected from its members the contribution totaling to 25% and that the Govt. share of 75% is awaited from



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last few years and once that is received, the current CETP set up of this Respondent No. 09 shall be upgraded and modernized etc. as per its current DPR Proposal.

z. It is submitted that this Respondent is regularly taking several steps for upgradation of its CETP and is also successful in getting the improved results. It may kindly be appreciated by this Hon'ble Tribunal that some time back the MPCB conducted tests etc. to find out the status of all 24 CETPs, including the CETP of this Respondent, to find out whether the same are conforming or non-conforming CETP as per the various directives issued by CPCB and/or other concerned authorities from time to time. In a letter dated 6<sup>th</sup> March, 2017, the MPCB addressed to the MIDC recorded that out of the aforesaid 24 CETPs 17 CETPs are complying to the standards stipulated in the consent. It is submitted that during that survey and as per the aforesaid letter, the CETP of this Respondent is covered under the category of conforming CETP. Hereto annexed and marked as EXHIBIT - "R" is a copy of the said letter dated 6<sup>th</sup> March, 2017.

aa. It is submitted that in the meeting held on 9<sup>th</sup> May, 2017, attended by Addl. Chief Secretary-Environment and Chairman of MPCB, MIDC officials, MPCB officials and NEERI representatives, which was held with the objective to discuss various issues with



respect to the CETPs in Maharashtra and in the said meeting the CETP of this Respondent was also discussed and it was agreed by all the members present that the performance of the CETP of this Respondent has been improved due to its upgradation and augmentation. In the said meeting, the MIDC has also proposed to lay separate conveyance system for both the CETPs i.e. for chemical CETP (DCETP) and Textile CETP i.e. the CETP of this Respondent. Also, in the aforesaid meeting it was observed that MIDC has to ascertain different proposals submitted regarding conveyance of effluent from individual industries and CETP outlets to the creek. From the above, it is abundantly evident and clear that once the MIDC provides the aforesaid infrastructure, the CETP of this Respondent No. 09 will be able to further improve its results. Hereto annexed and marked as **EXHIBIT-"S"** is a copy of the minutes of the aforesaid meeting dated 09.05.2017.

- bb. It is submitted that this Respondent have obtained from the MPCB a copy of Status of Action Taken Plan in Dombivili Industrial Area and that from a bare perusal thereof, it would show that substantial improvements by the CETP of this Respondent. As and when the MIDC would finish the work of segregation of textile effluent from that of chemical effluent and further MIDC shall complete work of laying the drainage pipe-line from the out let point of CETP of this Respondent to the point



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recommended by the NIO, the CETP of this Respondent would be able to further improve its results. A copy of the above said Status report as to Action Taken is annexed hereto and is marked as **EXHIBIT-"T"**.

cc. Without prejudice, one joint meeting was held on 28.03.2016 between the Officers of the CPCB, MPCB with representatives of CETP of this Respondent No. 09 and other CETPs and after joint visit and comprehensive inspection etc., it was unanimously observed by all concerned authorities and was accordingly also recorded in the minutes of the said meeting that at least the CETP of this Respondent No. 09 has improved. A copy of the said minutes of the meeting dated 28.03.2016 is annexed hereto and is marked as **EXHIBIT-"U"**.

dd. It may be appreciated that on one hand the entire effluent discharged by the CETP Textiles is treated in a very well organized manner and in organized procedure but on the other hand, as is observed and has been recorded in the said Order dated 02.07.2015 of this Hon'ble Tribunal, there are many other resources, organized or not, who are discharging their effluent and that also in multifold quantity without any treatment at all and that also directly in the sweet water zone and apart from this there are many other persons who even from outside the area of Dombivali bring their effluent in tankers and dump the same directly in the Ulhas River. It may thus be appreciated that these are



the major factors responsible for pollution and not the CETP of this Respondent, however all of them got escaped but This Respondent No. 09 was burdened with heavy cost, which decision of this Hon'ble Tribunal is needed to be recalled at least qua this Respondent No. 09.

ee. I say and submit that the alleged study report relied upon by the Original Applicants is completely vague and ambiguous and was not related with the CETP run by this Respondent and therefore the alleged findings of the said alleged report ought not to be related with the CETP of this Respondent No. 09. Without prejudice to the above, I submit that the alleged findings of the said alleged report are not deemed to be admitted by this Respondent No.09.

ff. Without prejudice, I say and submit that the NIO report referred in the Order dated 02.07.2015, in its conclusion mentioned that the presence of heavy metals in the CETP treated effluents were within the MPCB Consented norms though BOD and COD exceeded the set norms. A copy of the summary of the NIO report is annexed hereto and is marked as **EXHIBIT-"V"**.

gg. I say and submit that this Respondent has submitted its DPR to MIDC for approval on 11.02.2015 i.e. much in prior to the passing of the order and judgment dated 02.07.2015 passed by this Hon'ble



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Tribunal. I say and submit that following is the table as to the action taken by this Respondent as to upgradation of its CETP:

Dates	Events
11.02.2015	DPR submission to MIDC for 100 ppm BOD & 250 ppm COD, 30 MLD.
17.07.2015	Application for additional Land allotment.
03.08.2015	Application for Environment Clearance
03.05.2016	Approval of DPR for 100 PPM BOD & 250 PPM COD.
21.06.2016	Submission of draft agreement for subsidy.
30.06.2016	MPCB has given dead-line to achieve the parameters of BOD of 30 ppm in their consent and we are not able to meet the same pending



	requisite actions.
05.07.2016	Submission of CETP treatment charges (Rate Revision)
03.02.2017	MIDC informed regarding appraisal of DPR by CH2M
24.03.2017	Approval of Subsidy for 30 PPM BOD & 250 PPM COD
09.08.2017	Grant of Environment Clearance
	Regular upgradation/modernization of CETP of Respondent No.09 till date.

hh. I say and submit that right from the very beginning it had been the demand and contention of this Respondent that infrastructure separating the industrial effluent from chemical industries must be separated /segregated from that of the effluent from textile industries be provided and the MIDC for one or the other reason was deferring the same. I say and submit



that in spite of the various reports that mixing of both the industrial effluents was not good nor was allowed to be treated by the CETP of the this Respondent which was designed keeping in view the parameters required to treat the effluent from textile industries. The design, specifications and parameters as to treatment as per DPR of the CETP of this Respondent were duly approved from time to time by the competent authorities. There is no any allegation raised against the CETP of the this Respondent that it was not commissioned/ installed or upgraded as per the DPR approved by concerned authority. I say and submit that finally the MIDC by its said letter dated 23.02.2017 confirmed that it has started the aforesaid work of segregation i.e. providing infrastructure of separating industrial effluent from chemical industries from that of textile industries.

- ii. I say that Ulhas River extends up to NRC Bandhara/ Mohone Bandhara/ Dam, which is sweet water zone and thereafter the downstream part including Dombivli and other places is a part of creek having saline zone. I repeat and reiterate that estuary which falls within the saline zone, which is not used for drinking by the residents. This being so and as is evident from the report submitted by NIO, the treated effluent is discharged in Ulhas creek in saline water zone and it does not come in contact with sweet water / drinking water zone. Pertinently, the distance between the said NRC/ Mohone Dam/ Bhandara and the Thakurli Bridge



(which is the discharge point of CETP of this Respondent No. 09) is about 12 Kilo Meters up stream and thus no possibility to mix with sweet water.

18. **GROUNDS:**

- (i) It may kindly be appreciated that no evidence is found against this Respondent No.9 showing that this Respondent caused any willful water pollution as alleged.
- (ii) It may kindly be appreciated that the Applicants have filed the above case alleging sever pollution in Waldhuni River, whereas the CETP of this Respondent No.9 has never discharged its treated effluent in Waldhuni River. This Respondent is discharging its treated effluent in saline zone of Ulhas Creek.
- (iii) The material on record in the above matter would show that various industries, jean washing industries etc. were found discharging their untreated & polluted industrial effluent directly in sweet water zones and thus causing sever pollution, whereas this Respondent No.09 has never discharged untreated effluent anywhere nor in saline water zone and even the treated effluent is never discharged in the sweet water zone by the CETP of this Respondent No. 09.
- (iv) That it is humbly submitted in foregoing paras that the allegations and/or adverse findings are not referable to



this Respondent and that all those submissions may kindly be considered as grounds.

- (v) That in any circumstances, as submitted above, the alleged amount of cost/ penalty in respect of this Respondent is not correct nor even the basis is correct based on which the alleged calculation was arrived at.
- (vi) This Respondent is a company registered under Section 25 of the Companies Act, 1956 with object to function of no profit no loss and therefore it missed to be considered by this Hon'ble Tribunal that there was no occasion for this Respondent for profit motive and thus the said Order ought not to have been passed on the ground of profit motive and further not to take penal action against the Office bearers of This Respondent especially when none of them could be heard before passing order.
- (vii) It could be appreciated that the entire Original Application was for safeguarding drinking/ sweet water and in the order, this Hon'ble Tribunal has pleased to specifically record that discharge from CETP of this Respondent was not in the drinking/ sweet water zone but in saline zone and thereby in Ulhas Creek and then in Arabian Sea without coming in contact at any point of time with sweet/ drinking water zone, which could be seen from the Affidavit filed by the Irrigation Dept. before this Hon'ble Tribunal in the original proceedings, which needs to be considered by this Hon'ble Tribunal.



- (viii) One of the Industry Member of this Respondent in RTI enquiry from the Irrigation department, was informed that the drinking water is being lifted from sweet water zone, which is evidently very much distant from the CETP of this Respondent and also there is no occasion nor any chance of mixing the effluent discharged by CETP of this Respondent with drinking water at any point. This Respondent craves leave to refer to a copy of the said RTI Application/ Reply, when produced.
- (ix) It could be appreciated that the entire basis of filing the said Application No.37 of 2013 was on the ground that the Ulhas River is an important river supplying drinking water to the urban areas of Badlapur, Navi Mumbai, Ambarnath and Ulhasnagar besides several villages in the rural areas of District Thane. Undisputedly, this Respondent is not discharging its effluent into the sweet water zone stretch of the Ulhas river basin but in the saline water zone stretch, which can also be seen from the said Affidavit of the Irrigation Department and the Map attached thereto, and thereby direct flow into the Arabian sea without affecting at all the sweet water zone i.e. drinking water to be supplied to the areas including areas apprehended by the original Applicants before this Hon'ble Tribunal.



- (x) In the above matter, some specific alleged resources causing pollution to the drinking water/ sweet water zone are identified and thus the same were found causing pollution. The CETP of this Respondent was not discharging its effluent in sweet water zone at any point of location and thus this Respondent No.09 is not liable for any cost, fine, penalty etc. for causing any alleged pollution to Ulhas/ Waldhuni River as alleged by the Applicants.
- (xi) It may be considered by this Hon'ble Tribunal that this Respondent is discharging its treated effluent into saline water zone which further meets directly to the Arabian sea thus causing no harm and damage to the quality of drinking water and further that this Respondent is a company registered u/s 25 of the Companies Act, 1956 and is formed on the basis of no profit no loss.
- (xii) It may be appreciated that the CETP (Textiles) of this Respondent No.09 falls in the last end of the Ulhas River Basin i.e. Saline Water Zone meeting Ulhas Creek, thus the CETP of this Respondent was/is discharging its effluent directly in the Arabian Sea through saline zone without coming in to contact with sweet water zone at any point of time.
- (xiii) The CEPI result shown by CPCB were for the year of 2009, which were shown high, but the CEPI results



for the subsequent years, especially shown by MPCB for the subsequent years which shown that the condition had substantially improved.

(xiv) This the CETP of this Respondent is that of Textile Industries and the Textile Industries do not use toxic metals and thus their industrial effluent do not contain toxic metals. It may be appreciated that even the Legislature in its wisdom after examining all aspects and technical data, have drafted standards of parameters for effluent discharge and treatment thereof in respect of effluent discharged by Textile Industries considering that it does not contain toxic/hazardous elements.

(xv) Right from the very beginning, it was admitted position that for having desired norms and results as to COD at the out let points of the CETP, then it was mandatory that the MIDC provides at least 2 infrastructural facilities being its Statutory and Contractual obligations, viz (1) Collection and segregation of textile effluent from chemical effluent and drainage pipe line carrying such segregated textile effluents to the CETP of this Respondent No.09 and (2) to provide drainage pipe line from the out let point of the CETP of this Respondent to the discharge point as per the recommendations of the NIO. This requirement was admitted by all the concerned authorities/



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Committees from time to time and on many occasion the concerned authorities have even released directives to the MIDC to fulfill both the above requirements. Time and again all the concerned authorities, including the CPCB and MPCB, have identified and confirmed that for want of above two facilities from MIDC, the CETP of this Respondent is suffering, otherwise the CETP of this Respondent No. 09 is capable and competent to achieve the desired norms.

- (xvi) It is submitted that the CETP of this Respondent No.09 was established by the textile Industrial units to treat industrial effluents of member textile industries and accordingly the CETP was designed to meet standards keeping in mind the quality of effluent discharge coming from textile industries. However, due to logistic problems, this Respondent No.09 was forced by the concerned local statutory authority to accept effluent even from chemical industries, which had potentials to adversely affect the outlet standards. Further majority of these chemical industries are Small Scale units discharging less than 25 KI/day of effluent and these SSI Units were not required to maintain any standard for COD as per the provisions of the Environment Protection Rules, 1986. Hence under the benefit of that legal provisions, these Small-Scale Chemical units could discharge high COD stream which was not biodegradable but as these were forced to be



accepted by the CETP of this Respondent No. 09, which had potential to affect the final outlet standards of the COD for the reasons beyond the control of this Respondent No.09.

(xvii) It is submitted that right from the commissioning of its CETP (Textiles), this Respondent No.09 is taking regular steps for expansion and upgradation of its said CETP and also since passing of the said Order dated 02.07.2015 of this Hon'ble Tribunal, this Respondent No. 09 have already spent few Crores of Rupees to further upgrade and modernize its said CETP (Textiles) and that once the approved DPR of this Respondent No.09 would be permitted to be implemented, the CETP of this Respondent No.09 will be able to further improve its results. The above being long term measure, this Respondent No. 09 have already taken various steps and have upgraded its CETP, which would be evident from the chart herein above mentioned.

(xviii) This Hon'ble Tribunal may kindly be pleased to appreciate that this Respondent is a Section 25 Company formed on the basis of No loss No profit, while considering and applying the decision of the Hon'ble Supreme Court of India in the case of M.C. Mehta Vs. Union of India reported in (1987) 1 SCC 395 whereby even in the case of any industry is found to be responsible for causing pollution it was held by the



Hon'ble Supreme Court of India that magnitude, capacity and prosperity of the unit are the relevant considerations for determining the extent of the liability.

- (xix) The Executive Engineer, Irrigation Department, Thane filed one Affidavit dated 16.02.2015 before this Hon'ble Tribunal in original proceedings and as per that affidavit there are 4 outlets for disposal of waste which are flowing in Ulhas River in Thane District, out of which 3 outlets are in saline water, which is not usable for drinking or Irrigation. Admittedly the CETP of this Respondent is falling among these 3 outlets in saline water. Along with said affidavit a copy of river map was annexed to show position of said 4 outlets.
- (xx) That estuary is a partly enclosed coastal body of brackish water with one or more rivers or streams flowing into it and with a free connection to the open sea. Brackish water is water that has more salinity than fresh water and this being so, the same is not used by the residents around the same. The whole object of the CETP of this Respondent No.09 is to treat industrial effluent from the Textile Industries in MIDC, Dombivli and to discharge the treated effluent into the disposal system of MIDC, which would carry the same upto the point suggested by NIO. The Industrial Effluents of the members of this Respondent are connected with CETP Textiles through drainage pipe network provided by MIDC and the same do not come in contact at any point

(PPD)



of time with sweet water / drinking water zone or supply resource. This being so, at no point of time, the untreated effluent or the treated effluent going from the outlet point of CETP Textile mixes with / pollutes the sweet water / drinking water. It seems that the NIO report referred in the said Order dated 2.7.2015 is in respect of the investigations made in/ with the estuarine water which is brackish water. Thus, any conclusion based on this report that the sweet water zone is polluted will not be proper and accordingly imposition of cost and penalty on this Respondent based on that report will also not be proper, thus its needs consideration by this Hon'ble Tribunal.

- (xxi) Without prejudice, even presuming while denying that the CETP of this Respondent has caused any pollution, even than while considering and imposing compensation, penalty, restitution cost etc., this Hon'ble NGT may kindly be pleased to consider the nature of industrial waste after treatment. The hazardous waste removed in the CETP of this Respondent No.09 is sent to CHWD and the cost of disposal of the same is about Rs. 1,600/- Rs.2,000/- per MT including handling charge plus taxes as applicable. The disposal charges are levied on the basis of quality of waste and treatment required to safely dispose the same. Thus, the basis to be adopted by this Hon'ble Tribunal for imposing the cost



and penalty etc., if any at all, needs consideration at least qua this Respondent No.09.

(xxii) Pertinently, the Applicants themselves in their Original Application have raised serious doubts as to the authenticity regarding the test reports of the Respondent No. 1 i.e. the MPCB, and contended that the same were not reliable. It thus submitted that the Applicants after raising the above doubts, are not entitled to seek from this Hon'ble Tribunal to levy/ impose cost/ penalty etc. on this Respondent No. 09 based on the said alleged test reports of the MPCB.

(xxiii) Without prejudice, the alleged test reports were not valid otherwise also as the due process of test report for sampling and testing not followed nor any alleged sample was taken in the presence of the representative of this Respondent No. 09 was taken and thus such alleged test reports can-not be taken as basis for levying cost/ penalty at least on this Respondent No. 09.

(xxiv) There is not any evidence on record against the CETP of this Respondent No.09 as to causing alleged pollution as alleged in the Application and in the absence thereof, it is not justified that the Respondent No. 09, be held responsible for causing the alleged





Pollution. On the contrary, it is on record that the Statutory Agencies like MPCB, CPCB, MIDC, NEERI etc. have found many unorganized industries, Jean Washing Industries, Chemical Industries etc., who were discharging their respective untreated (without any treatment of any kind whatsoever) and highly toxic effluents directly into the Drinking/ Sweet Water Zones of the Ulhas and Waldhuni Rivers and therefore such persons/ industries are liable for causing pollution and not this Respondent No.09.

(xxv) The levying/ imposing of the alleged cost/ penalty is otherwise also untenable in law, at least on this Respondent No.09 especially in the facts and circumstances of this case.

(xxvi) This Hon'ble Tribunal may kindly be pleased to consider that the CETP of this Respondent is designed to treat effluent from Textile Industries which is bio-degradable, whereas this Respondent No.09 was forced in spite of its strong to very strong objection, to accept the effluent from chemical industries also, which contained refractory elements which were beyond the treatment by the CETP of this Respondent No.09 which was designed to treat textile industrial effluents. This might have affected the results of the CETP of this Respondent No.09 to some extent and for that this Respondent No.09 ought to be avoided to be fastened



PPD

with any alleged liability nor any penal action be taken against this Respondent No.09 nor against its Officers.

(xxvii) The Committee appointed by this Hon'ble Tribunal has visited the sites including that of the CETP of this Respondent No.09, who has prepared its report, which expressly mentioned that the CETP of this Respondent No.09 was working efficiently and was achieving the satisfactory results. The said Committee consisted of the respective officials of the CPCB, MPCB, MIDC, Applicant/ NGO, IIT. A copy of the said report is annexed hereto and is marked as **EXHIBIT-"W"**.

(xxviii) The Hon'ble Supreme Court of India also appointed a committee, who has also visited the sites including that of the CETP of this Respondent No.09, who has prepared its report and from the said report it can be seen that there is no adverse findings/ observations against the CETP of this Respondent No.09. A copy of the said report is annexed hereto and is marked as **EXHIBIT-"X"**.

(xxix) That no penal action be taken against the Office Bearers of the CETP of this Respondent No. 09 as no willful/ intentional act of omission/ commission is done on their part causing the alleged pollution nor any evidence is also found against them.





(xxx) Any other ground with the leave of this Hon'ble Tribunal.

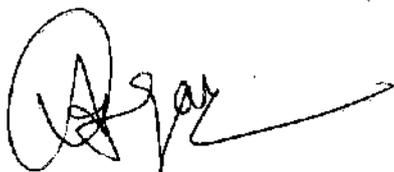
19. Without prejudice to the above, I say and submit that this Respondent is aware of the need for balance of sustainable development with control of environmental pollution and is therefore taking all feasible steps on their part for the same. Feasibility studies were carried out by two independent consultants viz. M/s Sweep Enviro (sine IIT-B) and M/s Klean Enviro Consultants. Based on recommendations received, additions and modifications to the existing infrastructure is being carried out on a continuous basis and that this Respondent No.09 has also further spent approx. Rs. Five crores on the upgradation during the period of 2015-2017.
20. I say and submit that in the above affidavit, I have referred many documents but due to certain reasons beyond my control and/or due to the reason of not readily available of these documents with this Respondent No.09, the copies of them could not be filed along with this affidavit and that I crave leave of this Hon'ble Tribunal to file the copies of those documents by way of separate compilation, as and when needed.



*(Signature)*

21. I crave leave to file an additional affidavit in reply, if required, on behalf of this Respondent No.9 in the above matter.
22. I crave leave to add to, alter, amend, change, delete the above submissions or any of them.
23. In the above facts and circumstances, it is respectfully and humbly submitted that no case is made out against this Respondent No.09 nor its Officers/ Directors and that the above Original Application of the Applicants is liable to dismissed with heavy cost against this Respondent No.09.
24. I say and submit that pursuant to board resolution dated 08.07.2017 passed by this Respondent, I am entitled to sign, execute this affidavit and to depose on oath. I have made myself conversant with the facts of the matter with the record maintained by this Respondent in the above matter. A copy of the said board resolution is annexed hereto and is marked as **EXHIBIT-"Y"**.

Solemnly affirmed at Mumbai )  
Dated this 18<sup>th</sup> day of April, 2022 )



Vijay Kumar Aggarwal  
Advocate for Respondent No.9



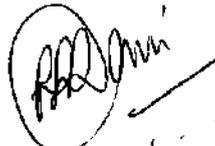
(Mr. Rajesh Doshi)  
Deponent



**VERIFICATION**

I, Mr. Rajesh Rajanibhai Doshi, Authorized Signatory/ CEO of the Respondent No.9 abovenamed, an adult, Indian Inhabitant, aged about 59 years, having address as mentioned in the cause title of the above Original Application, do hereby verify and state on solemn affirmation that the contents of the above Affidavit in Reply are true based on my own knowledge and as per the record maintained by the Respondent No.9 and that I believe the same to be true and correct.

Solemnly affirmed at Mumbai  
Dated this 18<sup>th</sup> day of April 2022.

)  
)   
(Mr. Rajesh Doshi)  
Deponent/ Respondent No.9

Aadhar No-955330315994

Identified by me



Vijay Kumar Aggarwal

Advocate for Respondent No.9

*Semmandh  
pow 8/4/2022*

Before me/ Notary





SR. No. 722  
Date: 18 APR 2022  
NOTARY REGISTER

**BEFORE ME**

**DR. T. C. KAUSHIK**  
ADVOCATE HIGH COURT &  
NOTARY, GOVT. OF INDIA  
REGD. NO. 309

FLAT NO. 804, BLDG. NO. 11,  
YVONNE BUILDING, NAKHAR ANANT SHAKTI,  
NEAR JAIN TEMPLE, CHANDIVALI,  
ANDHERI (E), MUMBAI-400 072.



Item No. 01 to 03

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

Execution Application No. 08/2019 (WZ)

IN

Original Application No. 37/2013

WITH

Review Application No. 04/2017 (WZ)

M.A. No. 238/2017 (WZ) & M.A. No. 249/2017 (WZ)

IN

Original Application No. 37/2013

WITH

Original Application No. 148/2017 (WZ)



Vanshakti & Anr.

Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors.

Respondent(s)

Dombivli Better Environment System  
Association (BESA) & Ors.

Applicant(s)

Versus

Vanshakti Public Trust Unique  
Industrial Estate Mumbai

Respondent(s)

WITH

Dombivil Common Better Effluent  
Treatment Plant & Ors.

Applicant(s)

Versus

Vanshakti Public Trust Unique  
Industrial Estate Mumbai & Anr.

Respondent(s)

59  
Date of hearing: 19.11.2019

**CORAM :** HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER  
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER

For Applicant(s):

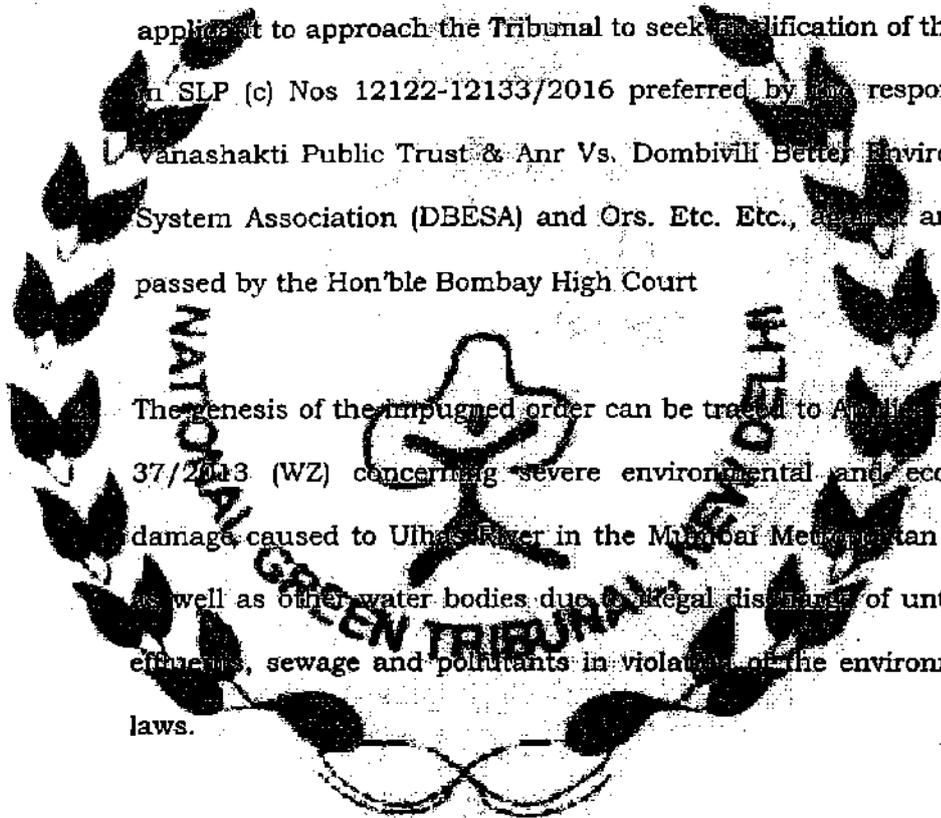
Mr. Colin Gansalves, Mr. Zaman Ali, Mr. Ankur Kumar, Mr. Hitesh Mankar and Mrs. Megha Sharma, Advocates in Item No. 2  
Mr. T. N. Subramanian, Sr. Advocate alongwith Mr. Vijay Kumar Aggarwal and Mr. Shivshankar Swaminathan, Advocates for Review Applicant (DBESA)

For Respondent (s):

Mr. Saurabh Kulkarni along with Mr. Prashant Bhat, Advocates for Notice (DCETP&AAMA) in Item No. 1 & 3 In Item No. 1  
Ms. Manasi Joshi, Advocate for Respondent No. 1  
Mr. Saurabh Kulkarni, Mr. Prashant Bhatt & Ms. Priti Joshi, Advocates for Respondent (DCETP)  
Mr. Aniruddha S. Kulkarni, Advocate for Respondent No. 4 In Item No. 2  
Mrs. Supriya Dangare, Advocate for Respondent Nos. 3 & 4  
Mr. Aniruddha S. Kulkarni, Advocate for Respondent No. 6  
Mr. Pradnyesh Loregaonkar i/b Little & Co, Advocate for Respondent No. 10 along with Mr. S.S. Nanaware, Executive Engineer, MIDC, Dombivali In Item No. 3  
Mrs. Supriya Dangare, Advocate for Respondent (MPCB)  
Mr. Aniruddha S. Kulkarni, Advocate for Respondent No. 4  
Mr. Rahul Garg, Advocate for Respondent No. 7.  
Mr. Saurabh Kulkarni, Mr. Prashant Bhatt & Ms. Priti Joshi, Advocates for Respondent (DCETP).  
Mr. Pradnyesh Loregaonkar i/b Little & Co, Advocate for Respondent No. 8 along with Mr. S.S. Nanaware, Executive Engineer, MIDC, Dombivali.

**ORDER****R.A No. 04/2017 (WZ) IN O.A. No. 37/2013**

1. Stated briefly, this review application has been preferred against the Judgment dated 02.07.2015 in Application No. 37/2013 (WZ) specifically with regard to the finding against the review applicant contained in paragraph 58 (3). It was filed as a consequence of an order passed by the Hon'ble Supreme Court permitting the review applicant to approach the Tribunal to seek a modification of the order in SLP (c) Nos 12122-12133/2016 preferred by the respondents, Vanashakti Public Trust & Anr Vs. Dombivili Better Environment System Association (DBESA) and Ors. Etc. Etc., against an order passed by the Hon'ble Bombay High Court



The genesis of the impugned order can be traced to Application No. 37/2013 (WZ) concerning severe environmental and ecological damage caused to Ulhas River in the Mumbai Metropolitan region as well as other water bodies due to illegal discharge of untreated effluents, sewage and pollutants in violation of the environmental laws.

3. Shorn of the other details of the proceedings, suffice it to observe that studies carried out by the MPPCB and the CPCB found various non-compliances by the CETPs operating in the area of which one of them was the present review applicant, namely, Dombivili Better Environment System Association and Phase - I.

4. Based upon such findings, the Tribunal had imposed Rs. 30 crores against restitution and restoration of environment upon the CETPs including the Review applicant,

5. The applicant has sought to assail such finding primarily on the ground that before passing the orders adverse to the applicant, an opportunity of hearing ought to have been provided to the review applicant.

6. We have heard learned Counsel for the parties.

7. Mr. Zaman Ali, learned counsel for respondent, in the review application submits that although it is conceded that the review applicant was not heard before the order was passed, it was not necessary to do so in view of the legal position enunciated by the Hon'ble Supreme Court in *M.C. Mehta Vs. Union of India & Ors*, 1997 6 S.C. 287. Specific reference has been made to paragraph 20 of the judgment to substantiate his contention.

8. The Principal enunciated in paragraph 20 referred to by learned Counsel for the Respondent articulates the well settled Principal of "Useless Formality". The very decisions of *Ridge vs. Baldwin* referred to in *M.C Mehta (Supra)* clearly enunciates that "*non-observance of natural justice is itself prejudice to any man and proof of prejudice independently of proof of denial of natural justice is unnecessary*" and can be invoked "*on the admitted or indisputable*

*facts*". In any case no opinion has been expressed by the Hon'ble Supreme Court on this proposition of law as it would appear from paragraph 23 of the decision.

9. We find substance in the submission of the Review Applicant that he was entitled to an opportunity of hearing before giving finality to the findings at paragraph 58(3) of the judgement.

10. In view of above, before making the findings at paragraph 58(3) of the impugned judgment final against the Review Applicant, we permit the Review Applicant to raise its contentions against such findings referable to it. We make it amply clear that this order will apply only in the case of the Review Applicant and shall not be treated as a precedent or of a general application.

11. Consequently, the Review Application stands allowed in part.

12. List E.A. No. 37/2013 on 10.12.2019.

13. The report of the Committee filed in the Review Application be also placed in that file.

E.A No. 08/2019 (WZ) IN O.A. No. 37/2013

14. Order dated 08.08.2019 pertaining to Additional Ambarnath MIDC CETP stands recalled in view of the submissions made by the learned counsel for the said CETP today.

15. List on 10.12.2019.

62

O.A. No. 148/2017

16. List this also on 10.12.2019.

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Satyawant Singh Garbyal, EM

Saibal Dasgupta, EM



Item No. 05

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

Original Application No. 37/2013 (WZ)

Vanshakti Public Trust Unique  
Industrial Estate Mumbai & Anr.

Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors.

Respondent(s)

Date of hearing: 05.03.2020

**CORAM HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER  
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant(s):

Ms. Gayatri Singh, Senior Advocate,  
Mr. Zaman Ali, Mr. Pranav Kashyap  
and Ms. Khyati Chaudhary,  
Advocates for Applicant

For Respondent(s):

Mr. Arif Singh, Addl. S. General  
along with Ms. Shyamal Gadre,  
Advocate for R-6 with Mr. B. Patil  
and Mr. Nanavate, MIDCO officers  
Mr. Saurabh Kulkarni, Advocate for  
Noticee  
Mr. N. Subramanian, Mr. Saket  
Mone and Mr. Aggarwal, Mr.  
Shivshankar Swaminathan and Mr.  
Abhishek Salian, Advocates for  
DBESA  
Mr. Aniruddha S. Kulkarni, Advocate  
for Respondent No. 4  
Mr. Rahul Garg, Advocate for  
Respondent No. 7

**ORDER**

1. Vide order dated 19.11.2019, Review Application No. 04/2017  
(WZ) filed by the Dombivli Better Environment System

65

Association (DBESA) was allowed, which by implication set aside the findings at paragraph 58 (3) of the judgment dated 02.07.2015 in Original Application No. 37/2013 (WZ) whereby the Review Applicant had been found to be liable for payment of environmental compensation of Rs. 30 crores. The order dated 19.11.2019 was passed primarily on the ground that while arriving at the findings, opportunity of hearing had not been provided to the Review Applicant/DBESA having not been impleaded as a party in the proceedings.

2. When we asked of the learned counsel for the DBESA today as to whether any application had been filed pursuant to the opportunity granted, it was submitted that since no application was forthcoming from the applicant seeking to implead the Association, it was felt not necessary to do so. It was further submitted that even in Original Application No. 37/2013 (WZ), DBESA was never a party and therefore, it would not be necessary also for that reason.

3. Upon consideration of the submissions of the learned counsel for DBESA, in the interest of expeditious disposal of the matter, we direct that DBESA be impleaded as one of the respondents in the Original Application No. 37/2013 which stands restored to the limited extent of hearing the review

applicant as a consequence of order dated 19.11.2019 in Review Application No. 4/2017.

4. Since Mr. T.N. Subramanian, learned counsel is present for DBESA, the newly added respondent, notice stands dispensed with. We grant opportunity to DBESA to file an appropriate response before the next date with copies on the other side.
5. List on 24.04.2020.



Item No. 03-04

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

Original Application No. 37/2013 (WZ)  
WITH  
Original Application No. 148/2017 (WZ)

Vanshakti Public Trust Unique

Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors.

Respondent(s)

WITH

Dombivli Common Better Effluent Treatment Plant  
& Ors.

Applicant(s)

Versus

Vanshakti Public Trust Unique Industrial Estate  
Mumbai & Anr.

Respondent(s)

Date of hearing: 24.06.2020

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE MR. SIDDHANTA DAS, EXPERT MEMBER**

For Applicant(s) Mr. Saurabh Kulkarni and Mr. Prashant Bhat,  
Advocates for WZ No. 148/2017

For Respondent(s) Mr. T.N. Subramanian, Advocate along with  
Mr. Vijay Kumar Agarwal, Mr. Shiv Shankar  
Swaminathan and Mr. Saket Mone, Advocates  
for DBESA

Ms. Supriya Dangre, Advocate  
Mr. Aniruddha S. Kulkarni, Advocate for CPCB  
Mr. Prandyesh Loregaonkar, Advocate  
Mr. Amrut Joshi, Advocate  
Mr. Saurabh Kulkarni and Mr. Prashant Bhat,  
Advocates for DCETP  
Mr. Rahul Garg, Advocate for MoEF

**ORDER**

1. While passing the order dated 05.03.2020 the Tribunal observed that the order dated 19.11.2019 was passed primarily on the ground that while

arriving at the findings, opportunity of hearing had not been provided to the Review Applicant/DBESA having not been impleaded as a party in the proceedings and the Tribunal directed as follows:

"2. When we asked of the learned counsel for the DBESA today as to whether any application had been filed pursuant to the opportunity granted, it was submitted that since no application was forthcoming from the applicant seeking to implead the Association, it was felt not necessary to do so. It was further submitted that even in Original Application No. 37/2013 (WZ), DBESA was never a party and, therefore, it would not be necessary also for that reason.

3. Upon consideration of the submissions of the learned counsel for DBESA, in the interest of expeditious disposal of the matter, we direct that DBESA be impleaded as one of the respondents in the Original Application No. 37/2013 which stands restored to the limited extent of hearing the review applicant as a consequence of order dated 19.11.2019 in Review Application No. 4/2017.

4. Since Mr. T.N. Subramanian, learned counsel is present for DBESA, the newly added respondent, notice stands dispensed with. We grant opportunity to DBESA to file an appropriate response before the next date of sittings on the other side.

2. Learned counsel-Mr. T.N. Subramanian appearing for DBESA has argued that in light of the order dated 05.03.2020 para 3, the applicant was directed that DBESA be impleaded as one of the respondent but applicant has not complied the order.
3. In light of above facts, applicant is directed to comply the order and implead DBESA as a respondent and required step be taken within fortnight. Application, copy of the documents be served upon the respondent within fortnight and after service of the copy, the respondent will reply within six weeks.
4. Learned counsel-Mr. Saurabh Kulkarni appearing for the applicant in O.A. No. 148/2017 has submitted that DCETP may also be impleaded as one of the respondent in O.A. No. 37/2013 and if DCETP is made party then he may raise all the matters relating to this application in the reply of O.A. No. 37/2013 and also made a request that on this condition O.A. No. 148/2017 may be disposed of finally.

5. In light of above facts, applicant of O.A. No. 37/2013 is directed to implead DCETP as one of the respondent and provide the copy within fortnight. Step required be taken within fortnight. After service of copy DCETP may also file reply within six weeks.
6. O.A. No. 148/2017 (WZ) is finally disposed of.
7. List it on 24.11.2020.

Sheo Kumar Singh, JM

Siddhanta Das, EM

June 24, 2020  
Original Application No. 37/2013 &  
O.A. No. 148/2017 (WZ)  
MN



Item Nos. 04

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

Execution Application No. 08/2019 (WZ)  
IN  
Original Application No. 37/2013

Vanshakti & Anr.

Applicant(s)

Versus

Maharashtra Pollution Control Board & Ors. Respondent(s)

Date of hearing: 05.03.2020

**CORAM: HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER  
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant(s): Mr. Zaman Ali, Advocate  
Ms. Gayatri Singh, Sr. Advocate  
Mr. Zaman Ali, Mr. Pranav  
Kaashyap, Mr. Khyati Chaudhary,  
Advocates

For Respondent(s): Senior Counsel Mr. Anil Singh Addl.  
Sd. General and Yamali Cadre  
1/ by Little & Co. R-8 (MIDC)  
MIDC officers Mr. S.B Patil, Mr  
Nanavare  
Mr. Saurabh Kulkarni, Advocate for  
Notice  
Mr. T.N. Subrananian,  
Mr. Saket Mone and Mr. Vijay  
Agarwal,  
Mr. Shivshankar Swaminathan and  
Mr. Abhishek Salian, Advocates for  
DBESA Ms. Manasi Joshi, Advocate  
for Respondent No. 1

71

Mr. Aniruddha S. Kulkarni, Advocate  
for Respondent No. 4  
Mr. D.M. Gupte, Advocate for  
Respondent No. 7

**ORDER**

1. The present Execution Application seeks execution of the directions contained in judgement dated 2.7.2015 in OA No. 37 of 2015.
2. This case had proceeded on the premises that no appeal had been filed before the Hon'ble Supreme Court in terms of the direction issued vide order dated 5.7.2017 in Civil Appeal No (s) 10582/2017 (Arising out of SLP (C) Nos. 12122-12133 of 2016) as reproduced in paragraph 1 of the order dated 12.12.2019.
3. Today Mr. Anil Singh Senior Counsel appearing on behalf of the Respondent No. 3, MDC, has placed before this order of the Hon'ble Supreme Court dated 5.2.2020 which shows that an appeal has in fact been filed in terms of the direction of the Hon'ble Supreme Court and is pending consideration of that court.
4. In view of the above, this Execution Application cannot be sustained and is accordingly dismissed without prejudice to

the remedies available to the applicant as and when cause of action arises to invoke such remedy.

S.P. Wangdi, JM

Dr. Satyawan Singh Garbyal, EM

05th March, 2020  
Execution Application No. 08/2019 (WZ)  
IN Original Application No. 37/2013  
pk



BEFORE THE NATIONAL GREEN TRIBUNAL, WESTERN ZONE BENCH, PUNE

APPLICATION NO.37/2013 (WZ) MA No.11/2014

Vanshakti V/s MPCB.

CORAM: HON'BLE SHRI JUSTICE V.R. KINGAONKAR, JUDICIAL MEMBER HON'BLE DR. AJAY A. DESHPANDE, EXPERT MEMBER

- Present : Applicant/ Appellant : Mrs. Gayatri Singh Adv
Respondent Nos.1 & 2 : D.M. Gupte Adv w/ Ms. Supriya Dangre Adv
Respondent No.5 : A.S. Rao Adv
Respondent No.6 : N.V. Chavan Adv
Respondent No.7 : Dr. S. Mahashabde Adv
Respondent No.8 : Shyamli Gade a/w Deepak Pawar i/by Little & Co.

Table with 2 columns: Date and Remarks, Orders of the Tribunal. Contains text regarding court proceedings, affidavits, and cancellations of warrants.

Item No.5  
February 12,  
2014  
Order No.4

industries. The Committee is required to conduct the survey within period of two (2) months and to submit report to the Principal Secretary (Environment).

2675

Learned Counsel Gayatri Singh undertakes to instruct the Applicants to inform the Authorities, including the Principal Secretary and the MPCB to attend the work of such Joint Committee for joint survey and assist the Committee for identification of polluting industries in the area in question, including industries in the MIDC area as well as those industries, which are said to be discharging effluents in Waldhuni River as well as Ulhas River, without effluent treatment or without adequate treatment and add pollution loads.

Learned Counsel for the MIDC submits that the Hon'ble High Court has given certain directions to the Co-operative Societies running CETP in the industrial area, to take action against individual industrial units after giving proper Notices. She submits that concerned Societies also should be added as parties. We do not find it necessary to add such Co-operative Societies as parties, without having any tangible material to show role of such societies in monitoring of pollution free effluents discharge from the industries, because *prima facie* it is the MIDC which is required to monitor such activity within the area.

The MPCB has filed reply affidavit in detail along with report of sampling. The copies of reply affidavits are furnished to the Applicant and other parties. The Applicant and other Respondents may file rejoinder/reply affidavits as may be deemed proper. The MPCB has not submitted water quality reports of River 'Waldhuni' though specifically directed in the last order. The Counsel for MPCB assures that the same will be filed tomorrow. He also informs that total 44 industries have been issued closure orders. He on instructions submits that these industries are not in operation now. In the meanwhile the MPCB shall continue exercise of taking action against the polluting industries and if necessary shall take police aid to complete exercise of survey and taking such actions against polluting

Item No.5  
February 12,  
2014  
Order No.4

not be, of course, based on mere surmises or conjunctures. The Applicant may collect such record by using Internet and any other mode including information collected by using RTI. The MPCB to immediately act upon authenticated information, if so supplied by the Applicant. The MPCB in such case need not await for joint inspection and further course of survey, which is expected to be jointly conducted as per communication issued by the Principal Secretary of Environment, referred to above. The Police Authorities including the Commissioner/DCP of the area be informed and instructed to give necessary police aid to the MPCB officials as and when required to execute the orders of this Tribunal for closure of industries or conducting the survey as may be needed from time to time.

The Respondents who have not filed reply affidavits may file such affidavits on or before next date.

The Applicant may file response in the context of action plan suggested by the MPCB, which will be taken into account at the time of further hearing. The MPCB has already approached IIT, Mumbai as per the directions of the Tribunal. The Applicant may suggest any modification if so required, on valid basis, before such plan is finalized by the Environment department.

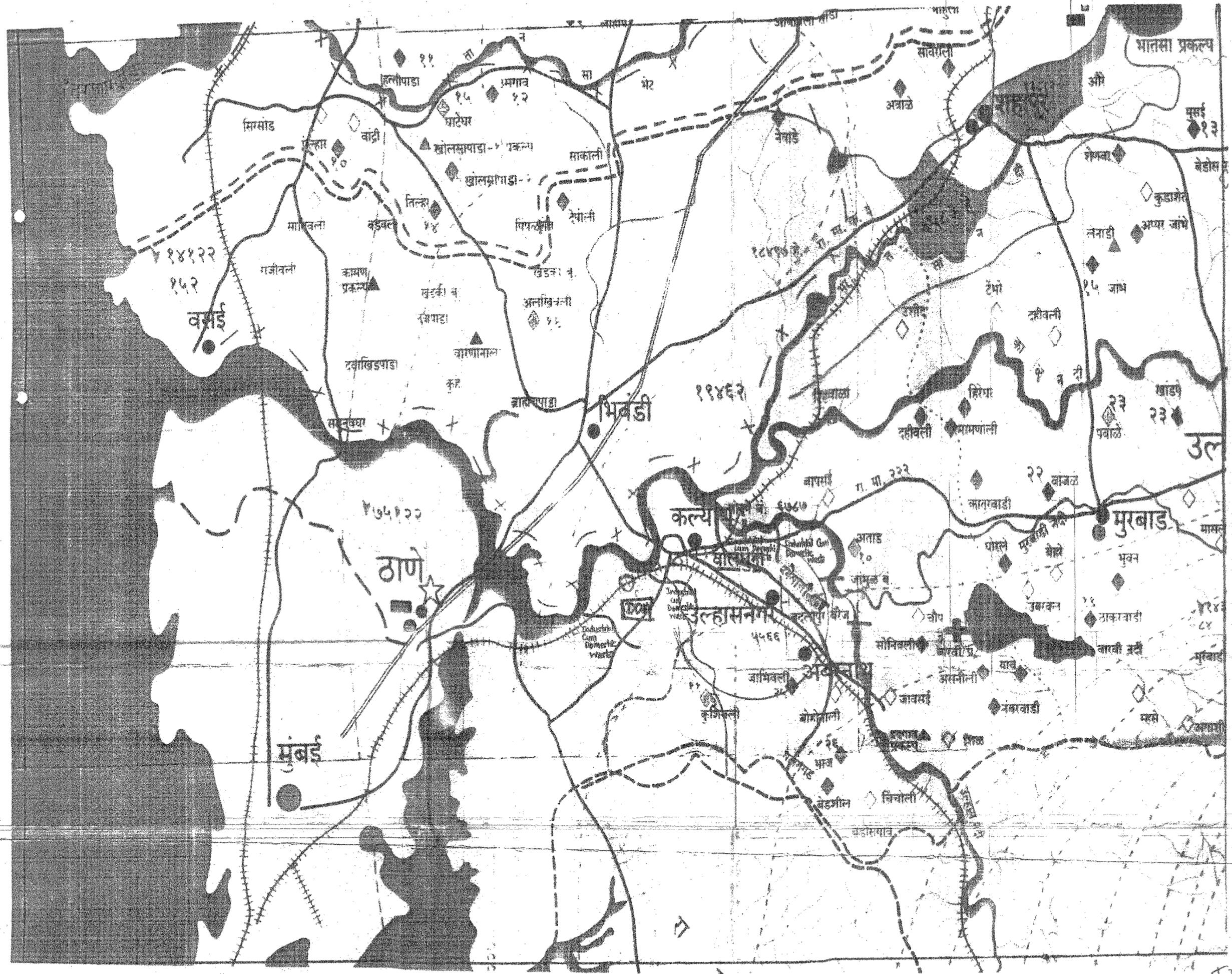
**Stand over to 13<sup>th</sup> March, 2014.**

....., JM  
(Justice V. R. Kingaonkar)

....., EM  
(Dr. Ajay A. Deshpande)







TC  
b

नद्यांच्या पाणी गुणवत्तेमध्ये  
सुधारणा करण्याबाबत धोरण

महाराष्ट्र शासन

पर्यावरण विभाग, मंत्रालय,

शासन निर्णय, क्रमांक मंमवै- २००९/३२५/प्र क्र ६१/तांक १

नवीन प्रशासन भवन, १५ वा मजला, मादाम कामा मार्ग, मुंबई-४०० ०३२.

दिनांक : १३ जुलै, २००९.

- संदर्भ :-
१. पर्यावरण विभाग, मंत्रालय, मुंबई शासन निर्णय, क्र. मुमंवै-२०००/ ३२६/  
प्र.क्र.२२/ तांक.३, दिनांक १५.०७.२०००.
  २. उद्योग, ऊर्जा व कानगर विभाग, मंत्रालय, मुंबई शासन निर्णय, क्र.  
आयडीसी-१८२२/(८३०६)/ उद्योग-१४, दिनांक ३०.०६.२००४.

प्रस्तावना :-

नद्यांच्या खोऱ्यांच्या क्षेत्रामध्ये उद्योग धंद्यांचे पर्यावरण विषयक स्थान विनियमन धोरण शासनाने दिनांक १५.०७.२००० च्या शासन निर्णयाद्वारे जाहीर केलेले होते. त्यामध्ये महाराष्ट्र औद्योगिक विकास महामंडळाच्या काही अस्तित्वात असलेल्या औद्योगिक क्षेत्रासाठी सदर स्थान नियमन धोरणामध्ये संवर्ध क्र.२ प्रमाणे सुधारणा करण्यात आलेली होती. वाढते औद्योगिकीकरण व शहरीकरण, पर्यावरणास पोषक उत्पादन प्रक्रियेचा विकास, तसेच पर्यावरण विषयक पायाभूत सुविधेची निर्मिती या बाबींचा विचार करून सदर स्थान नियमन धोरणामध्ये सुधारणा करण्याबाबतचा प्रस्ताव शासनाच्या विचाराधीन होता. त्या अनुषंगाने, जाहीर सूचना देऊन मागविण्यात आलेल्या सर्व आक्षेप / सूचनांचा सर्वकष विचार करण्यात आलेला आहे.

शासन निर्णय :-

महाराष्ट्रातील प्रमुख २० नद्यांच्या व उपनद्यांच्या क्षेत्राचे वर्गीकरण अ-१, अ-२, अ-३ व अ-४ या चार वर्गांमध्ये, नद्यांच्या त्या क्षेत्रातील अपेक्षित पाणी वापरासंबंधी विचार करून वर्गीकरण करण्यात आलेले आहे. २० प्रमुख नद्या व त्या नद्यांच्या प्रमुख उपनद्यांच्या क्षेत्राचे वर्गीकरण परिशिष्ट-१ मध्ये नमूद करण्यात आलेले आहे. तसेच अ-१, अ-२, अ-३ व अ-४ या वर्गांमध्ये असलेल्या पाण्याचा अपेक्षित उपयोग परिशिष्ट-२ मध्ये नमूद करण्यात आलेला आहे. नदीच्या पाण्याची गुणवत्ता विहित

रोट/एच-११७६[५००-५-२००९]-१

उपयोगासाठी योग्य राखण्यासाठी उद्योगांचे स्थाननिश्चयन तसेच नागरी क्षेत्रामध्ये पर्यावरण सुविधांचा विकास होण्यासाठी खालीलप्रमाणे नियमन करण्यात येत आहे :

१. अ-१ या वर्गामध्ये नदीच्या नियंत्रक पूररेषेपासून दोन्ही बाजूस तीन किलोमीटरपर्यंतच्या क्षेत्रात उद्योग उभारण्यासाठी प्रतिबंध राहिल. त्यानंतरच्या पाच किलोमीटर पर्यंतच्या क्षेत्रात हिरव्या व नारिंगी संवर्गातील उद्योग उभारणे अनुज्ञेय राहिल. त्यापुढील म्हणजेच आठ किलोमीटर नंतरच्या क्षेत्रात कोणत्याही कारखान्यांना योग्य ती प्रदूषण नियंत्रण यंत्रणा बसविल्यानंतर परवानगी देता येईल. धरणाच्या बुडीत क्षेत्राच्या दोन्ही बाजूस ८ कि. मी. अंतरापर्यंतच्या डोंगरक्षेत्रात कोणत्याही उद्योगांना परवानगी अनुज्ञेय नाही. अ-१ वर्ग क्षेत्रात नदीवर भविष्यात एखादे नवीन धरण निर्माण झाल्यास, अ-१ क्षेत्रामध्ये कोणताही बदल होणार नाही. अ-१ क्षेत्रातील कार्यरत असलेल्या उद्योगांनी तीन वर्षांच्या कालावधीमध्ये "शून्य निकसन (Zero Discharge)" करणे बंधनकारक राहिल.

२. राज्यातील सर्वसाधारण उद्योगांसाठी अ-२ वर्गीकरणामध्ये नदी किना-यापासून पहिला ५०० मीटरचा पट्टा ना-विकास क्षेत्र, त्यापुढील ५०० मीटर म्हणजेच नदी किना-यापासून ५०० ते १००० मीटरच्या पट्ट्यात ग्रीन संवर्गातील उद्योग, त्यापुढील १,००० मीटरच्या क्षेत्रामध्ये म्हणजेच १,००० ते २,००० मीटरच्या पट्ट्यामध्ये हरित व नारिंगी संवर्गातील उद्योग, व तदनंतर म्हणजे नदी किना-यापासून २,००० मीटरनंतर सर्व उद्योगांना परवानगी असेल.

३. महाराष्ट्र औद्योगिक विकास क्षेत्रासाठी नदी किना-यापासून पहिला ५०० मीटरचा पट्टा ना-विकास क्षेत्र त्यापुढील २५० मीटर म्हणजेच नदी किना-यापासून ५०० ते ७५० मीटरच्या पट्ट्यात हरित व नारिंगी संवर्गातील उद्योग, तदनंतर म्हणजे नदी किना-यापासून ७५० मीटर नंतर सर्व उद्योगांना परवानगी असेल. परंतु यासाठी औद्योगिक क्षेत्रामध्ये महाराष्ट्र औद्योगिक विकास महामंडळाच्या मार्फत / माध्यमाने सांडपाणी एकत्रिकरण, सामायिक सांडपाणी प्रक्रिया यंत्रणा व प्रक्रिया केलेल्या सांडपाण्याची विल्हेवाट यंत्रणा असणे आवश्यक आहे.

४. महाराष्ट्र औद्योगिक विकास महामंडळाच्या वसाहतीमध्ये असलेल्या उद्योगांचे सनियंत्रण योग्य रितीने शक्य असल्याने, तसेच महाराष्ट्र औद्योगिक विकास महामंडळाच्या क्षेत्रामध्ये पर्यावरण विषयक पायाभूत सुविधा असल्यामुळे, महाराष्ट्र औद्योगिक विकास महामंडळाच्या औद्योगिक क्षेत्रासाठी, सर्वसाधारण धोरणास, अ-२ वर्ग क्षेत्रासाठी खालीलप्रमाणे अपवाद करण्यात आलेले आहेत.

- अ. नदीच्या नियंत्रक पूररेषेपासूनच्या १०० मीटर पर्यंतच्या क्षेत्रात व्यावसायिक वापरास प्रतिबंध राहिल.
- ब. नदीच्या नियंत्रक पूररेषेपासून १०० ते ५०० मीटरच्या भागामध्ये दिनांक ३० जून, २००४ रोजीच्या शासन निर्णयानुसार सर्व सामान्य जनतेच्या सर्वसाधारण वापरासाठी आवश्यक प्रदूषणविरहीत ॲक्टीव्हिटीज परिशिष्ट ३ प्रमाणे नमूद केल्याप्रमाणे अनुज्ञेय राहतील
५. अ-३ व अ-४ या दोन्ही वर्गामध्ये नदीच्या नियंत्रक पूररेषेपासून दोन्ही बाजूस अर्धा किलोमीटरपर्यंतच्या क्षेत्रात उद्योग उभारण्यासाठी प्रतिबंध राहिल. त्यानंतरच्या अर्ध्या किलोमीटर पर्यंतच्या क्षेत्रात हिरव्या व नारिंगी संवर्गातील उद्योग उभारणे अनुज्ञेय राहिल. त्यापुढील म्हणजेच नियंत्रक पूररेषेपासून एक किलोमीटर नंतरच्या क्षेत्रात कोणत्याही कारखान्यांना योग्य ती प्रदूषण नियंत्रण यंत्रणा बसविल्यानंतर परवानगी देता येईल.
६. अ-१, अ-२, अ-३ व अ-४ वर्गीकरण केलेल्या क्षेत्रात व म.प्र.नि.मंडळाचे संमतीपत्र व पर्यावरण विषयक परवाना असलेल्या उद्योगांबाबत सध्या अस्तित्वात असलेल्या उद्योगांपैकी काही उद्योग ना विकास क्षेत्रामध्ये असतील, तसेच काही लाल संवर्गातील उद्योग ना विकास क्षेत्रामध्ये किंवा हिरव्या व नारिंगी क्षेत्रातील उद्योगांसाठी अनुज्ञेय असलेल्या भागामध्ये अस्तित्वात असतील, अशा उद्योगांच्या अस्तित्वाला कोणतीही बाधा येणार नाही. अशा उद्योगांना स्रोत प्रदूषणात घट होत असल्यास आधुनिकीकरण, विस्तारीकरण आणि / किंवा उत्पादनाचे अदलाबदल करण्यास मंजूरी मिळू शकेल.
७. नवीन उद्योग स्थापण्यास बंदी घालण्यात आलेल्या क्षेत्रामध्ये प्रदूषणविरहीत बिगर औद्योगिक प्रकल्प / व्यवसाय करण्यास महाराष्ट्र प्रदूषण नियंत्रण मंडळाच्या परवानगीने अनुमती देण्यात यावी. याबाबत परिशिष्ट-४ मधील यादी ही मार्गदर्शक राहिल.
८. ना विकास क्षेत्रामध्ये हॉटेल्स, रिसॉर्ट, इ. प्रकारच्या पर्यटन उद्योगांनी नदीमध्ये सांडपाणी व घनकचरा जाऊ न देण्याच्या अटीसह म.प्र.नि.मंडळातर्फे परवानगी दिली जाऊ शकेल. सदर उद्योगांनी त्यांच्याकडे सांडपाणी प्रक्रिया यंत्रणा बसवून, उत्सर्जित होणारे प्रक्रिया केलेले सांडपाणी नदीच्या

82

नियंत्रक पूररेषेपासून १०० मीटर अंतराच्या पुढे विसर्जित करणे बंधनकारक राहिल. ज्या हॉटेल्स, रिसॉर्ट, इ. उद्योगांनी सेप्टिक टँक / सोक पिढ प्रस्तावित केले आहे, त्यांना नदीच्या नियंत्रक पूररेषेपासून १०० मीटर अंतरापर्यंत परवानगी अनुज्ञेय नाही.

९. भातसा जलग्रहण क्षेत्रासाठी उद्योग विभागाने शासन निर्णय क्रमांक : आयएलपी-१०८७/२४७७/ उद्योग-२, दिनांक ०४.१२.२१८७ अन्वये काढलेले आदेश रद्द करण्यात येत असून हा शासन निर्णय या भागासाठी लागू राहिल.

१०. उद्योगांची प्रदूषण क्षमतेनुसार विशिष्ट रंगाने वर्गवारी करण्यात आलेली आहे व ती म.प्र.नि.मंडळाच्या संकेतस्थळावर उपलब्ध आहे. पर्यावरणदृष्ट्या स्वच्छ उत्पादन प्रक्रिया सातत्याने विकसित होत आहेत. तसचे प्रदूषण नियंत्रणाबाबत आधुनिक यंत्रणा उपलब्ध होत आहेत. या बाबी लक्षात घेऊन म.प्र.नि.मंडळाने उद्योगांच्या वर्गवारीचा आढावा दर दोन वर्षांनी घ्यावा व सुधारित वर्गीकरणाबाबतची माहिती म.प्र.नि.मंडळ व पर्यावरण विभागाच्या संकेतस्थळावर उपलब्ध करून घ्यावी.

११. उद्योगांचे स्थान निश्चयन करतांना नदीच्या नियंत्रक पूररेषेपासूनचे अंतर ठरवितांना क्षितिज समांतर सरळ रेषेत अंतर हे कार्यकारी अभियंता, पाटबंधारे विभाग, महाराष्ट्र शासन यांनी पाटबंधारे विभाग, मंत्रालय, मुंबई यांचे शासन परिपत्रक क्र. एफडीडब्ल्यू-१०८९/२४३/८९/सि.व्य.(काने), दि.२१.०९.१९८९ अन्वये प्रमाणित करावे. उद्योगांच्या भुयंडाच्या सीमेची नदीच्या सरसरी पूररेषेपासूनचे अंतर ना विकास क्षेत्र असेल तर उद्योगाच्या प्रस्तावित आराखडयानुसार उद्योगाच्या कार्यरत क्षेत्रापासूनचे (Operational Area) नदीच्या सरसरी पूररेषेपासूनचे अंतर विचारात घेण्यात यावेत. ना विकास क्षेत्रात वृक्षारोपण करून हरीत पट्टा निर्माण करण्यात यावा.

१२. नदीच्या पाण्याची गुणवत्ता प्रस्तावित उपयोगासाठी योग्य राखण्यासाठी नागरी क्षेत्रामध्ये पर्यावरणविषयक सुविधांचा विकास होण्याच्या दृष्टीने खालील निर्णय घेण्यात आलेले आहेत.

- अ. नदी धर्गीकरण केलेल्या क्षेत्रामध्ये पुरेशी प्रकिया न केलेले घरगुती सांडपाणी विसर्ग करणाऱ्या स्थानिक स्वराज्य संस्थांनी त्यांच्याकडे निर्माण होणाऱ्या संपूर्ण घरगुती सांडपाण्यासाठी तीन वर्षांच्या आत सांडपाणी यंत्रणा उभारून कार्यान्वित करणे आवश्यक राहिल. याबाबतचा कालबद्ध कार्यक्रम व पाठपुरावा नगर विकास विभागामार्फत करण्यात यावा.
- ब. स्थानिक स्वराज्य संस्थांच्या अखत्यारीतील जागेमध्ये घरगुती सांडपाणी प्रकिया यंत्रणा उभारणी नद्यांच्या नियंत्रक पूररेषेच्या १०० मीटरच्या बाहेर अनुज्ञेय राहिल. यासाठी सदर सांडपाणी प्रकिया केंद्र हे नैसर्गिक उताराच्या आधारे स्थान निश्चयन झालेले असावे. सदर प्रकिया यंत्रणेसाठी घावयाची मानके प्रादत्त समिती देईल.
- क. नदीच्या नियंत्रक पूररेषेच्या ५०० मीटरच्या बाहेर नागरी क्षेत्रातील घनकचरा विल्हेवाटीसाठी नागरी घनकचरा अधिनियम, २००० अंतर्गत आवश्यक ती घनकचरा व्यवस्थापन यंत्रणा उभारण्यासाठी परवानगी असेल.
- ड. उपरोक्त सांडपाणी प्रकिया यंत्रणा व नागरी घनकचरा व्यवस्थापन यंत्रणा, नदीच्या उच्चतम पूररेषा विचारात घेऊन या यंत्रणा नद्यांच्या पुरामुळे बुडणार नाही, याबाबत खबरदारी घेणे आवश्यक आहे.
- इ. स्थानिक स्वराज्य संस्थांनी त्यांच्या परिसरात असणाऱ्या नद्या व तलाव यांच्या पाणी गुणवत्ता संवर्धनासाठी विशेष कार्यक्रम हाती घ्यावेत. तसेच नदी व तलावाच्या क्षेत्रात प्रदूषणकारी क्रिया, जसे - वाहने धुणे, घनकचरा विल्हेवाट, इ. वर प्रतिबंध करावा.

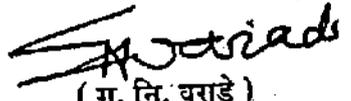
### १३. धोरण पुनर्विलोकन समिती :

शासन निर्णयाची अंमलबजावणी करतांना आवश्यक तो धोरणात्मक खुलासा / विशिष्ट प्रकरणे यावर निर्णय घेण्यासाठी शासन स्तरावर समिती स्थापन करण्यात यावी. सदर समितीमध्ये पर्यावरण, उद्योग, नगर विकास, जलसंपदा विभागाचे सचिव तसेच सदस्य सचिव, महाराष्ट्र प्रदूषण नियंत्रण मंडळ यांचा समावेश राहिल. संचालक, पर्यावरण विभाग हे समितीचे सदस्य सचिव राहतील.

१४. नदी खोऱ्यांच्या क्षेत्रामध्ये पर्यावरण विषयक स्थान नियमन अंमलता आणण्याकरीता पर्यावरण (संरक्षण) अधिनियम, १९८६ च्या कलम ५ चा पर्यावरण (संरक्षण) नियम, १९८६ च्या नियम ४ (५) अन्वये असलेल्या अधिकारांचा वापर करून हे आदेश जारी करण्यात आलेले आहेत.

१५. या शासन निर्णयान्वये पर्यावरण विभागाने या विषयावरील दि. १५.७.२००० रोजी जारी केलेला शासन निर्णय खारीज करण्यात येत आहे. हा शासन निर्णय निर्गमित झाल्याच्या दिनांकापासून अंमलात येईल.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नांवाने,

  
( म. नि. वराडे )  
संचालक

प्रति,

मा.राज्यपाल यांचे सचिव,  
मा.मुख्यमंत्र्यांचे प्रधान सचिव,  
मा.उपमुख्यमंत्र्यांचे प्रधान सचिव,  
मुख्य सचिव, महाराष्ट्र शासन,  
सर्व मंत्रालयीन विभागाचे अप्पर मुख्य सचिव/ प्रधान सचिव/ सचिव,  
पर्यावरण विभागातील सर्व अधिकारी,  
मा.मंत्री (पर्यावरण) यांचे खाजगी सचिव,  
मां.राज्यमंत्री (पर्यावरण) यांचे खाजगी सचिव,  
सर्व मा.मंत्री/राज्यमंत्री यांचे खाजगी सचिव,  
मुख्य कार्यकारी अधिकारी, महाराष्ट्र औद्योगिक विकास महामंडळ,  
अध्यक्ष/ सदस्य सचिव, म.प्र.नि.मंडळ, मुंबई,  
संचालक, उद्योग संचालनालय,  
माहिती व जनसंपर्क महासंचालनालय,  
पर्यावरण विभागातील सर्व कार्यासने / तां. क्र. १, निवड नस्ती.

**Annexure-I****LIST OF RIVER BASINS AND DETAILS REGARDING CLASSIFICATION OF RIVERINE SYSTEM INTO A-I, A-II, A-III etc. CATEGORIES.****List of Riverine System with Sub-Basins**

- 1] Agrani River Basin
- 2] Bombay Island Basin
- 3] Ghataprabha River Basin
- 4] Konkan Coastal Basin
- 5] Krishna River Basin
- 6] Kundalika River Basin
- 7] Lower Bhima River Basin
- 8] Lower Godavari River Basin
- 9] Nag River Basin
- 10] Narmada River Basin
- 11] Nira River Basin
- 12] North and New Bombay Basin
- 13] Patalganga River Basin
- 14] Satpati Coastal Basin
- 15] Sukna River Basin
- 16] Tapi River Basin
- 17] Ulhas River Basin
- 18] Upper Bhima River Basin
- 19] Upper Godavari River Basin
- 20] Wainganga, Wardha, Penganga River Basin

86

**CLASSIFICATION OF WATER  
OF  
AGRANI RIVER BASIN**

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	A-III Class
1.	Agrani River	---	All waters of Agrani River from origin to boundary.	---

**BOMBAY ISLAND BASIN**

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Bombay Island Basin	---	---	All waters falling in catchment area of Bombay Island region are classified as SW-II Class.

**GHATAPRABHA RIVER BASIN**

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	
1.	Ghataprabha River	---	Ghataprabha river & Its tributaries from origin to State boundry.	---
2.	Hiranyakeshi	---	- do -	---
3.	Tamraparni	---	- do -	---

87

## KONKAN COASTAL BASIN/SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Surya	Origin to Surya dam	Surya dam to saline zone	Stretch of rivers having tidal & saline zone upto sea.
2.	Vaiterna	Origin to Upper Vaiterna dam	Upper Vaiterna dam to saline zone.	- do -
3.	Tansa	Origin to Tansa dam	Tansa dam to saline zone	- do -
4.	Savitri, Vashiti, Shatri, Jog, Muchkundi Gad (Near Savarde in Ratnagiri Dist.) Gad (Near Kankavli in Sindhudurg Dist.) Kal (Near Addl. MIDC Mahad)	—	Stretch of rivers spread upto saline zone.	- do -

## KRISHNA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	
1.	Krishna River	Origin to Dhom Dam	Dhom dam to State Border	---
2.	Venna River	Origin to Kalamba dam.	Kalamba dam to confluence with Krishna river	---
3.	Uramodi River	Origin to Uramodi dam.	Dam to confluence With Krishna river	---
4.	Tarli	Origin to Tarli dam	Dam to confluence With Krishna river	---
5.	Koyna	Origin to Koyna dam	Koyna dam to confluence with Krishna river.	---
6.	Kandhar	Origin to Wang dam	Wang dam to confluence with Krishna river.	---
7.	Peth	---	Origin confluence with Krishna river.	---
8.	Warna	Origin to Warna dam	Warna dam to confluence with Krishna river.	---
9.	Kadvi	Origin to dam near Malkapur	Dam at Malkapur to confluence with Krishna river.	---
10.	Kasari	Origin to dam	Dam to confluence with Krishna river.	---
11.	Kumbhi	Origin to Kumbhi dam	Kumbhi dam to confluence with Krishna river.	---

89

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## KRISHNA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class
12.	Tulsi	Origin to dam at Chanawale village	Dam at Chanwale village to confluence with Krishna river. ---
13.	Bhogawati	Origin to Radhanagari dam.	Radhanagari dam to confluence with Krishna river. ---
14.	Dudhganga	Origin to dam at Kalmawadi village	Dam at Kalmawadi to State Boarder. ---
15.	Vedganga	Origin to dam at Ukarbarla village	Dam at Ukarbarla to State Boarder. ---
16.	Verala	Origin to Nevetank	Neva tank to confluence with Krishna river. ---
17.	Wanganga	Origin to dam	Dam to confluence with Krishna river. ---
18.	Morna	---	Origin to confluence with Krishna river. ---
19.	Shimbi	---	Origin to confluence with Krishna river. ---

## KUNDALIKA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Kundalika	Origin to Kolad dam.	Kolad dam to Areykhund.	Areykhund to confluence with sea.

## LOWER BHIMA RIVER BASIN/SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class
1.	Sina	---	Origin to confluence with Bhima ---
2.	Chandani	---	Origin to confluence with Bhima ---
3.	Bhogawati	---	Origin to confluence with Bhima ---
4.	Kamuni	---	Origin to confluence with Bhima ---
5.	Mosira	---	Origin to confluence with Bhima ---
6.	Bori	---	Origin to confluence with Bhima ---
7.	Mas	---	Origin to confluence with Bhima ---
8.	Bhima (stretch of river in lower Bhima basin)	---	Confluence of Bhima with Nira to State border. ---

91

## LOWER GODAVARI RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class
Lower Godavari River Basin			
1.	Godavari	---	D/S of Jaikwadi dam to State border.
2.	Purna	---	Origin to confluence With Godavari river.
3.	Karpura	---	- do -
4.	Dhudhana	---	- do -
5.	Yalganga	---	- do -
6.	Dhora	---	- do -
7.	Kundalika	---	- do -
8.	Sindhaphana	---	- do -
9.	Manjra	---	- do -
10.	Terna	---	- do -
11.	Manar	---	- do -
12.	Tiru	---	- do -

## NAG RIVER BASIN/SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Nag	---	Origin to Ambazari lake.	Ambazari lake to confluence with Kanhan river.
2.	Pioli	---	Origin lake Gorewada tank	Gorewada tank to confluence with Nag river.

92

१४

## NARMADA RIVER BASIN /SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	A-IV Class
1.	Narmada	---	River Narmada in Maharashtra State	---

## NIRA RIVER BASIN /SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	A-IV Class
1.	Nira	Origin to Devghar Dam	Devghar Dam to Vir Dam	Vir Dam to Conflu. With Bhima
2.	Kannad River (Including of Yelwadi River)	Origin to Bhatghar Dam	---	---
3.	Ganjawani River	---	Origin to confluence With NIRA	---
4.	Karha River	---	Origin to confluence With NIRA	---

## NORTH &amp; NEW BOMBAY BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	North & New Bombay Basin	---	All waters falling in area of North New Bombay	
2.	Kasadi river	---	All waters falling in the area of North New Bombay	
3.	Gadha	---	All waters falling in the area of North New Bombay	

१४-११५६ -७३

93

## PATALGANGA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW -II Class
1.	Patalganga	Origin to tata power House at Khopoli with Catchment are Of Dams near Lonavala	Tata Power house at Khopoli to weir at Chawane	Weir at Chawane
2.	Balganga	Origin To Creek	---	Tidal Zone Of Balganga River
3.	Bhogeshwari	Origin to creek	---	Tidal Zone Of Bhogeshwari River

## SATPATI COASTAL BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-IV Class
1.	Vogni	---	Origin to saline Water zone( In Maharashtra	---
2.	Paona	---	Origin to saline Water zone	Tidal & Saline portion of river

## SUKANA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class
1.	Sukana river	---	Sukana river from its origin to confl. with Godawari River

## TAPI RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	
1.	Tapi River	---	From M.P. State Border to Gujarat State Border.	---
2.	Purna River	Origin to Purna Dam.	Purna Dam to Confluence with Tapi river.	---
3.	Katepurna River	Origin to Katepuran Dam.	Katepurna Dam to Confluence with River Purna.	---
4.	Shahanur River	Origin to Shahanur dam.	Shahanur dam to Confluence with River Purna.	---
5.	River Pedhi, Van, Mound, Chandra Bhaga, Man, Bosva.	---	Origin to Confl. with Purna river.	---
6.	Girna River	---	Origin to Confl. With Tapi.	---
7.	Gomati River	---	Origin to Confl. With Tapi.	---
8.	Burai River	---	Origin to confl. With Tapi river.	---
9.	Panjrakan	---	Origin to confl. With Tapi.	---

95

१७

## ULHAS RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Ulhas	Origin to Badlapur Water Works.	Badlapur water Works to NRC bund at Shahad.	NRC bund at Shahad to confluence with sea.
2.	Barvi	Origin to Barvi dam	Barvi dam to confluence with Ulhas river.	---
3.	Bhatsa	Origin to confluence with Ulhas river (saline water zone)	---	---
4.	Kalu	Origin to confluence with Ulhas river (saline water zone)	---	---

## UPPER BHIMA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	SW-II Class
1.	Pushpawati River	Origin to Pushpawati bandara.	Pushpawati Bandara to confluence with Kukadi.	---
2.	Are River	Origin to Pimpalgaonjagadam	Pimpalgaonjagadam to confluence with Pushpawati.	---
3.	Kukadi River	Origin to Manikdondam	Manikdondam to confluence with Ghod river.	---

96

१८

## UPPER BHIMA RIVER BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	A-IV Class
4.	Mina River	Origin to Wadaj dam	Wadaj dam to confl. With Ghod river	---
5.	Ghod River	Origin to Dimbhedam	Dimbhedam to confl. With Bhima river	---
6.	Vel River	---	Origin to confl. With Bhima	---
7.	Bhima River	Origin to Chaskaman dam	Chaskaman dam to confl. With Mira river	---
8.	Bhama River	Origin to Askheda dam	Askheda dam to confl. With Bhima	---
9.	Andhra River	Origin to Vadivale dam	Vadivale dam to confl. with Indrayani	---
10.	Kundali River	Origin to Shirwati dam	Shirwati dam to confl. with Indrayani river	---
11.	Indrayani River	Origin to Lonavala dam	Lonavala dam to confl. with Bhima river	---
12.	Pawana River	Origin to Pawana dam	Pawana dam to Ravet weir	Ravet weit to confl. with Mula
13.	Mula River	Origin to Mulsli dam	Mulsi dam to Wakad Bandhara	Wakad Bandhara to confl. with Mutha river
14.	Mutha River	Origin to Khadakwasla dam	Khadakwasla dam to Vithalwadi weir	Vithalwadi weir to confl. with Bhima river

## UPPER GODAVARI RIVER BASIN / SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	
1.	Godavari	Origin to Gangapur dam	Gangapur dam to Paithan	—
2.	Darna	Origin to Darna dam	Darna dam to confl. with Godavari	—
3.	Kolganga (Kalwan)	Origin to Waghad dam	Waghad dam to confl. with Godavari	—
4.	Unand	Origin to Ozarkhed dam	Ozarkhed dam to confl. with Godavari	—
5.	Kadwa	Origin to Karanjvan dam	Karanjvan dam to confl. with Godavari	—
6.	Pravara	Origin to Bhandardara dam	Bhandardara dam to confl. with Godavari	—
7.	Mahalungi	Origin to Mahalungi dam	Mahalungi dam to confl. with Godavari	—
8.	Adula	Origin to Adule dam	Adule dam to confl. with Godavari	—
9.	Mula	Origin to Mula dam	Mula dam to confl. with Godavari	—
10.	Shivani	Origin to Ambadi dam	Ambadi dam to confl. with Godavari	—

## WAINGANGA, WARDHA, PENGANGA RIVER BASIN / SUB-BASIN

Sr. No.	Name of River	Stretch of A-I Class	A-II Class	
1	Khekrenalla	Origin to Khekranalla project	Khekranalla project to confl. with Pench river	---
2	Pench	Origin to Pench River Project	Pench river project to confl. with Wainganga river	---
3	Bag River	Origin to Bawanthadi project (including Sagra project)	Bawanthadi project to confl. with Wainganga river	---
	A] Wainganga River		From M.P. State Border to confl. with Wardha river	---
	B] Wardha River		From M.P. State Border to confl. with Wainganga river	---
	C] Penganga River		Origin to confl. with Wardha river	---
	D] Pranhita River (stretch of river in Mah.)		From confl. of Wardha and Wainganga river to confl. with Godavari river	---
	E] Indrayani River (stretch of river in Mah.)		From M.P. State Border to confl. with Godavari river	---
	F] Godavari River (stretch of river in Mah.)		From confl. of Pranhita to confl. with Indrayani river	---

**Annexure-II****EXPECTED STANDARDS OF WATER AS PER CLASSIFICATION OF BEST DESIGNATED USAGES**

Category of fresh water	A-I	A-II	A-III	A-IV
Best Usage	Unfiltered Public water supply after approved disinfection	Public water supply with approved treatment equal to coagulation, sedimentation & disinfection	Not fit for human consumption Fish & Wildlife propagation	Agriculture, Industrial cooling & process water
<b>PHYSICAL QUALITIES:</b>				
Temperature	Not higher than Ambient temp by 2 C.	Not higher than ambient temp by 5 C.	Not more than 3 C above ambient temp	Not more than 3 C above ambient temp
Colour	Less than 50 units (Cobalt Units)	Less than 300 units (Platinum Cobalt Units)		Unobjectionable
Turbidity	Less than 25 units JTU			
Odour	Unobjectionable	Unobjectionable	-	Unobjectionable
Taste	Unobjectionable	Unobjectionable	-	Unobjectionable
Floating Solids				
<b>CHEMICAL QUALITIES:</b>				
Maximum allowable concentration				
<b>1. Toxic substances</b>				
Arsenic (As AS)	0.3 mg/l	0.03 mg/l	1.0 mg/l	0.1 mg/l
Cadmium (as Cd)	0.01 mg/l	0.01 mg/l	-	-
Chromium (Hexa Cr)	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.2 mg/l
Cyanide (as Cn)	0.05 mg/l	0.1 mg/l	0.05 mg/l	0.2 mg/l
Lead (as Pb)	0.1 mg/l	0.1 mg/l	-	0.1 mg/l
Boron				2.0 mg/l
Mercury (as Hg)	0.001 mg/l	0.001 mg/l	0.001 mg/l	-
Gross alpha activity	3 pCi/ml	10 pCi/ml	3 pCi/ml	3 pCi/ml
Gross Beta activity	30 pCi/ml	10 pCi/ml	30 pCi/ml	30 pCi/ml
<b>2. Substances affecting health</b>				
Fluoride (as F)	1.5 mg/l	1.5 mg/l	-	1.0 mg/l
Nitrates (as NO)	45 mg/l	45 mg/l	-	-

100

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3. Substances affecting the potability of water				
pH	6.5 to 9.0	6.5 to 9.0	6.5 to 8.5	6.5 to 8.5
T.D.S.				
Total Solids	1500 mg/l	1500 mg/l		
Total suspended solids	25 mg/l			
Total Hardness (CaCO <sub>3</sub> )	5. mg/l	500 mg/l		
Total Residential Chlorine				
Electrical conductance at 25 C			1000 x 10 mhos	1000 x 10 mhos
Free Carbon Dioxide			12 mg/l	
Free Ammonical Nitrogen (N)			1.2 mg/l	
Oil & Grease			0.1 mg/l	
Pesticides			0.02 mg/l	
Blotic Index			6.0 mg/l	
Total Ammonical Nitrogen	1.5 mg/l	1.5 mg/l		50 mg/l
Chlorides (as Cl)	600 mg/l	600 mg/l		600 mg/l
Sulphates	400 mg/l	400 mg/l		1000 mg/l
Copper (as Cu)	1.5 mg/l	1.5 mg/l		
Maganese (as Mn)	0.5 mg/l	3.0 mg/l		
Iron (as Fe)	1.0 mg/l	5.0 mg/l		
% Sodium				
Zinc (as Zn)	4.5 mg/l	5.0 mg/l	15.0 mg/l	15.0 mg/l
Phenolic Compounds (C N O)	0.002 mg/l	0.002 mg/l	0.05 mg/l	
Alkyl Benzene Sulphates (ABS Surfactants)	1.0 mg/l	1.0 mg/l		
Mineral Oil	0.3 mg/l (No visible oil in sample)	0.3 mg/l (No visible oil in sample)		
Ammonia	1.5 mg/l	1.5 mg/l		
B.O.D. 5days 20 C	2.0 mg/l (monthly average of atleast 10 Samples)	5.0 mg/l (monthly average of atleast 10 samples)	10 mg/l	30.0 mg/l
C.O.D				150 mg/l

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D.O.	Not less than 5 mg/l (monthly average of atleast 100 Samples) Not less than industrial sewage	4.0 mg/l	Not less than 40% on saturation or 3 mg/l whichever is more	150 mg/l Not less than 2 mg/l
Bacteriological standards: (MPN/100)	Coliform Bact 250	Not greater than 5000	-	-

Carbon Chloroform (Extract: CCE Organic Pollutants) Any value beyond 0.2 mg/l will render the water suspicious upto a value of 1 mg/l and beyond this value water will be unfit.

102

२४

**Annexure-III****LIST OF ACTIVITIES ALLOWED / DISALLOWED IN NO  
DEVELOPMENT ZONE****Suggestive list of Non-Industrial Activities which can be  
allowed in 'No Development Zone'**

- 1) Fuel Wood Growing
- 2) Furniture & Structural Wood Growing
- 3) Bamboo Growing
- 4) Grass & Fodder Growing
- 5) Sericulture without Processing
- 6) Orchards Development
- 7) Fruits & Berries Growing
- 8) Nurseries Development
- 9) Medicinal Plants and Aromatic Plants Growin
- 10) Water Abstraction works

**Annexure-IV**

**Activities which can be allowed in Residential areas along the rivers with the permission of concerned local body**

- 1) Preservation of meat; canning preservation & processing of fish
- 2) Rice huller
- 3) Groundnut decortications
- 4) Grain mill for production of flour
- 5) Manufacture of supari
- 6) Manufacture of bakery products
- 7) Coffee curing, roasting and grinding
- 8) Cashewnut processing like drying, shelling roasting, salting etc.
- 9) Manufacture of wooden and Cane boxes and packing
- 10) Manufacture of structural wooden goods such as beams, posts, doors and windows.
- 11) Manufacture of wooden furniture and fixtures
- 12) Manufacture of bamboo and cane furniture and fixtures
- 13) Manufacture of structural stone goods, stone dressing, stone crushing and polishing.
- 14) Manufacture of cement concrete building components, concrete jallies, septic tank, plaster of paris work
- 15) Manufacture and repair of Sundry ferrous engineering Products done by jobbing Concerns such as mechanical workshops with lathes, drills, grinders .

**Electrical Goods**

- 16) Repair of refrigerators, air conditioners, washing machines, electric cooking ranges, motor rewinding works, domestic appliances  
Transport Equipments
- 17) Repair of motor vehicles
- 18) Repairs of locks, stoves umbrellas, sewing machines, gas burners, buckets and other sundry house-hold
- 19) Optical glass grinding and repairs
- 20) Electronic industry

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**LIST OF 17 TYPE CATEGORIES OF HIGHLY POLLUTING INDUSTRIES**

<u>Sr.No.</u>	<u>Category</u>
1.	Fertilizer ( Nitrogen Phosphate )
2.	Sugar
3.	Cement
4.	Fermentation * & Distillery.
5.	Aluminium
6.	Petro Chemicals
7.	Thermal Power
8.	Oil Refinery
9.	Sulphuric Acid
10.	Tanheries.
11.	Copper Smelter.
12.	Zinc Smelter
13.	Iron and Steel.
14.	Pulp and Paper
15.	Dye and Dye Intermedies.
16.	Pesticides Manufacturing and Formulation.
17.	Basic Drugs and Pharmaceuticals

'X' 'I' 105



REG. NO. 10.  
Form I. R.

**CERTIFICATE OF INCORPORATION**

No. 11-110212 of Date 1957

Registered office of the company

and whether 1956 or 1957 (1) or whether 1956 or 1957 (2)

whereby certify that DOMBEVI BETTER ENVIRONMENT SYSTEM ASSOCIATION

is a company

is this day incorporated under the Companies Act 1956 (No. 1 of 1956) and that the Company is limited.

At Test: This is the 20 day of February 1957

Given under my hand at MUMBAI the TWENTIETH

day of FEBRUARY One thousand nine hundred and 1957



*[Signature]*  
(K. S. GANDHI)  
Registrar of Companies

Registrar of Companies

J. S. C. I.  
The Registrar of Companies  
MUMBAI

MAHARASHTRA POLLUTION CONTROL BOARD

PH: 4020781/4014701

Fax: 4023516/4924068

KALPATARU POINT 3rd & 4th floor

Sion Matunga Scheme Road No. 8,

Opp. Cine Cinema Near Sion Circle

Sion (E) Mumbai-400 022

No. MPCB/CETP-Dombivli/B-895

Dt: 08.03.2002

To,

1. The Joint Chief Executive Officer (Env)  
MIDC Udyog Sarathi, Marol Indli Area  
Andheri Mumbai-400 098

2. Managing Director  
Dombivli-Common Effluent Treatment Plant  
Dombivli (E).

3. Managing Director  
Dombivli Better Environment System Association  
Dombivli (E).

Sub: Minutes of the meeting convened by Member  
Secretary, MPCB in his chamber on 25.02.2002 with  
DBESA, GETP & DCETP and officials of MIDC.

Sir,

Please find enclosed herewith the minutes of meeting held on 25.02.2002 for your information and necessary action please.

Yours faithfully

Sd/-

(R.G. Pethe)

Water Pollution Abatement Engineer

D.A. As above:

Copy submitted for information to

1. Chairman MPCB Mumbai

D.A is above

2. Member Secretary, MPCB Mumbai

D.A is above

Copy for information to;

1. Regional Officer, MPCB Kalyan

D.A is above

2. Ex. Engineer, MIDC Dombivli

D.A is above

108

Minutes of the meeting convened by member Secretary MPCB in his chamber on 25.02.2002 with Dombivli Better Environment System Association (DBESA) CETP and Dombivli CETP and officials of MIDC).

The meeting was convened by member Secretary MPCB in his chamber on 25.02.2002 to discuss and resolve various issues related to DCETP and DBESA CETP like common effluent collection system, segregation of effluent from chemical and non-chemical (textile units) effluent carrying pipelines etc. A list of officials who were present during the meeting is annexed as Annexure -I in the meeting the following issues were discussed at length.

- 1) The Member Secretary MPCB welcomed the representatives of DBESA CETP and DCETP.
- 2) Shri R.G. Pethe, W.P.A.E. briefed about the proposal recently submitted by DBESA on various options of segregation of effluent from chemical industries and non-chemical industries (textile industries).
- 3) Shri S.B. Patil, Executive Engineer, MIDC informed that this report had been submitted by DBESA to MIDC and MPCB long back somewhere in 1997. This report just gives the idea about tentative routs of the separate effluent collection system for chemical and non-chemical units located in Phase-I and Phase-II of MIDC Dombivli. With this we cannot come to the conclusion that

the separate effluent collection line for chemical and non-chemical can be laid in MIDC area without studying the L-Section under ground network of telephone and other cable, water supply line, collection carrying line etc. He further brought to the notice of DBESA that they have to commission the CETP by 31.3.2002 otherwise MIDC will levy the penal water charge till they commission the CETP.

4) The details about the effluent quantity generated from Phase-I and Phase-II alongwith the number of units which are members of DBESA, DCETP were discussed. Possibility of treating the effluent to the extent of 1.5 MLD by DCETP and balance pumping to DBESA CETP for further treatment was discussed. However the representatives of DBESA said that the CETP is designed for textile effluent and not for chemical effluent and hence a detail study will be required regarding the treatment of chemical effluent in DBESA CETP. It was brought to the notice of DBESA representatives that effluent quantity of chemical units is very meager compared to textile effluent and that major chemical units are treating the effluent to the secondary treatment standards and therefore the overall load on the DBESA CETP will not be much varying than the designed parameters and therefore it should easily take the chemical effluent load and therefore treatment of combined effluent would be possible.

5) Member Secretary informed that there should be harmony between 2 CETPs and they should come with one concrete proposal towards solving the

issues once for all. Upon this the representatives of DCBTP said that they are ready for the proposal of DBESA to run the CETPs and they will handover the DCBTP to DBESA for further operation and maintenance of effluent station.

6) The representatives of DCBTP informed that they have already given a draft to DBESA regarding common facility utilization and DBESA will be at liberty to modify the draft. Upon this the DBESA's representatives accepted the suggestions from DCBTP and said that they will submit a draft of conditions of amalgamation of both the CETPs to Member Secretary MPCB on or before 8.3.2002 positively for consideration of MPCB and modifications if any. The modifications made by MPCB on the draft amalgamation conditions will be accepted to DBESA and DCBTP.

7) DBESA requested for release of subsidy to CETP by Board at the earliest.

8) The representatives of DBESA then summarized the discussion held during the meeting as below.

a) The 2<sup>nd</sup> effluent collection pipeline for chemical non-chemical (textile unit) will be avoided.

b) DBESA will act as big brother and submit the draft condition for amalgamation of 2 CETPs to Member Secretary, MPCB on or before 8.3.2002.

111

c) The draft amalgamation conditions as approved by MPCB will be accepted to DEBSA and DCETP.

d) The existing DCETP which is in operation may not be closed down and shall be used as a treatment facility for the effluent generated by the industries outside this MIDC area so that it will generate some revenue which will further subsidise the cost of both CETPs in addition to taking care of environment.

e) Member Secretary congratulated the DEBSA and DCETP and requested them to get the necessary approvals and clearances from the relevant authorities and to complete the same as soon as possible. He also requested them to have to commission the CETP by 31st 2002 as per their commitment.

The meeting ended with a vote of thanks to the Chair.

**DOMBIVALI -CEPI ACTION PLAN**

MPCB

112

**Short Term Action Plan**

Sl. No.	Action Item	Compliance
1	Performance evaluation of various pollution control measures in the industrial units.	<ul style="list-style-type: none"> <li>&gt; Survey of industrial units conducted in 2012.</li> <li>&gt; Accordingly Board instructed the district industrial officers to monitor the industry and file.</li> <li>&gt; As per directions analysis has been done.</li> <li>&gt; Regular compliance is monitored by Board officers.</li> </ul>
2(a)	Performance evaluation of Both CETPs	<ul style="list-style-type: none"> <li>&gt; CETP has carried out performance evaluation study.</li> <li>&gt; On the basis of analysis report and visit the Board has issued directions to both CETP on 24.05.2010 to the tune of Rs. 1000000.</li> <li>&gt; Accordingly both CETP has carried out upgradation of CETP.</li> </ul>
2(b)	Optimization of both CETPs	<ul style="list-style-type: none"> <li>&gt; Optimization of CETP is not possible as the industrial load varies due to different type of industries.</li> <li>&gt; For the smooth functioning of CETP following measures are taken:               <ul style="list-style-type: none"> <li>- SCADA system installed by both CETPs.</li> <li>- Installation of control panel for better operational management.</li> <li>- Microscope camera attachment procured for better identification of microbial culture.</li> <li>- Online pH meter installed in the outlet.</li> <li>- Installed actuator valves for proper sludge removal from primary &amp; secondary clarifiers.</li> <li>- DMC system installed to take care of irregular operations especially during monsoon and off-peak hours.</li> </ul> </li> </ul>
3	Installation of effluent pipeline from all industries to the CETPs.	<ul style="list-style-type: none"> <li>&gt; Reasonably viable pathway is provided to the industries for effluent disposal. Also the need to install effluent pipeline from all industries to the CETPs is advised by WARD.</li> </ul>

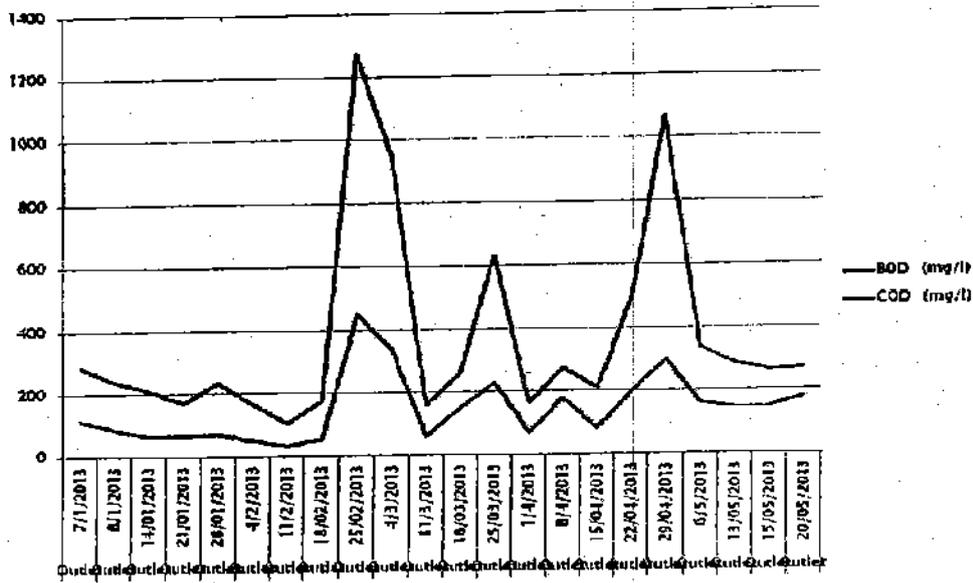
113

<p>Pre-Feasibility study for upgradation of DBESA plant</p>	<ul style="list-style-type: none"> <li>For upgradation of DBESA CETP at Chembur. The CEMTS is completed and tender for installation of equipment is being invited.</li> <li>Amount spent Rs. 400.00 lakhs</li> <li>For upgradation of DDE at Chembur. The MTRC study is under preparation. It may require a being completed.</li> <li>Amount spent Rs. 25.00 lakhs</li> </ul>	
<p>Pre-Feasibility study for upgradation of CETP</p>	<ul style="list-style-type: none"> <li>10 CIPES Nos. 5 MLD</li> <li>1000000 Litres of Raw Water</li> <li>1000000 Litres of Raw Water</li> <li>Additional 1000000 Litres of Raw Water</li> <li>Online pH meter to be installed</li> <li>Control panel to be installed</li> <li>Central control panels with indicators installed for better operational management</li> <li>Microscope camera attachment procured for better identification of microbial culture</li> <li>D.G. Set installed to take care of operations specially during power cut-off on Friday</li> <li>Work on installation of Monobelt filter Press is in progress and will be completed by the end of June 2013</li> <li>Also DPR for upgradation &amp; expansion is under preparation from 5 MLD to 2.0 MLD</li> </ul>	<p>Rs. 80.00 lakhs</p>
<p>Study of upgradation of DBESA CETP</p>	<ul style="list-style-type: none"> <li>Installed 10 HP 5 Nos. of new mixers in equalization tank for better equalization</li> <li>Installation of control panel for better operational management</li> <li>Microscope camera attachment procured for better identification of microbial culture</li> <li>Online pH meter installed at inlet &amp; outlet</li> <li>New Bio-reactor 4 nos. commissioned</li> <li>12 Triton Aerators commissioned</li> <li>Installed actuator valves for proper sludge removal from primary &amp; secondary clarifiers</li> <li>D.G. Set procured to take care of operations specially during power cut-off on Friday</li> <li>Proposal submitted to MDC for the treatment of 4.50 MLD domestic effluent generated from MDC residential area in existing CETP</li> <li>Also DPR for expansion is under preparation for 4.00 MLD</li> </ul>	<p>DBESA CETP DBESA CETP Amount spent Rs. 400.00 lakhs</p>

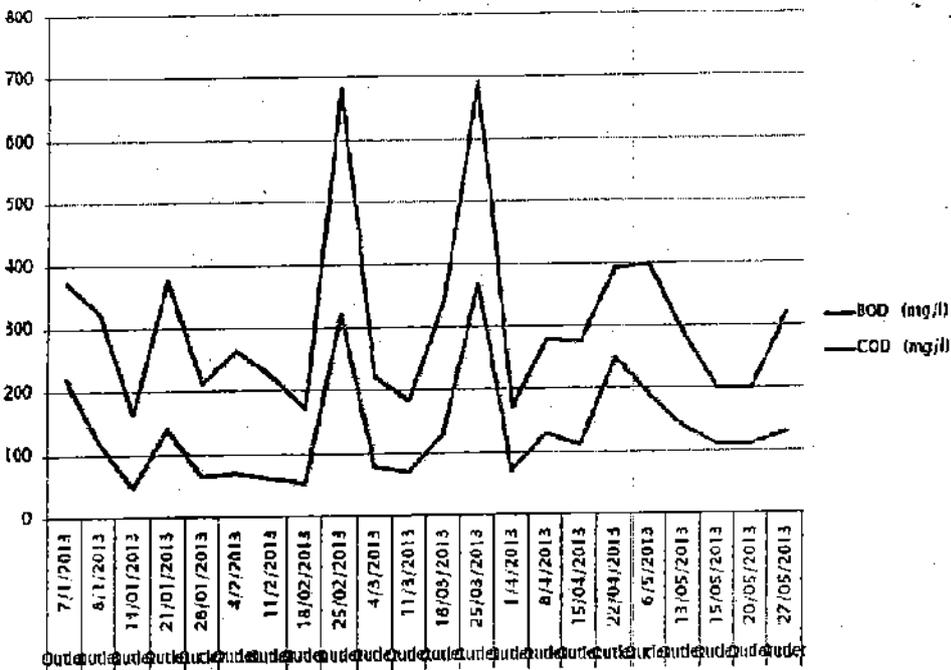
Dombivali-CEPI Phase I					
Dombivali-CEPI Phase I					
	Standards	2010	2015	2020	
pH					
BOD	100 mg/lit	159.16	94.31		
BOD	250 mg/lit	415.39			
Dombivali-CEPI Phase II					
		1000	2000	3000	
pH	6.5-9	7.31	7.02	7.01	
BOD	100 mg/lit	465.88			
COD	250 mg/lit	804.31	619.38	328.20	

115

### Dombivali CETP, Ph-II



### DBESA CETP, Ph-I



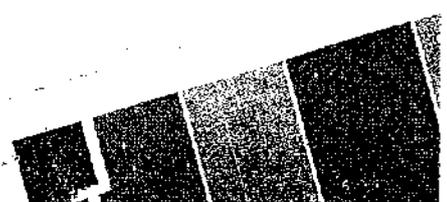
Sl. No.	Action Point	Compliance
5	Repairing of leakage and Effluent carrying pipeline & replacement of the same.	<ul style="list-style-type: none"> <li>&gt; Length of internal effluent carrying pipeline MDC has replaced same with HDPE line.</li> <li>&gt; Total no. of chambers: 290. Out of 290 chambers, chambers are constructed by MDC.</li> <li>&gt; Recently MDC has completed above work.</li> </ul>
6.	Laying of closed pipeline for disposal of treated effluent from CETPs up to Creek:-	<ul style="list-style-type: none"> <li>&gt; Local body KDMC has issued NOC from</li> <li>&gt; From DBESA CETP to Creek.</li> <li>&gt; Tenders finalized and work order will be issued.</li> <li>&gt; From DCEP to DBESA CETP proposal prepared by MDC office and submitted to the Board for approval.</li> <li>&gt; From 1500 meter to 4650 meter.</li> </ul> <p>For this section land acquisition is under process. Once the land acquisition is completed work will be taken up.</p>
7.	VOCs Monitoring	<ul style="list-style-type: none"> <li>&gt; VOC monitoring carried by MDC from 1st April 2011 to 23rd April 2011.</li> <li>&gt; in MIDC Dombivali area at different industries such as</li> <li>&gt; industries at CETP on behalf of Board.</li> </ul>
8.	Lifting of effluent passed into nalla due to any accident or leakage or chamber overflow into CETP by providing bandhara on the nalla near CETPs :-	<ul style="list-style-type: none"> <li>&gt; Length of internal effluent carrying pipeline MDC has replaced same with HDPE line.</li> <li>&gt; Total no. of chambers: 290. Out of 290 chambers, chambers are constructed by MDC.</li> <li>&gt; As MDC has completed above work, there will be no bandhara.</li> </ul>
9 (a).	Provision of continuous power supply to CETPs:-	<ul style="list-style-type: none"> <li>&gt; DCEP installed D.G. set</li> <li>&gt; Whenever there is power shutdown DBESA CETP has D.G. Set.</li> </ul>
9 (b).	Provision of continuous power supply to Pumping station:-	<ul style="list-style-type: none"> <li>&gt; MDC has installed D.G. set</li> </ul>

117

10	Provision of continuous power supply to STP & Pumping station	<ul style="list-style-type: none"> <li>&gt; KDMC has installed DG set for their new 6 STP and pumping stations.</li> </ul>
11	Performance evaluation of air pollution control measure in the industrial units.	<ul style="list-style-type: none"> <li>&gt; Survey of industrial unit is carried out in 2010.</li> <li>&gt; Accordingly Board had issued 32 closer directions &amp; 26 show cause notice to industry in 2010.</li> <li>&gt; As per directions industry has complied.</li> <li>&gt; Regular compliance is monitored by Board officials.</li> </ul>
11	Inventorizing of units carrying out reactions in open vessels and ensuring closed operations with adequate APOMs.	<ul style="list-style-type: none"> <li>&gt; MPCB carried out survey of industrial unit in MIDC area. No such unit observed during the survey.</li> </ul>
12	Inventorizing of Hazardous Air Pollutant emitting units And installation of leak Detection and Repair (LDAR) in case of pesticide and bulk drug manufacturing units.	LDAR is installed by one pesticide & one bulk drug unit.
13	Provision of new AAQM station.	<ul style="list-style-type: none"> <li>&gt; Under SAMP/ NAMP two AAQM station @ DCETP MIDC Phase-II &amp; MIDC Office, Phase-Dombivali commissioned.</li> <li>&gt; Both are in operations from May 2012.</li> <li>&gt; Stations run by M/s. Smt. Chandibai Himathmal Mansukham College, Ulhasnagar.</li> </ul>
14	Installation of CAAQM Stations.	<ul style="list-style-type: none"> <li>&gt; Work is in progress.</li> <li>&gt; Proposal submitted to Head Quarter.</li> </ul>
15	Online Display of AQOM data.	<ul style="list-style-type: none"> <li>&gt; Work is in progress.</li> </ul>

5.3	Account Portal	Chemical wastes
66	Repairing of industrial tanks & equipment in industries in zone	...
17	Inventory of solvent using industry & solvent recovery units	...
102	...	...

Average Ground water report -2012			
Parameter	Well opp. KAMA Office Dombivali	Well at Pimpaleshwar, Dombivali	Well water near M/s Ultra Pure, Dombivali
pH	7.3	7.55	7.4
B.O.D 3 days 27°C	3.4	5.3	3.5
C.O.D	20.0	34.0	24
SS	10.0	17.00	16



119

AVOM Report

STATION	NO.	RSPM	NO.	NO.	SPM	NO.						
Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min

Location: MIDC Office Dombivali Period: Jan-May 2013 (31 Samples)

			26.20	39	85	54.99	58	120	81.39	72	145	93
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Location: DCETP MIDC Phase-II Dombivali Period: Jan-May 2013 (31 Samples)

		68	61.88	28	107	65.73	46	149	95.24	61	174	113.68
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S.N	Action Point	Compliance
19	Health Impact Study	<ul style="list-style-type: none"> <li>➤ Health impact study is done...</li> </ul>
20	Proper storage & regular disposal of HW & solid waste.	<ul style="list-style-type: none"> <li>➤ All industries are in line with HW collection and transportation to CHWTSDE, Dombivali.</li> <li>➤ Also regular monitoring is carried out by MPCB.</li> </ul>
21 & 22	Awareness Programme & Monitoring Vision:-	<ul style="list-style-type: none"> <li>➤ Regular Review meeting is held to monitor work of CEPI by Board officials.</li> <li>➤ Tree plantation programme is in collaboration with MIDC &amp; industrial associations.</li> <li>➤ MPCB recently organized a seminar on e-waste discharge from IT and industry.</li> <li>➤ MPCB recently organized a seminar on Emission Trading Scheme on 6th April 2013.</li> <li>➤ MPC Board, Kalyan has conducted meeting to progress of Dombivali Action plan with stakeholders on 4th April 2013.</li> </ul>

121

Long Term Action plan

2010

Sl. No.	Action Point	Responsibilities
	<p>Availability of CETP for all the industries in the area.</p>	<p>Availability of CETP will not be a problem as both CE/ETP governed by Maharashtra Industrial Association.</p> <p>Basically there is no consideration by both the CETP for amalgamation.</p> <p>Finite load coming from chemical industries of high COD is mixed with large quantity of low COD from textile industries and again it is mixed in order to reduce COD load by manufacturer and then distributed to both CETP for further treatment.</p>
	<p>Recycling of treated effluent.</p>	<ul style="list-style-type: none"> <li>&gt; Individual industries are not in favor of recycling of treated effluent nor by CETP. 98% of the total industry falls under SSJ.</li> <li>&gt; Two paper industry recycling total treated effluent in process &amp; one paper industry using 70% treated effluent in process.</li> <li>&gt; Also one large &amp; one medium industry reuse some part of their treated effluent.</li> </ul>
3	<p>Providing underground drainage network for collection of sewage from remote area/Grampanchayat area.</p>	<ul style="list-style-type: none"> <li>&gt; No progress is observed in this matter from MIDC/Grampanchayat.</li> <li>&gt; Government has to take initiative.</li> <li>&gt; Zilla Parashid has to take initiative.</li> </ul>
4a	<p>Providing STP for domestic effluent of residential colony developed by MIDC. Treated water can be used for gardening.</p>	<ul style="list-style-type: none"> <li>&gt; MPCB has written letter to MIDC, but till MIDC has not given any reply. And is under consideration by MIDC.</li> <li>&gt; Proposal submitted by DBESA CETP to MIDC for the treatment of 4.50 MLD domestic effluent generated from MIDC residential area in their existing CETP.</li> </ul>
4b	<p>Providing STP for KDMC area.</p>	<ul style="list-style-type: none"> <li>&gt; KDMC has started work of 6 new STP and @ 123 MLD.</li> <li>&gt; Out of 6 STP work 4 STP's work completed and are in commissioning stage. Trial run of STP are in progress.</li> <li>&gt; Remaining 2 STP's 90% work is completed, further work is in progress will be completed by Sep. 2013.</li> </ul>
5	<p>Provision of continuous power supply to STP &amp; their pumping station.</p>	<ul style="list-style-type: none"> <li>&gt; KDMC has installed DG set for their new STP &amp; Pumping stations.</li> </ul>

- 6. Introduction of Cleaner fuel like CNG/LPG:-
  - > Work of installation of Gas pipe line by Maharashtra Gas authority in Dombivali MIDC area. Phase I is completed. Phase II work is in progress & gas shall be supplied in 2013.
- 7. The vehicles in this area shall use clean fuel as LPG/ CNG:-
  - > Under RTO, Kalyan 6673 Raksha & 1133 and 1492 M Car are converted on LPG fuel. CNG is not available in this area.
- 8. Development of Green belt & Garden:-
  - > No progress. However follow up is on with officials KAMA & MIDC.
  - > Some industries have planted trees in surrounding area.
- 9 a. Illegal & unscientific dumping of municipal solid waste by Grampanchayat's in industrial area as well as in residential area:-
  - > This matter is related with Grampanchayat/MIDC. Also KAMA has filed a PIL against Grampanchayat & others.
  - > MIDC has taken initiative for providing land for scientific disposal of MSW. Proposal sent to their HQ.
  - > Zilla Parashid has to take initiative.
- 9 b. Scientific treatment & disposal of MSW- KDMC:-
  - > KDMC has obtained Authorisation from MPCB for new site at Umbarde, Kalyan.
  - > Till no further progress.
  - > Board is forfeited BG of Rs. 5 Lacks from KDMC for not starting work of new site. New BG of Rs. 10.00 is submitted by KDMC.

Estimated Cost / Incurred cost (Lakhs)										
	MPCB			GETP		MIDC			Local Body	
	AAQM	CAAQM	VOC	DBESA	DCETP	Internal network	Disposal line	DG Set	MSW	
Total Expenditure	Rs. 5.07	Rs. 105.00	Rs. 1.5	Rs. 650.4 Rs. 787.7 (DC Set)	Rs. 300 Rs. 517 (DC Set)	Rs. 1800	Rs. 3672			
Expenditure used so far	Rs. 8.72		Rs. 1.5	Rs. 340.4 Rs. 787.7	Rs. 300 Rs. 517	Rs. 1400				

123

	Schemes/Items	Authority	
	Scientific disposal of municipal solid waste (CEPT to MIDC)	MIDC	
	Required improvement in the network of effluent carrying pipeline & Chambers	MIDC	
	Legal & scientific dumping of MSW in all panchayat & in industrial areas as well as in residential area	Ganapachavay Zilla Parishad/MIDC MMRDA	
21	Sewage Treatment Plant for the sewage generated from residential colony (Milap, Sucharshan Nagar) developed by MIDC	MIDC	
22	Scientific disposal of Municipal Solid Waste in KDMC area	KDMC	

Regional Office, MPC Board, Kalvan has conducted meeting for the progress of Dombivli Action Plan on 11th April 2013.

For the meeting representatives of MIDC, KDMC, KAMA, Both CEPT, Maharashtra Gas, RTO, Chandrab College are present.

MIDC representative inform that the work of pipeline is under progress. Tender work is completed work order will be issued shortly. Sludge of the sump is removed from the sump, proposal from both CEPT's received for the treatment of domestic effluent generated from residential MIDC area. Also MIDC is ready to provide land to develop site for the scientific disposal of MSW generated from surrounding village.

DBESA CEPT, Ph-I representative informed that Proposal submitted to MIDC for the treatment of 30 MLD domestic effluent generated from MIDC residential area in existing CEPT. Also DPR for expansion is under preparation for 400 MLD.

DCEPT, Ph-II representative informed that Work of installation of Monobelt filter Press is in progress, also DPR for up gradation & expansion is under preparation from 1.5 MLD to 2.0 MLD.

Maharagar Gas representative informed that laying of pipeline in Ph-I has completed and work of Ph-II is under progress and gas will be supply to industries up to Dec 2013.

KDMC representative informed that 4 STPs are commissioned, work of 2 STPs are under progress.

"B"

L

124

5/3/2017

Midc Letter - For your information.jpg

3691

Ed on 02/03/17



# MIDC

No. BE/PA-III/A80309 of 2017,  
Office of the Executive Engineer,  
In front of Pendharkat College,  
MIDC, Division Dombivli,  
Date: 23/02/2017.

To,

Plot No. \_\_\_\_\_  
MIDC, Dombivli

Sub: Dombivli Industrial Area ...

Ref: Agreement No. B-1/22 for 2016-17 &  
D-5 for 2016-17.

Dear Sir,

[Redacted] is requested to remove all the raw material, scrap, debris stacked out side your plot and at side of road. It is very difficult to execute the work without removing the above mentioned material.

Please do the needful at once failing which this office will initiate appropriate action against defaulter.

Thanking you,

Yours faithfully,

(S.S. Nanaware)  
Executive Engineer,  
MIDC., Division Dombivli

Copy submitted to the Superintending Engineer (MMR) MIDC Dombivli for favour of information please.

[Redacted]

Copy to Deputy Engineer & PA-III, MIDC Dombivli for information and necessary action.

Copy to guard file

2726  
Rel-28/01/2019

4408

M



125

**MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION**

(A Government of Maharashtra Undertaking)

IFMS No. DE & PA-II/Dombivli/2019/A 34218

Office of the Executive Engineer,  
MIDC, Dombivli Dn. Dombivli-421 203.

Date: 25/01/2019

To,

✓ M/s. Dombivli Better Environment System Association,  
Plot No. 05-8, MIDC Ph-I,  
Opposite Savitribai Phule Kala Mandir,  
Dombivli (East)-421 203.

**Sub:** Segregation of textile and chemical duster effluent pipeline.

**Ref:** Your letter No. 7315/ 2018-19, Dt. 04.01.2019.

Dear Sir,

The information required by you vide above cited letter is given as follows-

- (1) The work of segregation of effluent carrying pipeline of textile and chemical effluents is completed to the extent of 90% and is in progress. The stipulated date of completion as per tender is 05.02.2019.
- (2) The earlier collection system is being segregated by laying separate collection lines for textile effluents and diverting the same to separate collection tanks. Separate ETP's are already in existence for treating Textile & Chemical effluents. The treated effluents shall be disposed off through a common line.
- (3) The fully treated effluent of LS1/ MS1 industries will be collected in the nearby constructed sump of 1000 Cu M capacity in Ph-I and the same will be pumped to DCETP in Ph-II. It will not be brought to DBESA CETP for treatment.

Proposal for separate billing of both clusters if necessary will be prepared in consultation with their associations.

Thanking you,

Yours faithfully,

Executive Engineer,  
MIDC, Dombivli Division,  
Dombivli-421 203.

➤ Copy Submitted to The Superintending Engineer (MMR), MIDC Dombivli Zone for favour of information please.

"L" Catty "N"  
 "Catty" "Catty"

**J-11013/5/2010-TA-III(A)**  
**Government of India**  
**Ministry of Environment & Forests**

Paryaveeran Bhavan,  
 C.G.O. Complex, Lodhi Road,  
 New Delhi-110003,  
 Telefax: 24362434

Dated: 13<sup>th</sup> January, 2010

**Office Memorandum**

**Sub: Consideration of projects for environmental clearances based on Comprehensive Environmental Pollution Index - Regarding.**

Central Pollution Control Board (CPCB) in association with Indian Institute of Technology (IIT), New Delhi have, recently, carried out an environmental assessment of industrial clusters across the country based on Comprehensive Environmental Pollution Index (CEPI) with the aim of identifying polluted industrial clusters and prioritizing planning needs for intervention to improve the quality of environment in these industrial clusters and the nation as a whole. The assessment so carried out has been documented in the form of a report entitled 'Comprehensive Environmental Assessment of Industrial Clusters' which is available on the website of CPCB [www.cpcb.nic.in](http://www.cpcb.nic.in) and website of Ministry [www.menvf.nic.in](http://www.menvf.nic.in). In all 68 industrial clusters have been assessed.

2. The industrial clusters have been listed in table 8 (annexed herewith) of the report in descending order of environment pollution Index scores. The report has concluded that the industrial clusters/areas having aggregated CEPI scores of 70 and above should be considered as critically polluted; the clusters/areas having CEPI scores between 60-70 should be considered as severely polluted areas and shall be kept under surveillance and pollution control measures should be efficiently implemented; and the critically polluted industrial clusters / areas need further detailed investigations in terms of the extent of damage and formulation of appropriate remedial action plan.

3. The Environment (Protection) Act, 1986 enjoins upon the Central Government to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of environment including restriction of areas in which any industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards. Accordingly, the Environment Impact Assessment Notification, 2006 has mandated certain category of projects / activities listed therein to obtain prior environmental clearance under the provisions thereof.

127

the identification of industrial clusters / areas by CPCB which are severely polluted. Ministry of Environment & Forests hereby imposes restrictions on consideration of developmental projects in such clusters/ areas and the following procedure to be adopted with immediate effect:

- 4.1 The developmental projects from industrial clusters with CEPI score above 70 (as listed at serial no. 1 to 43 of the Annexure) received for grant of environmental clearance in terms of the provisions of EIA Notification, 2006 (including projects for stage-I clearance i.e. scoping (TORs)) which are presently in pipeline for environmental clearance or which would be received hereafter shall be returned to the project proponent.
- 4.1.1 This restriction on consideration of projects from critically polluted clusters/ areas above will apply for a period of 8 months upto August, 2010 during which time the Central Pollution Control Board along with the respective State Pollution Control Boards / UT Pollution Control Committees will finalize a time-bound action plan for improving the environmental quality in these identified clusters/ areas. The situation will be reviewed thereafter and further instructions issued accordingly; provided that projects relating to renewal of mining lease without any increase in production and / or lease area which are already in operation in these clusters will continue to be appraised in accordance with the procedure prescribed under EIA Notification, 2006 and decision taken on merits; and provided further that the projects of public interest, such as projects of national importance, pollution control, defence and security, with prior approval of the Competent Authority, MoEF/ SEIAA for category 'A' & 'B' respectively, on a case to case basis, will continue to be appraised in accordance with the procedure prescribed under EIA Notification, 2006 and decision taken on merits.
- 4.2 The developmental projects from industrial clusters with CEPI score between 60 - 70 (as listed at serial no. 44 to 75 of the Annexure), which are in the pipeline or are received for grant of environmental clearance in terms of the provisions of EIA Notification, 2006 (including projects for stage-I clearance i.e. scoping (TORs)), will be considered following the procedure outlined in this Ministry's earlier circular no. J-11013/16/2009-IA-II(I) dated 25<sup>th</sup> August, 2009 relating to proposals for environment clearance for the projects located in the critically polluted areas as identified by the Central Pollution Control Board, which is available on the website of the Ministry [www.envfor.nic.in](http://www.envfor.nic.in).

128

5. In the eventuality of any dispute regarding the location of any project within the critically polluted area or otherwise, a reference will be made to GPCB and based on their advice a way will be taken on such projects.

This issues with the approval of the Competent Authority.

~~Signature~~  
Director

To:

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SRTAs/STACs
3. Chairman, GPCB
4. Member Secretaries of all SPCBs / UTPCCs

Copy to:-

1. PS to MEF
2. PPS to Secretary (E&F)
3. PPS to AS(JMM)
4. Advisor (GKP)
5. Advisor (NB)
6. Website, MoEF
7. Guard File

129

## Annexure

Table 8: The CEPI scores for industrial areas/ clusters descending order

SNo.	Industrial Cluster/Area	2012	2013	2014	2015	2016
1	Ankleshwar (Gujarat)	72.00	72.75	75.75	85.00	Ac_We_Lc
2	Vapi (Gujarat)	71.00	71.50	74.00	85.00	Ac_We_Lc
3	Ghaziabad (Uttar Pradesh)	68.50	68.25	71.50	85.00	Ac_We_Lc
4	Chandrapur (Maharashtra)	70.75	70.50	73.00	85.00	Ac_We_Lc
5	Korba (Chhattisgarh)	67.00	67.00	72.50	85.00	Ac_We_Lc
6	Bhiwadi (Rajasthan)	71.00	69.00	70.50	85.00	Ac_We_Lc
7	Angul Talcher (Orissa)	64.00	65.00	65.75	82.00	Ac_We_Lc
8	Vellore (North Arcot) (Tamilnadu)	69.25	65.25	67.50	80.00	Ac_We_Lc
9	Singrauli (Uttar Pradesh)	70.50	64.00	59.50	81.75	Ac_We_Lc
10	Ludhiana (Punjab)	68.00	66.00	66.50	80.00	Ac_We_Lc
11	Nazafgarh drain basin (including Anand Parvat, Naraina, Okhla and Wazirpur), Delhi	52.00	69.00	65.25	79.50	Ac_We_Lc
12	Noida (Uttar Pradesh)	65.25	64.00	60.00	78.00	Ac_We_Lc
13	Dhanbad (Jharkhand)	64.50	59.00	63.50	78.50	Ac_We_Lc
14	Dombivalli (Maharashtra)	66.00	63.50	57.50	78.00	Ac_We_Lc
15	Kanpur (Uttar Pradesh)	66.00	63.50	56.00	78.00	Ac_We_Lc
16	Cuddalore (Tamilnadu)	54.00	65.25	64.00	77.50	Ac_We_Lc
17	Aurangabad (Maharashtra)	64.75	60.50	50.50	77.44	Ac_We_Lc
18	Faridabad (Haryana)	64.50	59.00	62.75	76.00	Ac_We_Lc
19	Agra (Uttar Pradesh)	59.00	63.75	59.50	76.00	Ac_We_Lc
20	Madurai (Tamilnadu)	65.00	59.00	58.00	75.00	Ac_We_Lc
21	Haldia (West Bengal)	59.75	64.50	57.00	75.25	Ac_We_Lc
22	Ahmedabad (Gujarat)	63.75	58.00	58.00	75.00	Ac_We_Lc
23	Jodhpur (Rajasthan)	57.00	60.50	75.00	75.00	Ac_We_Lc
24	Cochin Greater (Kerala)	57.00	60.00	60.00	75.00	Ac_We_Lc
25	Mandi Gobind Garh (Punjab)	62.00	57.50	62.00	75.00	Ac_We_Lc
26	Howrah (West Bengal)	57.00	54.50	57.00	74.00	Ac_We_Lc
27	Yatva (Gujarat)	60.00	62.00	56.00	74.00	Ac_We_Lc
28	Ib Valley (Orissa)	64.00	56.50	54.00	73.00	Ac_We_Lc
29	Varanasi/Mirzapur (Uttar Pradesh)	58.00	52.00	58.50	73.75	Ac_We_Lc
30	Navi Mumbai (Maharashtra)	61.00	59.00	55.50	73.75	Ac_We_Lc



67	Pilani (Rajasthan)	47.75	53.00	50.00	56.00	An, Wn, Ln
68	Palanpur (Rajasthan)	45.00	49.00	47.00	51.00	An, Wn, Ln
69	Moradabad (Uttar Pradesh)	54.00	49.00	51.00	55.00	An, Wn, Ln
70	Sadarajpura (Chhatisgarh)	48.00	50.50	49.00	51.50	An, Wn, Ln
71	Aligarh (Uttar Pradesh)	53.00	48.00	49.00	50.00	An, Wn, Ln
72	Parwanoo (Himachal Pradesh)	53.00	47.50	48.00	50.00	An, Wn, Ln
73	Haridwar (Uttarakhand)	50.75	48.00	49.00	51.00	An, Wn, Ln
74	Vijaywada (Andhra Pradesh)	52.00	41.50	42.00	45.00	An, Wn, Ln
75	Ferozabad (Uttar Pradesh)	49.00	47.00	47.25	50.50	An, Wn, Ln
76	Mathura (Uttar Pradesh)	48.00	48.00	48.00	50.00	An, Wn, Ln
77	Mearit (Uttar Pradesh)	50.00	47.50	48.00	50.00	An, Wn, Ln
78	Erode (Tamil Nadu)	47.38	47.25	48.50	50.00	An, Wn, Ln
79	Surat (Gujarat)	48.00	46.75	48.50	52.50	An, Wn, Ln
80	Katbedan (Andhra Pradesh)	48.50	47.00	48.00	50.00	An, Wn, Ln
81	Kukatpalli (Andhra Pradesh)	41.50	42.00	48.50	50.50	An, Wn, Ln
82	Hallpur (Bihar)	43.50	42.00	43.00	45.00	An, Wn, Ln
83	Gwalior (Madhya Pradesh)	45.85	46.50	47.00	50.00	An, Wn, Ln
84	Udhamsingh Nagar (Uttarakhand)	44.00	43.25	44.00	45.00	An, Wn, Ln
85	Bhilla Buzurg (Chhattisgarh)	44.00	45.00	45.00	48.00	An, Wn, Ln
86	Botad Sahar Khurda (Odisha)	42.00	43.50	44.00	45.00	An, Wn, Ln
87	Buraihat (Assam)	35.00	34.50	35.00	36.00	An, Wn, An
88	Diboli (Assam)	32.00	32.50	33.00	34.00	An, Wn, An

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 2402 0781 / 2401 0437  
2402 4068

Website: <http://mpcb.mah.nic.in>  
Email: [mpcb@vsnl.net](mailto:mpcb@vsnl.net)



Kalambur, Pune  
2nd & 3rd 4th floor  
GPO, Kalambur  
Near Sion Circle, Sion (E),  
Mumbai - 400 021

No. MPCB/ZO-RAMS/CEPI/B-1/56

To

Mr. Member Secretary  
Central Pollution Control Board  
Dr. H. S. Bhavan, East Aarti Nagar, Sakinaka  
Delhi-110 032

Sub: Implementation of Action Plan for 5 Critically Polluted Industrial Areas in the State of Maharashtra

Ref: 1. Final Action Plans submitted as per the discussions held on 11/10/2010  
2. MoEF O.M. dated 13/1/2010 and 26/10/2010

Dear Sir,

MPCB has already submitted the action plans for control of pollution for 5 critically polluted industrial areas of Dombivli, Navi Mumbai, Tarapur, Aurangabad, and Chandrapur. These action plans have been developed based on several discussions with CPCB, more particularly on 1/11/2010 and also in consultations with the major stake holders. The CEPI reports have created significant awareness in all the stake holders including the Governmental Agencies, Industries and the local people. It is a very significant step towards the environmental protection in these critically areas.

These action plans include short and long term actions and many of the actions have already been initiated in the field. In fact, final action plans submitted in November, 2010 included the status of various actions, particularly in the short term scenario. A statement of the progress in implementation in each of these CEPI areas is annexed separately with this letter and the summary of the initiatives and the progress is as under:

1. The action plans have been circulated to all the stake holders for implementation in a time bound and effective manner. The action plans have been hosted on MPCB website for public information as required under the O.M. dated 26/10/2010.

133

2. The control and management of VOCs in the Industrial areas is the most difficult aspect of the CEPR report. Accordingly, Board has already issued a circular No. W/O/3-7986 in these CEPR areas on the basis of CEPR findings as decided in the meeting held on 1.12.2010 vide MPCB letter No. W/O/3-7986 dtd 26.12.2010. The monitoring programme shall be reviewed at the agency and is enclosed.

The industries with chloro-solvent use have already been identified for all these 5 areas in the action plans and random monitoring by the Board Officers have started. Recommended Regional Offices have issued directions for these industries to improve the performance of solvent recovery units and to have the industries in Karapur and Dombival have completed the work under this initiative. In Aurangabad Region, all 5 bulk drugs, pharmaceutical and chemical industries have been issued instructions to increase the solvent recovery.

4. MPC Board in its 15th meeting has decided to restrict the use of pet coke and accordingly, the no industries in the CEPR areas are now given consent with pet coke. There is only one industry in Aurangabad which was earlier allowed by the Board to use the pet coke and it has been directed to upgrade air pollution control systems within 6 months and Bank Guarantee for Rs. 5 lakhs is taken.

The TDC, New Mumbai and Dombival industrial areas have CNG access and availability. Board has followed up the matter with industries association as well as MHC to provide CNG for industrial use which will enable to reduce air pollution in the area. As of now, only 3 industries have started using CNG for industrial use. CNG is already available for public transport in these areas.

The TDC, Dombival and New Mumbai have taken steps to improve the condition of the main roads by providing new mixers, roller etc. More provision of CCTs and substantial capital investment has been made. The CEPR of Aurangabad could not be commissioned so far due to non-availability of CCT. Where 100% recycle and reuse has been recommended. However, individual industries in Aurangabad have taken initiatives, more particularly the electroplating industries for removal of heavy metals.

MPC Board has resolved to provide 5 CAAQMS monitors in these 5 CEPR areas and accordingly, a proposal has been submitted to CPCB for financial assistance vide office letter No. MPCB/PRA/MS/CAAQMS-Expan/B-5001 dtd 26.12.10.

8. In Chandrapur, Board has issued directions for transportation of minerals and material through mechanically closed trucks which will reduce the spillages and the resultant air pollution. A typical design is enclosed.

134

Hon'ble Minister, Environment, Govt. of Maharashtra has also taken the review of the progress on 9th of December.

9. MPCB has prepared a proposal for preparation of emission inventory and air quality modeling for Chandrapur District through NEER which is under final consideration.
10. Board has prepared a proposal for online stack monitoring and the same was submitted CPCB in November. CPCB comments are received on 10.2.11 and considering the comments, EoI will be issued in next 15 days.
11. Board has already strengthened its man power by recruiting about 114 Field Officers thereby improving the enforcement and compliance levels in the field. Board has also initiated the website display to the directions issued by the Board to improve the transparency and public information about the non-complying industries.

It is therefore submitted that MPCB and the concerned implementing agencies are taking sincere efforts for effective implementation of the action plans and there is a substantial progress in implementation of action plan. As per MOEF OM, the moratorium is to be lifted once the action plans are approved and implementation is started.

It is therefore, requested to consider this progress and lift the moratorium at the remaining 4 CEPI areas of Chandrapur, Aurangabad, Navi Mumbai and Bombali. This will ensure that the positive steps taken by all stakeholders are taken on record.

With regards,

Sd/-

(Radhe Mohan Mishra, Secy, MO)  
Member, Board

Copy submitted to:

1. Secretary, Ministry of Environment and Forest, Govt. of India, Parvathan Bhavan, Connaught Place, Lodhi Road, New Delhi.

2. Secretary, Environment, Govt. of Maharashtra, Mantralaya, Mumbai for information.

Copy submitted to: Chairman, MPCB at MPCB - for information.

Copy to: Chief Executive Officer, MDC, Udyog Sarathi, Maharashtra Caves Road, Andheri (E), Mumbai 400 093, for information.

Copy to: WRAE/APAE/PSO/SLO(D)/AS(Tech)/BO(HQ) - for information.

Necessary follow up.

Copy to:

The Regional Officer, MPC Board

Mumbai/Navi Mumbai/Raigad/Thane/Kalyan/Pune/Nashik/Kolhapur/Nagpur/

Aurangabad / Amravati/Chandrapur - for information and necessary follow up

135

## Compliance of CEPI action plan- Chandrapur

### A. Initiatives taken by Maharashtra Pollution Control Board

1. Direction issued to coal washeries to improve environment in the washeries .
2. Direction issued to Sponge Iron Units to improve environment in the sponge iron units.
3. Direction issued to ACC Cement Ghugus to close down old plant on 28-02-2011.
4. Consent to Establish granted to Ballarpur Industries Ltd. to installed to modernized plant by 31-12-2011.
5. Directives issued to WCL (CMD) to adopt mechanized closed system for transportation of coal from mines.
6. Direction issued to MIDC to develop landfill site at MIDC Tadali for disposal of non hazardous solid waste
7. Direction issued to collector Chandrapur to shift coal depose located on Nagpur Chandrapur road.
8. Direction issued to PWD Department to construct bypass road for Chandrapur
9. Direction issued to Chandrapur Municipal Corporation to provide Sewage Treatment Plant and MSW of adequate capacity.
10. Direction issued to Ballarpur Municipal Council to provide Sewage Treatment Plant and MSW of adequate capacity.

**B. Compliance****a. Sponge Iron:**

1. WHRB is provided by Lloyd Steel , Shidhabali & Gopani . Grace industries is in a process to provide WHRB.
2. House keeping is improved by Lloyds Metal, Chaman Metallics & Gopani Iron & Steel.
3. Solid Waste disposal is started by Lloyds Metal, Chaman Metallics & Gopani.

**b. Coal Washeries:**

1. Zero discharge of effluent is achieved by coal washeries under CEPI.
2. APC arrangement upgradation is in progress by coal washeries.
3. Concretization of internal road completed.

**c. CSTPS Chandrapur:**

1. Ammonia dosing system is installed in unit No. 1, 2, 3, 4 and in unit No. 5, 6, 7 this system will be installed by March 2011.
2. 10 % imported coal and 20% washed coal is utilized.

**d. Cement Plant:**

1. M/s. ACC Cement has almost completed modernized plant to achieve SPM below  $50 \text{ mg/Nm}^3$  Likely to be commissioned by 1<sup>st</sup> week

**e. Ballarpur Industries Limited.:**

1. Work of establishing modernized plant for reduction of water consumption, hydraulic load and organic load of effluent is in progress.

137

2. Sludge thickener and double wire filter press is commissioned
3. Vegetation over the accumulated lime sludge heaps is completed.
4. Industry is generally achieving stipulated standard of BOD 25 mg/ltr. Of industrial effluent.

f. WCL:

At present WCL is practicing coverage of coal transportation trucks by tarpaulin.

2. Dust suppression arrangement by water sprinkling is strengthened .

g. Chemical Unit:

1. M/s Multi Organic Limited, Chandrapur has achieved zero discharge of effluent
2. Bag filter to 4.5 TPH boiler is commissioned. Erection work of bag filter to another boiler is in progress.

h. PWD:

1. The work of construction of 4 lane concrete road from Chandrapur to Padoli is in progress . Two lanes are concreted.

i. MIDC:

The work of construction of 4 lane of concrete road in MIDC Tadali is in progress. 50% work is completed.

J. Coal Depot :

MPCB has provided list of coal depot to Collector Chandrapur for initiating action of shifting.

## PROGRESS OF IMPLEMENTATION OF CEPI: AURANGABAD

After submission of the draft action plan a detail survey, sector-wise meetings with the Bulk Drugs & Pharmaceuticals, Chemical Units, Breweries, Distilleries, Engineering and Electroplating Units were conducted in the month of September, 2010, the industries were given following instructions :

1. Installation of Solvent Recovery Plant in Bulk Drugs, Pharmaceuticals and Chemical Units and also improvement in efficiency of solvent recovery upto 95%.
2. Identification and segregation of high concentration streams of BOD, COD and TDS.
3. Revamping of old ETPs in prominent industries for control of seepages and leakages and upgradation of existing pollution control systems.

The sector-wise industries have submitted the Time Bound Programme for the above said work. The following industries have already segregated high concentration streams of BOD, COD and TDS.

- 1) M/s. AMRI India Ltd.
- 2) M/s. Ipca Laboratories Ltd.
- 3) M/s. Orchid Chemicals & Pharmaceuticals Ltd.
- 4) M/s. Wockhardt Ltd.
- 5) M/s. Harman Finchem Pvt. Ltd.

All the industries have been instructed by this office to physically join their effluent carrying drainage line to conveyance system to carry the effluent to CETP provided by MIDC. The trial run of CETP, Waluj is in progress. The CETP Waluj has set up a separate treatment facility for the effluent generated from electroplating units. The CETP has also provided units

for removal of heavy metals like Zinc, Lead, Cadmium, etc. and the sludge will be disposed to CHWTSDF at Ranjangaon. The Environmental Clearance for the CETP is awaited till date.

A sector-wise review meeting of industries was called by this office. The Bulk Drugs & Pharmaceuticals and Chemical Units were called on 15/02/2011 to take the review on the action taken regarding --

1. Upgradation work of Solvent Recovery Plant for 95% solvent recovery
2. Action taken for recycle/reduction of waste water volume
3. Isolation of high BOD, COD and TDS streams and
4. Adoption of Cleaner Technology.

M/s. Bajaj Auto Ltd, MIDC Area, Waluj has started using cleaner fuel in the form of LPG by replacing fossil fuel/furnace oil. M/s. Maso Automotive Pvt. Ltd., MIDC Area, Waluj has replaced the oil fired furnaces by cleaner technology in the form of electric heaters. M/s. Skoda, MIDC Area, Shendra has started using eco-friendly paints.

139

Breweries & Distilleries were called on 17/02/2011 and were directed for optimum utilization of water, reuse/recycle of water, isolation of high TDS and COD streams and improve the efficiency of pollution control systems.

M/s. Millennium Beer Industries Ltd. has submitted that they brought down the Beer to Water Ratio from 1.6 Ltrs to 1.4 Ltrs /Ltr. of Beer by installing Bottle Water Recovery System. M/s. Lilasons Industries Ltd. has replaced the dust collection system by installing new dust collector. M/s. Carlsberg India Pvt. Ltd. has reduced the water consumption from 13 HL/HL of Beer to 6.47 HL/HL of Beer.

The Board has already started the monitoring of V.O.C. and ambient air quality, surface water and ground water in the critically polluted area with the help of M/s. Vinita Labs. from 25<sup>th</sup> February, 2011.

**Progress of implementation of CEPI: Navi Mumbai TTC Industrial area**

1. Reduction in effluent load by way of recycles/ reuse etc.

Name of the industry	Remarks
M/s. SI Group Ltd., D-2, TTC MIDC, Navi Mumbai	Installed Acetone recovery plant thereby reducing effluent quantity at source.
M/s. Sandoz Pvt. Ltd., D 31/32, TTC Navi Mumbai	Effluent in partly is used for gardening. Planning to install RO system for treated effluent used for cooling tower recycling condensate water for boiler. Installed VOC reduction system.
M/s. Amines and Plasticizer Ltd., D-21 MIDC, TTC Navi Mumbai.	Treated effluent is used for cooling tower, vessel washing and gardening. ETP upgrading is proposed.
M/s. Pfizer Ltd., Plot No. 16, TTC Navi Mumbai.	Partly recycling the effluent for gardening.
M/s. Glenmark Pharma, Mahape, Navi Mumbai.	Total treated effluent is used for gardening. Incinerator for BMW is provided.
M/s. Zydus Nicomed, Plot No. -C-4, TTC Navi Mumbai.	Stared recovery organic solvents thereby reducing concentration of the effluent. Separate for high concentration in multiple effect evaporators. Venture scrubber provided.

In addition to this most of the industries have replace NaOH as neutralizing agent. Also scrubber and venture scrubber are provided wherever necessary.

2. Mahanagar Gas Limited: The laying of gas pipe line is in progress. Most of the industries proposed to convert to cleaner fuel and approached MGL. M/s. Mazda Dye Chem and SI group has already started use of cleaner fuel.

3. NMMC has proposed to reuse treated sewage for gardening, construction etc. As per discussion with NMMC authorities today, they are in process of floating tenders to appoint the consultant the aforesaid work.

141

4. Common Effluent Treatment Plant: CETP authorities are exploring the possibility of installing pre tertiary treatment in order to recycle the some of the effluent. This will reduce the pollution load quantitatively and qualitatively.

RO Navi Mumbai, MPCB, has already conducted meetings in this regards and progress is being monitored regularly.

4. MPCB has arranged awareness campaign regarding Environment at Modern College, Vashi and S. I. E. S, Nerul.

5. MPCB has started monitoring program about CEPI with consultation of M/s. VIMTA Lab, Hyderabad, the agency appointed by CPCB for the monitoring work.

## COMPLIANCE REPORT- CEPI ACTION PLAN- TARAPUR

## Short Term Action Points ( upto 1 year, including continuous activities)

S. No.	Action point	Compliance
1.	Expansion of TEPS-CETP from existing 25 MLD to 37 MLD (Expansion -12MLD)	Deffered due to local villagers opposition. Proposed 25 MLD CETP
2.	Arresting leakage of drainage pipe line	AMC is granted by MIDC
3.	Connection Sump III to CETP	Work has already started and near completion
4.	Identification of Solvent Use & solvent recovery plant to improve the efficiency of solvent recovery by solvent using industries	Letters were sent to industries using solvents vide ref no. MPCB/ROT/TB-3325 dated 26/11/10 to improve the efficiency of solvent recovery and to conduct solvent audit before 30/12/10. TMA has requested to extend this date to another 3 months. Work is under progress
5.	Survey of stack monitoring	Monitoring is under progress
6.	Illegal dumping of hazardous waste	Board has informed CHWTSDF to increase the frequency of collecting of HW and its transportation
7.	Massive Tree Plantation (One lacs Trees)	MIDC is carrying out massive tree plantation program on empty/reserved plots, and on boundary of MIDC. Work is under progress

143

**Long Term Action Points (more than 1 year)**

S. No.	Action point	Compliance
1.	Expansion of TEPS CETP from existing 25 MLD to 50 MLD	Master Plan has prepared and Land allotment was done and treatability studies on effluents are going on.
2.	If outlet treated quality is not achieved, advanced technologies such as MBR/RO are to be enforced	After installation of additional CETP, If outlet parameters are not achieved, then, advanced technology such as MBR/RO will be envisaged
3.	Replacement of RCC drainage by HDPE	Replacement of 6.0 km pipe line is under progress
4.	Replacement of RCC drainage by HDPE	Replacement of 9 km pipe line is under progress
5.	Augmentation of sump no. 1 holding capacity and Augmentation of pumping machinery at sump-1 & 2	Work is under progress.
6.	Extension of pipeline inside Navapur sea	NIO has studied pre and post monsoon studied and report is awaited
7.	Reuse and recycle of treated water by the textile industries	Board sent letter to textile industries
8.	Pursuing matter with Mahanagar Gas limited/ GAIL to make available CNG to MIDC Tarapur	TJMA has already started survey for requirement
9.	Proposal of installation of continuous Ambient Air Quality monitoring under CPCB scheme	Proposal has already submitted

**Details of Action taken against industries**

1. Around 137 Show cause notices were given to various industries for violating the norms of outlet parameters prescribed under Water Act for the period 2010 to till today
2. Bank guarantee Rs. 5.0 lacs was submitted by TEPS CETP during consent renewal in 2009 and been extended to 2010 and 2011

No. J-11013/5/2010-IA.II(I)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhavan,  
C.G.O. Complex, Lodhi Road,  
New Delhi-110003.  
Telefax: 24362434

Dated the 15<sup>th</sup> February, 2011

Office Memorandum

Sub: Consideration of projects for environmental clearance based on Comprehensive Environmental Pollution Index (CEPI) - Lifting of Moratorium in respect of industrial clusters / areas of (i) Agra (Uttar Pradesh), (ii) Aurangabad (Maharashtra), (iii) Bhavnagar (Gujarat), (iv) Cuddalore (Tamil Nadu), (v) Dombivalli (Maharashtra), (vi) Ludhiana (Punjab), (vii) Navi Mumbai (Maharashtra) and (viii) Varanasi-Mirzapur (Uttar Pradesh) - Regarding.

Ministry of Environment & Forests vide Office Memorandum of even no. dated 13.1.2010 had imposed a moratorium up to 31.8.2010 on consideration of projects for environmental clearance to be located in critically polluted areas / industrial clusters identified by Central Pollution Control Board. The details of the industrial clusters / areas were further specified in the Office Memorandum dated 15.3.2010. It was envisaged that during the period of moratorium, time bound action plans will be prepared by the respective SPCBs / PCCs for improving the environmental quality in these industrial clusters / areas. The action plans so prepared would be finalized by CPCB. Since, the action plans were not finalized within the prescribed time limit, the moratorium was extended up to 31<sup>st</sup> October, 2010. Based on the finalization of action plans and their initiation of implementation in respect of the five industrial clusters / areas of (i) Tarapur (Maharashtra), (ii) Pattencheru-Bollaram (Andhra Pradesh), (iii) Coimbatore (Tamil Nadu), (iv) Vapi (Gujarat) and (v) Mandi-Govindgarh (Punjab) as confirmed by CPCB, the moratorium was lifted in respect of these five industrial clusters and for the remaining 38 industrial clusters, the moratorium was further extended up to 31<sup>st</sup> March, 2011 vide office memorandum of even no. dated 26.10.2010.

2. Now, the Central Pollution Control Board (CPCB) vide their communication dated 15.2.2011 have informed this Ministry that the relevant revised action plans submitted by the respective SPCBs / UTPCCs have been reviewed and approved by CPCB and that the implementation of action plans has been initiated in respect of the industrial areas of (i) Agra (Uttar Pradesh), (ii) Aurangabad (Maharashtra), (iii) Bhavnagar (Gujarat), (iv) Cuddalore (Tamil Nadu), (v) Dombivalli (Maharashtra), (vi) Ludhiana (Punjab), (vii) Navi Mumbai (Maharashtra) and (viii) Varanasi-Mirzapur (Uttar Pradesh).

3. In view of the recommendation of the CPCB, it has been decided to lift the moratorium on consideration of projects for environmental clearance in respect of projects to be located in the above mentioned eight clusters / areas namely; (i) Agra

145

-2-

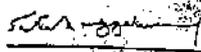
(Uttar Pradesh), (ii) Aurangabad (Maharashtra), (iii) Bhavnagar (Gujarat), (iv) Coimbatore (Tamil Nadu), (v) Dombivalli (Maharashtra), (vi) Ludhiana (Punjab), (vii) Navi Mumbai (Maharashtra) and (viii) Varanasi-Mirzapur (Uttar Pradesh) subject to the following conditions:-

- (i) GPCB and the respective SPCBs will immediately put the approved action plans on their respective websites.
- (ii) SPCBs will monitor the implementation of the action plans as per their schedule and ensure that there is no slippage either in terms of expenditure or the activities to be completed relating to the action plan. The report will be submitted to CPCB.
- (iii) GPCB will also develop a monitoring mechanism and put it in place within 30 days and monitor the implementation of these action plans, area-wise and also carryout random checks on the environmental parameters for their quality. The results will be put on their website.
- (iv) The respective SPCBs / UTPCCs will monitor the pollution levels in these areas on regular basis and if at any stage it is observed that the levels are increasing, it will be immediately brought to the notice of GPCB as well as MoEF and in such a situation the moratorium will be re-imposed.
- (v) Independent third party periodic monitoring on the implementation of action plan will be supported. The results of the monitoring so carried out will be hosted on the website and also communicated to CPCB.
- (vi) Industrial cluster / area wise Committee comprising various stakeholders inter-alia representatives of locals and experts in the relevant field will be setup to oversee the implementation of the action plans.
- (vii) The EACs / SEACs will take extra precaution during appraisal of projects to be located in these areas and prescribe the requisite stringent safeguard measures, so that the environmental quality is not deteriorated further in these areas.

4. The condition at serial no. 3(vi) above will also be applicable to the five industrial clusters in respect of which the moratorium was lifted vide this Ministry's earlier O.M. of even no. dated 26.10.2010.

5. Comments / feedback, if any, on implementation of action plans may be sent to Chairman, GPCB (e-mail: [ccb.cpcb@nic.in](mailto:ccb.cpcb@nic.in)).

This issues with the approval of the Competent Authority.

  
(S.K. Aggarwal)  
Director

To

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAs/SEACs

146

-3-

- 3. Chairman, CPCB
- 4. Chairpersons / Member Secretaries of all SPCBs / UTPCCs

Copy to:-

- 1. PS to MEF
- 2. PPS to Secretary (E&F)
- 3. PPS to ASUMM
- 4. Adviser (R&S)
- 5. Weblog, MoEF
- 6. Guard file

T-C  
D

47

Aggregate CEPI =  $I_m + \{(100 - I_m) \times (I_2/100) \times (I_3/100)\}$   
 Where  $I_m$  - Maximum sub index and  $I_2$  and  $I_3$  are sub indices for other media.

Parameter	CEPI (2009)	CEPI Score (2009)	CEPI (2015)	CEPI Score (2015)	CEPI (2016)	CEPI Score (2016)	Remarks
Water	63.5		59.0				1) There is no buffer zone in between residential & industrial area. 2) MBO was not completed. The work of internal effluent carrying pipeline is not complete. About 50% works completed.
Air	66.0		47.0				3) The work of CNG gas supply to the industries is not completed & expected to complete by March 2017.
Land	57.5		36.0				4) Presently domestic effluent from the area is directly discharged into Nalla which further leads to Creek. Due to above points there is no reduction of score.
Score		78.41		54.44			

"R" "H" "8" 148

**MAHARASHTRA POLLUTION CONTROL BOARD**

Tel: 24010437/24020781/24014701  
Fax: 24023518/24024088/24044631  
Website: <http://mpcb.gov.in>  
E-mail: [info@mpcb.gov.in](mailto:info@mpcb.gov.in)  
No. MPOR/JD/WPC/8:952



Katpalaru Point, 2<sup>nd</sup> - 4<sup>th</sup> Floor  
Opp. Cine Planet Cinema,  
Near Sion Circle, Sion (E)  
Mumbai: 400 022.  
Date: 10/3/2017.

CEO  
D/S  
at me  
15.3.17

To:  
The Chief Executive Officer,  
Maharashtra Industrial Development Corporation  
Jyoti Sarathi, Mahakuli Caves Road,  
Andheri, Mumbai.

Sub: Directions under Section 53 A of Water (Prevention and Control of Pollution) Act, 1974.

- Ref:
1. Circular issued by MPGB dated 21/02/2015.
  2. Discussions held in various meetings of State Level GETP Co-ordination Committees.
  3. Minutes of the Meeting extended to non-performing GETPs on 2/6/2016.
  4. Joint meeting of the Officials of MIDC, MPCB and representative of the GETP operators held on 22/02/2017 in World Trade Centre.

WHEREAS, the Maharashtra Industrial Development Corporation is the Planning Authority for providing infrastructure facilities for the MIDC area and also to ensure that the industries situated in the MIDC area should have been provided with proper water supply, roads, drainage lines including proper collection and sewerage line network treatment and disposal system to the waste water generated from their activities.

AND WHEREAS, the Common Effluent Treatment Plants was introduced with an enthusiasm approach to solve the problem of pollution caused by effluent discharge by small scale industries. These industries lack technical expertise and are not financially viable for implementation and maintenance of pollution control devices. The main object of the CESTP is to solve the problem of cost, lack of trained staff and space to reduce the problems of monitoring and to organize the disposal treated waste and sludge.

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149

AND WHEREAS, the non-conforming CETPs have now become threat to the environment due to various reasons and fail to cater their primary goal. The majority of the CETP managements have failed to control administration of CETPs. They don't have proper vigilance on their member industries. The industries are changing their production activities from time to time without intimating to the CETP Associations leading to receiving excess load at inlet. The major flaws such as maintenance of the hydraulic flow, online measurement, effluent quality, sludge quality, unit design, maintenance and working issues with laboratory facilities were observed in the CETPs. The similar kind of the outputs were also given by member industries appointed by MPCB for assessment of the CETPs in Maharashtra. Hence, the industries Association/CETP associations have failed to perform their duties of extending support to the non viable and small scale industries for overcoming of technological and financial constraints.

AND WHEREAS, the Central Pollution Control Board had issued directions u/s 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974, that not to permit expansion / establishment of the industrial units in the areas where the associated CETPs are not complying with the required standards and where such CETPs do not have adequate hydraulic load capacities. AND WHEREAS, these directions were brought to the notice by the Maharashtra Pollution Control Board vide Circular dated 21/09/2015 to all the concern including MIDC.

AND WHEREAS, 24 CETPs are working in the State of Maharashtra and one recently started at Nandgaon, Amravati. The said CETPs are catering the need of 7880 no. of industries and about 191 MLD of effluent treated and disposed to the environment. The MPCB has taken into consideration the revised standards laid down by Ministry of Environment and Forest, Govt. of India for CETPs and Board is monitoring the standards from time to time and accordingly consents are issued stipulating the stringent effluent disposal standards.

AND WHEREAS, now it was observed that out of 24 CETPs, 17 CETPs are complying to the standards stipulated in the consent. At present 7 CETPs are continuously non-complying to the disposal standards, namely TERS, CETP MIDC Tarapur, D-CETP (Chemical) MIDC Dombivali, Addl. Ambarnath CETP MIDC Ambarnath, RIA CETP MIDC Rahi, PRIA CETP MIDC Patalganga, Loleparshuram CETP MIDC Lote, CETP Akkalkot Road Solapur. In view of the continuous non-

compliance, the MPC Board has initiated actions against the following non-conforming CETPs.

1. Tarapur CETP - The CETP was receiving more effluent i.e. about 37 to 42 MLD against its capacity of 25 MLD, hence CETP was not in position to take extra hydraulic load and disposal is happening in violation to stipulated standards. The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. But no improvement was observed. The Board has issued closure directions to 43 industries in year 2016-17 which are grossly violating disposal standards to the inlet of CETP. In addition to this Board has issued directions to all industries for curtailing 40% of effluent generation. The CETP has undertaken construction for expansion by 50 MLD. Accordingly, Board has granted Consent to Establish for Expansion of CETP on 05.08.2014. The work of expansion of CETP is in progress. At present the CETP is not conforming with the consented disposal standards.
2. D-CETP, Chemical, Dombivli - There are two CETPs in Dombivli MIDC area, the one 16 MLD DBESA CETP (Textile) located in Phase-I pocket is dedicated to treat effluent of textiles units, and the other 1.5 MLD D-CETP (Chemical) located in Phase-II pocket is dedicated to treat effluent of chemical units. But there is no arrangement for segregation of textile and chemical effluent, about 4.5 MLD mixed effluent (Textile + Chemical) from Phase-II is sent to the 16 MLD DBESA CETP in Phase-I, and the remaining 1.5 MLD mixed effluent (Textile + Chemical) is left for treatment in 1.5 MLD D-CETP in Phase-II. The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. Board has also issued letter to MIDC for curtailment of water supply of Member Industries of CETP by 25%. But no improvement was observed in spite of the warnings. Therefore, Board has issued Closure Directions to the D-CETP on 02.07.2016. The said CETP is closed and directions were issued to all D-CETP member Industries for not to discharge effluent to D-CETP.
3. Additional Ambernath CETP - The CETP is owned by MIDC and was operated by M/s Bharat Udyog Ltd till 21.02.2016. Due to mismanagement issue by the operator, the MIDC has handed over the CETP to the Additional

*[Handwritten signature]*  
CETP

Ambern Manufacturing Association (AMMA) for operation & maintenance. The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. However, no improvement was observed in spite of warnings. The Board has also issued letter to MIDC for allotment of water supply of Member Industries of CETP by 25%. Board issued directions on 02.07.2016 to Additional Ambern Manufacturing Association, Additional Ambern CETP directing them to stop receiving effluent from member industries within 72 hours or till AMMA CETP submit concrete time bound proposal for up-gradation, operation and maintenance of existing CETP. Also 66 member industries were issued direction on 02.07.2016 and 13.07.2016 regarding not to discharge treated effluent into CETP / MIDC drainage system.

4. BIA CETP - The concentrated pollution load is receiving at Inlet of CETP. The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. The Board has closed down industries which are grossly violating disposal standards to the Inlet of CETP. The CETP has proposed the upgradation and expansion of existing CETP. Accordingly, Board has granted Consent to Establish for upgradation and Expansion of CETP on 26.03.2015.

5. BRIA CETP - The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. CETP was not in operation due to legal matter now resumed operation. MIDC has taken possession of CETP and posted tender for Operator for CETP.

6. Lote CETP - The Board has issued various directions, imposed bank guarantees, increased vigilance among individual industries and CETP. But no improvement was observed. The Board has closed down industries which are grossly violating disposal standards to the Inlet of CETP. Board has issued direction to CETP for burialment of quantity of effluent by 25% on 13.04.2016. The Board has granted Consent to Establish for upgradation and Expansion of CETP on 01.09.2015.

AND WHEREAS, the said issue was also discussed in the meeting of non performing CETPs on 01/08/2016 & 08/08/2016 before the Authorities of the Board and it was decided to suggest MIDC that if such type of CETPs do not perform and

152

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when there is no Board of Directors to control the CETPs, then why the MIDC cannot take over the working of these CETPs to operate it on their own by collecting contribution from the Member industries.

AND WHEREAS despite of repeated persuasion and meetings with the officials of MIDC, the MIDC has not taken requisite steps to take over the non-comforming CETPs in MIDC area AND WHEREAS, the Board has already given you sufficient & reasonable time to take effective steps to take over the working of non-comforming CETPs in MIDC area.

NOW THEREFORE, in exercise of the powers conferred upon me under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974, you are hereby directed to comply with the following directions:

- 1) You shall take over the non-comforming CETPs namely, TER3-CETP, D-CETP, Chemical, Additional Andamath CETP, RIA-CETP, PRIA CETP and Lote CETP located in MIDC areas, within a period of 3 months i.e. on or before 31/05/2017.
- 2) You shall operate & maintain these CETPs by your own or otherwise through an Expert Agency.
- 3) In case, the MIDC appoint an Expert Agency for operation & maintenance of the above CETPs then, the Member Industries/CETP Association shall not directly pay the cost of operation & maintenance to the Expert Agency. MIDC shall collect the said cost from the Member Industries of the aforesaid CETPs.
- 4) MIDC being the Infrastructure / nodal agency, shall also do the job of operation & maintenance of above non-comforming CETPs within a period of 3 months from the date of receipt of these directions.
- 5) You shall submit the time bound program to take over the non-comforming CETPs in MIDC area within a period of one month from the date of receipt of these directions.

In case of failure, the Maharashtra Pollution Control Board will initiate appropriate legal action against the MIDC which please note.

  
(Satis Gaval, J.S.)  
Chairman

T.C.  


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153

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MINUTES OF MEETING WITH MIDC IN RESPECT OF CETPS IN MAHARASHTRA

The Meeting with respect to various issues at MIDC for CETPs was held on 09.05.2017 in the Conference Room of Maharashtra Pollution Control Board, 3rd Floor, 5th Floor, Mumbai - 400022 at 11:00 AM. Additional Chief Secretary (Environment) and Hon'ble Chairman MPC Board chaired the Meeting. List of MIDC Officials, MPCB Officers and NESRI representative who were present for the meeting is enclosed.

The meeting was held with the objectives to discuss various issues with respect to the CETPs in Maharashtra. Member Secretary of the Board has welcomed the Additional Chief Secretary (Environment) and Hon'ble Chairman MPC Board and Chief Executive Officer, MIDC.

Member Secretary has briefed about the Directions issued to MPCB with respect to the 7 Norms concerning CETPs and also briefed about the new notified standards of the CETPs Dated 01.01.2016 by MoEF & CC.

After due presentations and discussions, the following points are finalized:

Sl. No.	MIDC ISSUES	Decisions
2	The fixation of the TDS parameter for the CETPs having Creek/sea disposal.	As per the NIO recommendations the TDS shall be relaxed upto 4000 ppm. The TDS parameter Have not specified for discharge into sea through proper Marine Discharge in cases where the marine outlet provides a minimum initial dilution of 150 times at the point of discharge and minimum dilution of 1500 times at a point 100m away from discharge point. The outlet standards for the CETP having creek disposal shall remain as per the standards notified for disposal into inland surface water (ex. BOD - 30 mg/l, pH - 6 to 9, COD - 250 mg/l, TSS - 100 mg/l or grease - 10 mg/l).

MPCB has stringent standards for the CETPs having Creek disposal as per the standards notified for disposal into inland surface water as per the MoEF & CC Notification Dated 01.01.2016.



9.	Directors to Non-complying member industries from PMA CETP Palanganga MIDC	MPCB Board has issued directions to the concerned industries on Dated 26/04/2017
10.	Tajiga, Kaha and Tarapur CETPs will be taken over as a first phase of the process by MIDC	Noted
11.	Acad. Ambebrahiresht issue	Board will take decision regarding rest of the CETP and rest of individual industries based on the adequacy proposal submitted to the Board
12.	DBESA & D-CETP merger for operation	DBESA and D-CETP in Dombivli areas have common effluence system for the collection of effluent from heterogeneous types of industries. However, the inlet design parameters of both the CETPs are different, therefore from the analysis it is observed that these both CETPs were not performing with respect to the disposal standards. Due to upgradation and augmentation of DBESA CETP it is observed that the performance of DBESA CETP is improved. Further MIDC has proposed to lay separate conveyance system for both the CETPs i.e. for Chemical and Textile CETPs.

The meeting ended with vote of thanks to Chair.

  
Dr. H. Anbalagan  
Member/Secretary

  
Ganay Saini  
CEO, MIDC

  
Suresh Gopin  
Additional Chief Secretary, Environmental  
and Chemical, MPC Board

Status of Action plan Dombivli Industrial Area

Action Plan (Short Term)

Sr. No.	Action Point	Current Status (as per information submitted by MPCB during the site inspection on 17.03.2016)	Current Status (as per information submitted by MPCB during the site inspection on 17.10.2016)	Present Status
1	Performance evaluation of water pollution control measures in industrial units	Survey of all industries has been carried out during 2016 - 2017. MPCB issued closure directions, proposed directions and show cause notice based on the survey. Voluntary Closure direction has been issued to 2 Industries in 2016	In 2015-16 MPCB has issued 11 closure directions, 133 Proposed Directions & 17 Show Cause Notices. (List enclosed)	MPCB
2	Performance evaluation of CETP	It was informed by MPCB that CETP has carried out upgradation of CETP in the year 2016. Pipeline has been laid for disposal of treated effluent to Khambalpada nallah near Thakurli Village. 80% work of laying closed pipeline upto phase - I completed. Observations: NGT ordered CPCB to carry out regular monitoring of effluent of CETP and industries located in MIDC area. CPCB informed that effluent quality of CETP is not complying with prescribed standards. Online effluent monitoring system is yet to be properly implemented at CETP in Phase - I	Both the CETPs OBESA & DCETP has upgraded their plant and providing online parameters pH, COD, BOD, TAN monitoring system and online flowmeter for Inlet and outlet. SCADA system. The 1.5 Km closed pipeline for treated effluent has been laid down by MIDC from OBESA CETP up to Thakurli railway bridge. The OBESA Phase-I CETP has achieving the parameters within consented standards and level of compliance is 70 to 80% (Results enclosed). The DCETP Phase-II is not achieving the consented standards and level of compliance is . Board has issued SON to CETP on 24.05.2016 regarding implementation of short term & long term action plan. This includes achievement of 30 mg/lit BOD & the period given upto 6 months.	MPCB
3	Taking possession of drainage pipeline carrying effluent to CETP by CETPs	It was informed by MPCB that pipeline is maintain by MIDC and the possession cannot be taken by CETP.	Pipeline is maintain by MIDC and the possession cannot be taken by CETP.	MPCB MIDC
4	Providing tertiary treatment by advanced waste water treatment	It was informed by MPCB that flush mixer, pH meter, flow meter, ToC analyser, data logger have been installed. Observation: As per the monitoring carried out by CPCB, effluent quality of CETPs is not complying with the prescribed standards.	The OBESA Phase-I CETP has achieving the parameters within consented standards and level of compliance is 70 to 80% (Results enclosed). The DCETP Phase-II is not achieving the consented standards and level of compliance level is	CETP/MIDC
5	Status of up gradation of CETP	It was informed by MPCB that CETP in Phase - II is upgraded with additional hyca reactor, bio reactor, sand filter, two blower, on line pH monitor. Observation: During the site inspection following treated effluent quality is observed in the online effluent quality measurement system: BOD: 72.99 mg/l COD: 217.83 mg/l pH: 6.11	The OBESA Phase-I CETP is achieving the parameters within consented standards and level of compliance is 70 to 80%. The DCETP Phase-II is not achieving consented standards and level of compliance	DCETP and OBESA compliance w/rt to achieve 30 BOD standard and metal parameters
6	Repairing leakage of effluent carrying pipeline and its replacement.	It was informed by MPCB that the 30.40 km length of pipeline has been replaced with HDPE pipeline. It was also informed by MPCB that leakages of pipelines are frequently observed. The leakages will be arrested by MIDC as and when detected.	30.40 km length of pipeline has been replaced with HDPE pipeline. The leakages will be arrested by MIDC as and when detected.	MIDC
7	Laying of closed pipeline for disposal of treated effluent from CETPs up to creek	Pipeline has been laid from phase - I CETP to Khambalpada nallah near Thakurli Village. NIO recommended discharge point that is 11 km from the CETP. However MIDC is not laying the Pipeline due to the cost factor.	1.5 Km closed pipeline has laid down by MIDC from OBESA CETP up to Thakurli railway bridge, however NIO recommended discharged point is 11 KM away from CETP.	MIDC
8	VOC monitoring	It was informed by MPCB that VOC monitoring has been carried out in 2011, 2014 & 2015 in MIDC area. The industries that are found to be non-compliant have been issued show cause notices. In respect to the show cause notice industries upgraded their pollution control systems. MPCB has been requested to provide the data on number of non-compliant industries based on VOC monitoring, number of Show cause notices issued, number of industries that have upgraded their pollution control systems.	4 Nos. of non-compliance industries list enclosed.	MPCB

157

9	Discharge of effluent passed into Badhara due to any accident or leakage or chamber overflow into CETP by providing handpump on the hillside near CETP.	It was informed by MPCB that total length of effluent carrying pipeline has been replaced with HDPE pipe hence there is no need to construct Badhara at nallah.	Total length of effluent carrying pipeline has been replaced with HDPE pipe hence there is no need to construct Badhara at nallah.	MIOC
10	Provision of continuous power supply to CETPs.	It was informed that the DG sets have been installed.	DG sets have been installed.	MIOC
11	Provision of continuous power supply to pumping stations.	It was informed that the DG sets have been installed.	DG sets have been installed.	MIOC
12	Provision of continuous power supply to STPs & pumping stations.	It was informed that the DG sets have been installed. However there is no STP for the treatment of domestic waste water from the colony located in MIOC area.	DPR has been prepared by MIOC which is under consideration.	KDMC
13	Performance evaluation of air pollution control measures in the industrial units.	It was informed by MPCB that textile and chemical industries have installed dust collectors, scrubbers. MPCB has been requested to provide the list of industries those installed dust collectors, scrubbers.	List enclosed.	MPCB
14	Employing units carried out reactions in open vessel & ensuring closed operations with adequate safeguards.	It was informed by MPCB that no any industry is carrying out reactions in open vessel.	There is no unit involved who are carrying out reaction in open vessel.	MPCB
15	Inventorizing of Hazardous Air Pollutants emitting units and installation of Leak Detection and Repair (LDR) in case of pesticides and bulk drug manufacturing units.	It was informed by MPCB that LDR survey has been carried out by one pesticide and bulk drug unit.	M/s. Gharda Chemicals Ltd., has installed LDR system & M/s. Arch Pharma lab has been placed order for the same.	MPCB
16	Provision of new AQM station.	Two (02) AQM stations were installed in the MIOC area. Observations: It was observed that the instruments were covered under shed due to which the actual air quality data may not be obtained.	To avoid the interruption of rain water the machine is placed upon the terrace with 10 to 12 feet height upper side in sheet cover.	MPCB

158

17	Installation of CAAQMS Station	One number of CAAQMS (of M/s. Environment SA India Pvt Ltd., Make) has been installed.	CAAQMS installed in MIDC area & is in operation.	MPCB
18	Online display of AQMD data	The air quality levels are continuously displayed to public by one display Board.	The air quality levels are continuously displayed to public by one display Board.	MPCB
19	Repairing of internal roads & proper maintenance of the same.	It was informed by MPCB that cement roads are constructed and maintained regularly by MIDC.	Concrete road-11.01 Km & Asphalt Road-23.67 Km. Total 34.68 Km road constructed by MIDC.	MIDC
20	Inventory of solvent using industry & solvent recovery units.	There are 4 solvent recovery units, out of which 2 are captive, 1 is closed and 1 is carrying out solvent recovery on job work basis.	There are 4 solvent recovery units, out of which 2 are captive, 1 is closed and 1 is carrying out solvent recovery on job work basis.	MPCB
21	Ground water monitoring	It was informed that ground water quality is monitored at 3 locations.	Results enclosed.	MPCB
22	Health impact studies.	No data has been collected by MPCB regarding health impacts. During the meeting MPCB was asked to collect the last 3 year. Data of air borne and water borne diseases reported in major hospitals in Dombivli-area.	Letter issued to Medical Health Officer, KDMC on 11.05.2016. Reply awaited.	KDMC
23	Proper storage and regular disposal of hazardous waste and solid-waste.	It was informed by MPCB that all industries have taken membership of CHWTSDF.	All the Hazardous waste generating industries have taken membership of CHWTSDF and disposing the waste regularly.	MPCB
24	Awareness program & monitoring program	It was informed by MPCB that regular awareness programs are conducted by them.	Board is conducting regular awareness and monitoring programs.	ALL

## Action Plan (Long Term)

Sr. No.	Action Point	Current Status (as per information submitted by MPCB during the site inspection on 17.03.2016)	Compliance	
1	Amalgamation of CETP chemical and CETP textile and upgradation of CETP textile.	It was informed by MPCB that amalgamation of CETPs is not under consideration. However 2.5 MLD effluent from chemical industries is mixed with textile industries effluent and treated in CETP textile.	Amalgamation of CETPs is not under consideration. However 2.5 MLD effluent from chemical industries is mixed with textile industries effluent and treated in CETP textile. Additionally DBESA, CETP, PH-4 has upgraded their plant by providing new flash mixer, online monitoring system, new decanter & SCADA system.	MPCB/MIDC/CETP
2	Recycling of treated effluent	It was informed by MPCB that: 1. Recycling of 20% effluent is being carried out by some industries. 2. Three units achieved zero liquid discharge (ZLD) out of 595 industries.	1. Recycling of 20% effluent is being carried out by some industries. 2. Three units achieved zero liquid discharge (ZLD) out of 595 industries.	MPCB/MIDC/CETP
3	Providing underground drainage network for the collection sewage from remote area / Gram Panchayat area.	It was informed by MPCB that no progress is made by either MIDC or Gram Panchayat.	Recently 27 villages are include in KDMC area. DPR is prepared by KDMC & submitted to Urban Development.	MIDC
4	Providing STP for domestic effluent from the residential colony developed by MIDC. Treated water can be used for gardening.	STP being constructed for catering the wastewater of residential colony of MIDC is yet to be commissioned.	DPR has been prepared by MIDC which is under consideration.	MIDC/KDMC
5	Providing STP for KDMC area.	Out of 6 STPs 5 STPs commissioned and one is yet to be commissioned.	Out of 8 STPs 5 STPs commissioned and one is yet to be commissioned.	KDMC
6	Introduction of cleaner fuel like CNG / LPG.	Installation of Gas pipeline is in progress.	Installation of Gas pipeline is in progress.	MGL

159

7	Vehicles in this area shall use clean-fuel such as CNG / LPG.	Nearly 8392 vehicles converted to LPG. It is a continuous process. MPCB is requested to provide the total number of vehicles registered in Dombivli area.	Letter issued to Dy. RTO, Kalyan on 11.05.2016. Reply awaited.	RTD
8	Illegal & unscientific dumping of municipal solid waste by Gram Panchayat in industrial as well as residential area.	It was observed that municipal solid waste is being dumped at Agharwadi dump (adjacent to Ulhas Creek).	Municipal solid waste is being illegally and unscientifically dumped at Agharwadi site (adjacent to Ulhas Creek).	KDMC
9	Scientific treatment & disposal of MSW.	KDMC is dumping municipal solid waste at Agharwadi site illegally and unscientifically. Case has been filed by MPCB in Kalyan Court. KDMC has taken authorization from MPCB for a new site @ Umbarde, Barve & Manda Kalyan. MPCB forfeited BG of 5 Lakhs for not starting the work. KDMC submitted a new BG for Rs. 10 Lakhs.	KDMC is dumping municipal solid waste at Agharwadi site illegally and unscientifically. Case has been filed by MPCB in Kalyan Court. KDMC has taken authorization from MPCB for a new site @ Umbarde, Barve & Manda Kalyan. MPCB forfeited BG of 5 Lakhs for not starting the work. KDMC submitted a new BG for Rs. 10 Lakhs.	KDMC

Illegal and unscientific disposal of MSW in MIDC plot: Buring of MSW/solid waste in MIDC area

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**Minutes of the Meeting CPCB, MPCB and CETP authorities dtd 28/03/2016**  
**with respect to status of CETPs**

The Vanshakti Public Trust had filed the application regarding Pollution of Ulhas river in Mumbai Metropolitan Kalyan Region before Hon'ble NGT, Pune.

After number of hearings and submission of MPCB, MIDC and other authorities the Hon'ble NGT has passed the order on July 2<sup>nd</sup> of 2015. For the compliance of the said order CPCB was directed to verify the compliance of CETP and conduct the Random inspections of major industries for ensuring the compliances.

In continuation to this Hon. NGT has further passed the orders on March 16<sup>th</sup> of 2016 that CETPs are not functioning as required so CPCB and MPCB shall conduct a joint inspection of CETPs and hold a meeting on fact findings collected during the inspection in a meeting with CETP operators to identify the effective implementation in its functioning and also to ensure CETP compliance upto the standards Prescribed.

In view of above, the joint site inspection was caused along with the CPCB authorities Shri. Nazimuddin, Scientist E, CPCB, Shri. Prasun Gargava, Scientist D, Zonal Office, CPCB and Regional Officer, MPCB Kalyan to the non complied CETP i.e DBESA, DCETP and Addi. Ambarnath CETP on 28/03/16. Followed by the visit, the meeting is held under the Chairmanship of Member Secretary, MPCB, Sion at Mumbai along with CETP operators at 6:00 PM.

**Following points were discussed:--**

1. Principal Scientific Officer Dr Amar Supate briefed about Hon'ble NGT Orders and directions given to CETPs time to time.
2. Dr. Y. B. Sontakke also extended his thoughts/views on present status of CETP and directions issued after the state level committee meetings. The CETP has to operate professionally and action shall be initiated by CETP Association against defaulting members.

: 2:

- 161
3. DCETP and DBESA expressed their difficulties regarding operation and maintenance and requested to provide separate effluent carrying pipeline by MIDC as early as possible so as to collect separate effluent generated from textile and chemical units in Dombiwali MIDC to meet the consented discharge standards. The Additional Ambarnath CETP operator AAMA representative stated that they require 8-9 months to stabilize operations which was denied by authorities.
  4. Member Secretary, MPCB has shown regret on performance of CETPs and given following instructions:
    - a. ROs/SROs of this region to identify MS/LSI units and check the performance of ETP for atleast one year by comparing all JVS results and accordingly put up violations as per enforcement policy of Board for further stringent action.
    - b. CETPs are directed to follow the guidelines given by CPCB and Hon. High Court to form a committee and inspect the units time to time and defaulting industries names shall be communicated to MPCB for further initiations of actions and further they may also go for cancellation of CETP Membership.
    - c. The CETPs shall submit undertaking for making their CETP compliant to the consented standards. The deadline was decided as 31<sup>st</sup> March, 2016 for DBESA and D CETP whereas 30<sup>th</sup> April, 2016 for Additional Ambarnath CETP.
    - d. The Board has already issued directions on 20/02/2016 for installation of SCADA (Supervisory Control and Data Acquisition Automation control system) within 3 months.
  5. The performance of DBESA has slightly improved but no progress has been observed in case of DCETP and Additional Ambarnath CETP.
  6. CPCB authorities talked their suggestions and recommendation for improvement of performance of these 3 CETPs.

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After due deliberations and discussions the following short term and long term measures are prepared to be considered to ensure earliest compliance by non-performing CETP.

**A. DEBESA - Dombivli (Textile) CETP**

**a) Short Term Actions**

- (i) Proper segregation of effluent of textile units and chemical units in textile zone and chemical zones so that only textile effluent comes to Dombivli (Textile) CETP and entire chemical effluent is treated in Dombivli (Chemical) CETP
- (ii) CETP Management to identify major polluting industries which require special vigil based on their size (Large/Medium) and effluent strength and develop a mechanism of self vigilance and reporting names of defaulters to MPCB
- (iii) CETP Management to consult experts to conduct jar test studies to arrive at optimum chemicals dosing, primary sludge quantity and primary treatment efficiency and demonstrate similar performance in the primary treatment system of the CETP, and to guide the CETP Management about primary sludge wasting and dewatering pattern.
- (iv) CETP Management to consult experts to guide them about secondary sludge wasting on the basis of Solids Retention Time, and guide the CETP Management about secondary sludge wasting and dewatering pattern.
- (v) CETP Management to get their primary sludge and secondary sludge dewatering capacity verified by the experts that these are sufficient or meet the requirement and install sludge drying facility.
- (vi) CETP Management to operate the CETP under guidance of expert to demonstrate its best performance and seek guidance for achieving the compliance of present norms of 100 mg/l in a short time frame, failing which the member units will be liable for closure.
- (vii) The CETP shall obtain immediate technical guidance from the professional service provider to their CETP so as to achieve the consented standards.
- (viii) The short term measures shall be completed in 3 months.

: 4 :

**b) Long Term Actions**

- (i) CETP Management to upgrade the treatment scheme to meet the revised BOD standards of 30 mg/l.
- (ii) Expansion of the existing CETP as per the DPR prepared shall meet 30 mg/l. BOD.
- (iii) Long term measures shall be completed as per the Directions given by Hon'ble NGT and Hon'ble High Court.

**B) D CETP - Dombivli (Chemical) CETP****a) Short Term Actions**

- (i) Proper segregation of effluent of textile units and chemical units in textile zone and chemical zones so that entire chemical effluent is treated in Dombivli (Chemical) CETP
- (ii) CETP Management to identify major polluting industries which require special vigil based on their size (Large/Medium) and develop a mechanism of self vigilance and reporting names of defaulters to MPCB
- (iii) CETP Management to consult experts to conduct jar test studies to arrive at optimum chemicals dosing, primary sludge quantity and primary treatment efficiency and demonstrate similar performance in the primary treatment system of the CETP and guide the CETP Management about primary sludge wasting and dewatering pattern.
- (iv) CETP Management to consult experts to guide them about secondary sludge wasting on the basis of Solids Retention Time, and guide the CETP Management about secondary sludge wasting and dewatering.
- (v) CETP Management to get their primary sludge and secondary sludge dewatering capacity verified by the experts that these are sufficient or meet the requirement.
- (vi) CETP Management to operate the CETP under guidance of expert to demonstrate its best performance and seek guidance for achieving the compliance of present norms of 100 mg/l in a short time frame, failing which the member units will be liable for closure.

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(vii) The CETP shall obtain immediate technical guidance from the professional service provider to their CETP so as to achieve the consented standards.

(viii) The short term measures shall be completed in 3 months.

**b) Long Term Actions**

- I. CETP Management to upgrade the treatment scheme to meet the revised BOD standards of 30 mg/l.
- II. Long term measures shall be completed as per the Directions given by Hon'ble NGT and Hon'ble High Court.

**C) Additional Ambemath CETP**

**a) Short Term Actions**

- (i) CETP Management to identify major polluting industries which require special vigil based on their size (Large/Medium) and effluent strength and develop a mechanism of self vigilance and reporting names of defaulters to MPCB
- (ii) CETP Management to consult experts to conduct jar test studies to arrive at optimum chemicals dosing, primary sludge quantity and primary treatment efficiency and demonstrate similar performance in the primary treatment system of the CETP and guide the CETP Management about primary sludge wasting and dewatering pattern.
- (iii) CETP Management to consult experts to guide them about secondary sludge wasting on the basis of Solids Retention Time, and guide the CETP Management about secondary sludge wasting and dewatering from both stages of aerobic treatment.
- (iv) CETP Management to incorporate equalization unit in the treatment scheme to ensure uniform influent to subsequent treatment units
- (v) CETP Management to upgrade and make functional their primary sludge and secondary sludge dewatering capacity under guidance of experts to meet the requirement.

165

: C. P. C. B. Z. O. BARODA:

FAX NO. : 026522392603

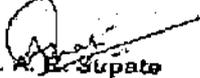
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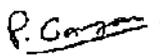
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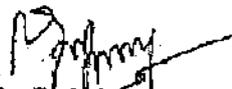
- (vi) CETP Management to operate the CETP under guidance of expert to demonstrate its best performance and seek guidance for achieving the compliance of present norms of 100 mg/l in a short time frame, failing which the member units will be liable for closure.
- (vii) The CETP shall obtain immediate technical guidance from the professional service provider to their CETP so as to achieve the consented standards.
- (viii) The short term measures shall be completed in 3 months.
- b) Long Term Actions
- (i) CETP Management to meet the revised BOD standards of 30 mg/l.
- (ii) Long term measures shall be completed as per the Directions given by Hon'ble NGT and Hon'ble High Court.

The meeting ended with vote of thanks to Chair.

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

  
Dr. A. E. Sripate  
Principal Scientific Officer

  
Pradipon Gargava  
Sc. D, CPCB

  
Dr. P. Abbasgari  
Member Secretary

  
Nageshmalini  
Sc. D, CPCB

Maharashtra Pollution Control Board

PSO DIVISION

Sub: Performance review meeting of CETP's in the matter  
Execution Appl<sup>n</sup> No-15/2016 (WZ) CPCB in Appl<sup>n</sup> No-37/013

Date: /03/2016

Time-

Venue: Conference hall, MPCB, Slon

Sr. No	Name of the Participant	Designation	Contact Details	Sign.
1	Dr. P. Anbalagan			
2	Dr. A.R. Suresh			
3	Dr. Y.B. Santakhe			
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5	PRASOON GARGAVA	Sc - D	9429896483	P. Gargava
6				
7	C. S. Nikhar	AAMA Representative	9921579066	Nikhar
8	S. A. Tondapurkar	AAMA Representative	9423983500	S. A. Tondapurkar
9	S. P. Gupta	ACMA CGTP	9769421092	S. P. Gupta
10	Vilas Desai	Chm. ACMA CETP, Amb	9822055393	V. Desai
11	Hareesh Jagan	Baalgao CETP	9930957509	Hareesh Jagan
12	AJAY SABOO	BADLAPUR CETP	9987320003	A. J. Saboo
13	Lat M.R.	SRO Icd		
14	Nitin R Shinde	SRO K-II	9545000067	
15	Dr. J.B. Sangewar	Ro Kalyan	9869440149	J. B. Sangewar
16	M. H. H.	Planner DCEP	9699621549	M. H. H.



NIO  
Report

#416

## 8 SUMMARY OF PRESENT STUDY

MIDC (Dombivli) is an agglomerate of more than 600 small and medium scale industries developed in two phases - phase-I and phase-II. There are two CETPs serving the two phases - with 1.5 and 18 MLD treatment capacities respectively. At present effluent leaving the CETPs is released to Ulhas Estuary through open Nallas.

Based on detailed environmental studies during 1994, CSIR-NIO had suggested the discharge of treated effluent near Thakurni (Station 7 in Figure 1.2.1). However, due to several technical and other difficulties, MIDC could not lay the pipeline to the recommended location. MIDC has now again contracted CSIR-NIO to conduct detailed studies in the Ulhas Estuary to examine the location suggested earlier and if found unsuitable, recommend another site to discharge treated effluent in a manner to minimize the adverse impact on the ecology of Ulhas Estuary.

CSIR-NIO conducted detail field investigations in the Ulhas Estuary during May 2014 (Premonsoon season). A total 14 locations were sampled, including nearshore coastal area and fresh water region. Analysis of several parameters has been completed while the remaining are still under process.

Numerical modelling to simulate the hydrodynamics of the estuary and its subsequent coupling with the water quality model is under progress. The emerging results will be used to select the final effluent disposal site in the estuary so as to minimise the impact on the ecology of Ulhas Estuary.

The present report is prepared based on the available results of May 2014 field studies, the existing historical data pertaining to the period (1991-2013) with CSIR-NIO, and inputs provided by MIDC and MPCB.

From the information gathered through MIDC and MPCB, it is evident that the Ulhas Estuary receives > 350 MLD largely untreated domestic sewage

169

and around 46.5 MLD of industrial effluents in the middle and upper segments of the Ulhas Estuary. Analysis of the effluent treated in CETPs indicates that though the heavy metals are within the MRCB Consent, BOD and COD substantially exceeded the set norms.

At the outset it must be clarified that in view of the estuary receiving effluents from multiple sources - all in the upper estuarine zone, it is not possible to identify impacts on estuarine ecology due to the effluent from the MIDC (Dombivli) alone and that the prevailing estuarine environment is the result of the cumulative influence of all anthropogenic contaminants reaching the estuary.

The prevailing water quality indicates that the BOD released to the estuary exceeds its natural assimilation capacity. Inefficient oxidation of organic matter leads to high tide-dependant BOD in the upper estuarine zone though its levels are near to expected baseline in the estuary mouth due to its consumption as it is transported seawards and due to dilution by voluminous tidal ingress during flood tide. The high organic loading leads to hypoxic condition particularly around low tide in the middle and the upper estuarine segments.

High effluent loading - mainly sewage, has resulted in build up of nutrients like phosphate, nitrate, nitrite and ammonia that in combination with frequent low DO have modified the ecology of the Ulhas estuary with eutrophic conditions in the middle and upper zones.

Accumulation of toxic heavy metals such as Cr, Cu, Zn, Pb, Cd and Hg as well as organic carbon, P and PHC, though has occurred particularly in the upper segment, it is not alarming.

As expected, the population of human pathogens is high in water and sediments. The relative concentration of chlorophyll a and phaeophytin suggests an environment conducive to the proliferation of phytoplankton. Zooplankton and macrobenthic biomass varied widely but there is distinct

170

1412

decrease in their diversity in the middle and upper estuarine zones suggesting environment not conducive to sensitive species.

Based on the monitoring of May 2014 and earlier results, it is concluded that the upper and middle zones of the Uhas Estuary have been degraded due to release of domestic and industrial effluent from different sources and conditions are not conducive for diverse aquatic fauna.

It is therefore vital that the domestic as well as industrial effluents must be treated to required norms and released at suitable locations in the estuary.

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X<sup>2</sup> X' X<sup>4</sup>

**JOINT INSPECTION REPORT**

OF THE COMMITTEE CONSTITUTED AS PER ORDER OF HON'BLE NGT IN  
THE MATTER EXECUTION APPLICATION NO. 08/2019 (WZ) IN ORIGINAL  
APPLICATION NO. 37 OF 2013

Jointly Prepared by:



**CENTRAL POLLUTION CONTROL BOARD**



**INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY**



**MAHARASHTRA POLLUTION CONTROL BOARD**

For submission to  
**HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE  
BENCH, PUNE**

OCTOBER 2019

172

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## INDEX

S.No.	TITLE	Page No.
1.	BACKGROUND	2
2.	SAMPLING AND MONITORING METHODOLOGY	3
3.	MIDC DOMBIVILI	4
4.	DOMBIVILI BETTER ENVIRONMENT SYSTEM ASSOCIATION (DBESA) , DOMBIVILI, DIST THANE	5
5.	DOMBIVILI CETP (CHEMICAL) (PHASE-II), DOMBIVILI, DIST THANE	10
6.	ADDITIONAL AMBERNATH MIDC AND CETP, AMBERNATH, DIST THANE	15
7.	STATUS OF RECIPIENT ENVIRONMENT	17
8.	CONCLUSION	20
Annexure I	CCA of DBESA CETP	23
Annexure II	Results of previous monitoring of DBESA CETP	32
Annexure III	CCA of DCETP	34
Annexure IV	Results of previous monitoring of Dombivili CETP	40
Annexure V	Soil Analysis Report	41
Annexure VI	AAQ Monitoring report	44

174

- Rajiv Jalan
- Sachin Harkhani
- Rajesh Doshi

**Representative from DCETP**

- Murlilyer
- Uday K Walavalkar
- Kammal Kapoor
- Deven Soni
- C. L. Kadam
- Dr. Nikhil Dhoot

**Representative from Additional Ambernath CETP**

- Sandeep A. Tondapurkar
- C.S. Nikar
- Ajit Khandeshe

The joint committee has carried out inspection & monitoring in the respective premises of CETPs, visited the MIDC area and collected soil and surface water sample from the recipient environment. Brief about MIDC area, functional efficacy of CETPs, observations based on analysis results etc. are discussed in subsequent paragraphs of the report.

**2.0 SAMPLING AND MONITORING METHODOLOGY**

The joint committee has visited the CETPs and collected/ requested for documents like Copy of consent, TSDF membership certificate, list of member industry, process flow diagram, flow records, sludge disposal records, steps taken by respective CETPs after judgment dated 02.07.2015 in the original matter 37 of 2013 etc. The committee has also requested MIDC officials to provide details regarding water supply, action taken by MIDC etc.

The functional efficacies of the CETPs are assessed based on the stage wise composite monitoring of individual CETPs. In addition grab samples of wastewater from inlet and final outlet of each CETP was collected. The samples collected from inlet and outlet were analyzed for physicochemical parameters and heavy metals.

The committee has also visited the locations shown by representative of Vanshakti and collected soil samples and water samples. Grab samples of water were also collected from the upstream and downstream (of discharge from CETPs of Dombivili) in Khambadpala Nallah.

The samples were collected and sealed in presence of committee. The water samples were analyzed at CPCB RD Vadodara Laboratory. The soil sample was analyzed at IIT Bombay. The AAQ sampling and analysis for 24 hours for all 12 notified parameters was planned to be carried out by NABL Approved laboratory by MPCB. However, the AAQ monitoring was not carried out on 16.09.2019 due to sporadic rain in the area. It was decided that MPCB may carryout AAQ monitoring and submit analysis results to the committee once the weather condition become normal. Locations for AAQ were identified by the committee.

173

**1.0 BACKGROUND**

Hon'ble National Green Tribunal, principal bench, New Delhi (through video conferencing) has passed an order dated 08.08.2019 on the matter Execution Application no 08/2019 (WZ) in Original Application no. 37 of 2013, wherein Hon'ble NGT has directed to constitute a committee headed by CPCB and the nodal agency shall be MPCB comprising of following

- i. A senior representative of the CPCB
- ii. A senior scientist/ professor of the IIT Bombay (Chemical Division)
- iii. A senior scientist/ Engineer of the MPCB

Hon'ble NGT has directed following "...The committee shall jointly inspect (i) DBESA CETP (ii) DCETP and (iii) Additional Ambernath MIDC CETP and submit a status report on the functional efficiency of the CETPs and the status of the recipient environment in terms of soil, water and air..."

Accordingly, MPCB has constituted a committee vide office order no. MPCB/MS/B-3119 dated 22.08.2019 comprising of following members

- Amit Thakkar, Scientist D, CPCB (Chairman of the committee)
- Prof. K.V. Venkatesh, Department of Chemical Engineering, IIT Bombay (Member of the committee)
- S. L. Waghmare, RO Kalyan, MPCB (Member of the committee)
- S.R.Bhosale, SRO Kalyan, MPCB (Member Conveyor of the committee)

The committee meeting was arranged by MPCB on 04.08.2019 at MPCB head office wherein Dr. Amar Supate, MPCB and Mr. Stalin D, from Vanshakti (Applicant) were also present. Based on the discussion and inputs received joint visit of the above mentioned three CETPs was planned to be carried out on 16.09.2019. Accordingly the committee has carried out inspection cum monitoring along with following officials from different stake holders.

**Team from CPCB RD, Vadodara**

- Saket Kumar, Scientist B
- SamarthNinama, JSA
- DharmeshRana, SLA

**Representative from Maharashtra Industrial Development Corporation**

- Deepak Patil, Dy. Engineer, Dombivili MIDC
- D.M. Bijali, Dy. Engineer, MIDC Additional Ambernath
- Suresh S. Shukla, Asst. Engineer, Dombivili MIDC

**Representative from Vanshakti**

- Stalin D
- Pawan Patil

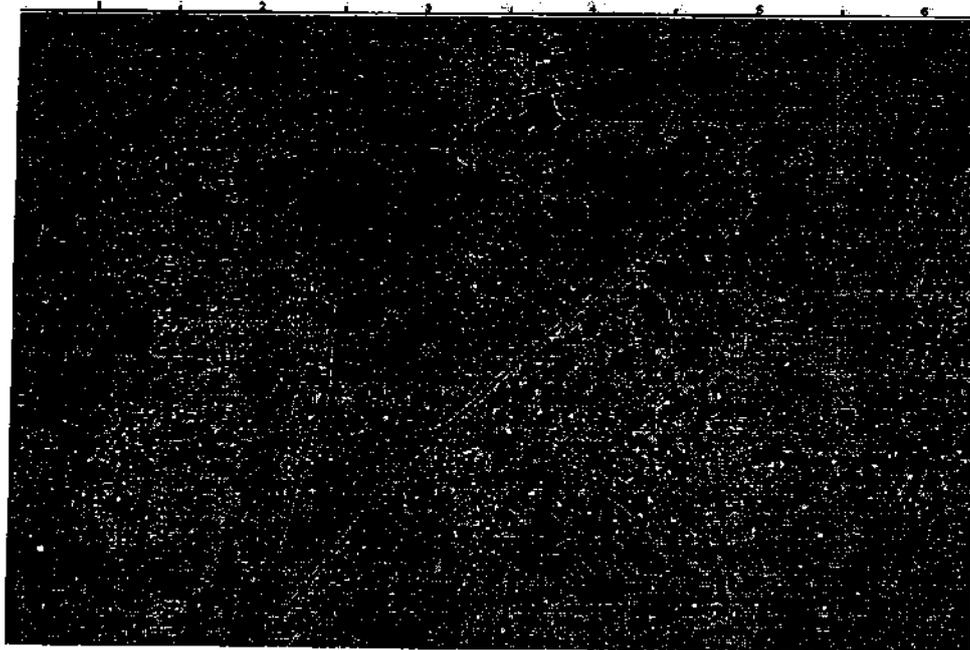
**Representative from DBESA CETP**

- Deshbandhu Kagzi
- Ashok Maheshwari
- Manoj Jalan

175

### 3.0 MIDC DOMBIVILI

MIDC Dombivili was established during 1964. MIDC is developed into two phases MIDC Phase-I and Phase-II having approx. area of 148 Ha and 97 Ha respectively. Both the phases have mixed category of industries namely textile, chemical and engineering. However, phase I has majority of textile industries and phase II has mostly chemical industries. Residential area has been developed between these two phases, having area about 103 Ha and population approx. 2 lakh. MIDC has provided basic infrastructure like water supply network, drainage network for collection and transfer of wastewater from industries to common effluent treatment plants, discharge pipeline for the disposal of treated wastewater etc. Total length of internal pipeline inside the MIDC area is about 30 KM and having about 1290 Chambers. There are two CETPs in the area viz. Phase I DBESA CETP having capacity 16 MLD and Phase II DCETP having capacity 1.5 MLD. Map of MIDC is shown below



#### **Wastewater collection and Disposal system:**

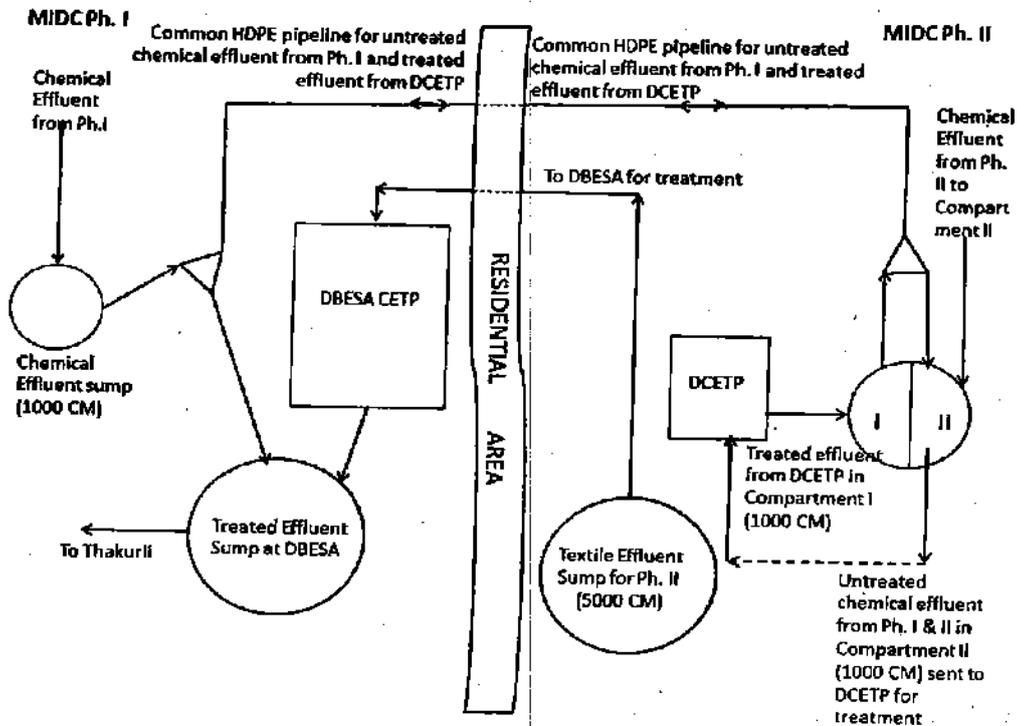
MIDC has provided drainage network to collect and transfer wastewater generated from industries (Chemical and Textile) located at Phase I MIDC to Sump inside the premises of DBESA CETP and treated at DBESA CETP. Wastewater from the industries (Chemical and Textile) located at Phase II MIDC is collected through drainage system and collected in a sump provided by MIDC near DCETP. Part of wastewater is treated at DCETP and remaining transferred to DBESA CETP for treatment.

MIDC has initiated steps for segregation of wastewater from chemical and textile sector of industries in both the phases. MIDC has now provided separate collection sump of about 1000 m<sup>3</sup> capacity for the wastewater of major chemical industries viz. Gharada, Monarch (Now Evonic), Auchtel etc. located in Phase I near DBESA CETP. Wastewater from this sump will be pumped to DCETP plant in Phase II through HOPE pipeline for treatment. Existing collection system (Phase I) in the premises of DBESA CETP will be now used for collection of wastewater of textile industries at DBESA inlet sump.

The existing collection sump located at Plot R-4/2, Phase II of capacity 5000 m<sup>3</sup> will be used for collection of wastewater of Textile industries located at phase II. Wastewater from this sump will be pumped to DBESA CETP in Phase I through existing pipeline network for treatment. A sump having two compartments (1000 m<sup>3</sup> capacity of each compartment) is provided in the premises of DCETP for

176

collection of wastewater from member chemical industries located at Phase II in compartment-I and treated wastewater from DCETP into compartment-II.



A common pipeline operating both-ways is provided for transfer of wastewater generated from chemical industries located in phase I to DCETP collection sump (Compartment-II) and transfer of treated wastewater from DCETP (compartment-I) to DBESA CETP located in phase I for final disposal. Synchronisation of timing for using same pipeline for transferring treated and untreated wastewater is yet to be finalised by MIDC.

The treated wastewater from DBESA CETP and DCETP disposed near Thakurli Railway bridge in KhamadpadaNallah through a 400 mm dia pipeline about 1.5 km from DBESA CETP. However, as per CCA issued to CETPs located in Dombivili the treated wastewater shall be disposed at the point suggested by NIO. MIDC has proposed to extend the existing disposal point by 7.50 Km. into the Ulhas creek as suggested by NIO. As informed, the Work Order for "Providing and laying HDPE marine out fall pipe line from Thakurli Railway bridge to outfall point (Diffuser) in Ulhas estuary (III Call)" is issued vide A-63834 to M/s Coastal Marine Construction and Engineering Ltd. on 15/02/2019. The stipulated time period is up to 14/02/2022.

#### 4.0 DOMBIVILI BETTER ENVIRONMENT SYSTEM ASSOCIATION (DBESA), DOMBIVILI, DIST THANE

##### About the CETP

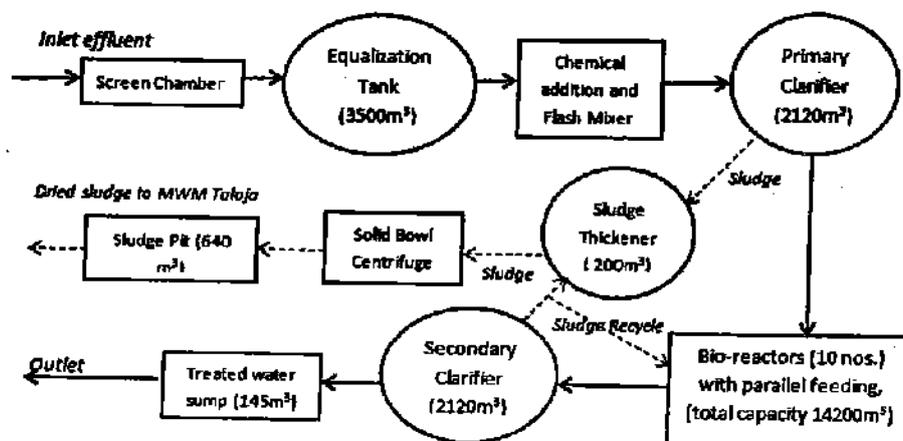
M/s Dombivili Better Environment System Association (DBESA) is located at Plot No. OS-08, Opp Telephone Exchange, MIDC Phase – I, Dombivili (E), Dist. Thane. The CETP has obtained CCA from MPCB which is valid up to 31.12.2020 (Annexure I). Installed capacity of CETP is 16 MLD. The CETP has about 140 member industries. DBESA CETP receives wastewater from 86 wastewater generating industries (out of total about 140 member industries) the remaining members units are now closed or not generating wastewater.

177

Presently, DBESA CETP receives mixed wastewater of about 10 MLD from Textile & 1.2 MLD from Chemical industries located in Phase I MIDC and about 4.5 MLD from Textile & 0.6 MLD from Chemical industries respectively located in Phase II MIDC. However, now MIDC has installed separate collection sump for textile and chemical industries for separate treatment. After commissioning the DBESA CETP will receive wastewater mostly from textile industries only.

#### Wastewater Treatment Methodology

The CETP received wastewater through MIDC drainage and pumping system from the member industries of Phase I and Phase II. The CETP has provided wastewater treatment system as depicted below:



Capacity of main treatment unit provided for wastewater treatment is tabulated below:

S.NO.	NAME OF TREATMENT UNIT	CAPACITY (m <sup>3</sup> )
1.	Equalization Tank	3500
2.	Primary Clarifier	2120
3.	Bioreactors (10 modules) total capacity	14200
4.	Secondary Clarifier	2120
5.	Treated wastewater sump	145
6.	Sludge Thickener	200

The chemicals and their average quantity used by the CETP are:

S.No.	Name of chemical used	Avg. quantity
1.	Polyelectrolyte	89.06 Kg/day
2.	Poly Aluminium Chloride (PAC)	32.57 MT/day
3.	Defoamer	1.65 Kg/day
4.	Limepowder	242.47 Kg/day
5.	Tri-Sodium Phosphate (TSP)	90.26 Kg/day

The treated wastewater from the CETP is discharged into Khamadpada Nallah near Railway bridge, Thakurli through an underground pipeline (about 1.5 km) provided by MIDC. This nallah meets saline zone of Ullhas river at distance of about 500m further downstream. However, the discharge point of the pipeline has not been provided as per NIO recommendation.

178

**Sludge management**

Sludge thickener and solid bowl centrifuge is provided for drying of sludge generated from primary clarifier and part of sludge generated from secondary clarifier (part of sludge is recycle back to the aeration tank to maintain MLSS). The CETP has obtained membership from CHWTSDF (M/s Mumbai Waste Management Ltd., Taloja) for disposal of sludge.

**Assessment of treatment efficacy of CETP**

The overall treatment process for the wastewater in DBESA CETP can be divided into two parts viz. primary treatment and secondary treatment. In order to assess the functional efficacy of treatment processes of CETP, the joint committee has collected wastewater samples from following

- Grab samples from inlet and final outlet of CETP,
- Stage wise composite sample (8 hours composite) from inlet, after primary treatment and final outlet (after secondary treatment)
- A grab sample from the bioreactor to assess the MLSS and MLVSS in the secondary treatment process.

**Submission by DBESA CETP regarding steps taken to improve wastewater treatment**

DBESA CETP informed about several modifications undertaken in the wastewater treatment process at the CETP in addition to the removal of accumulated sludge in the treatment system, chemical dosing system, flow measurement at final outlet, improvement in housekeeping. Some major modifications are as follows:

- Modification in Bio-reactors' feed line to allow uniform wastewater flow in each reactors and system for uniform distribution of recycle secondary sludge.
- Modification in aerator design in Bio-reactors to improve aeration and sludge circulation.
- Installing additional sludge thickener and decanter for dewatering of primary and secondary sludge.
- Use of additional bacterial cultures dosing to improve performance during shock loading and maintain desired level of MLSS in the secondary treatment.

**Observations & findings**

- The CETP was found operational during visit on 16.09.2019 with CCA valid up to 31.12.2020.
- As per the records submitted, the CETP received approx. 15.53 MLD wastewater during July'18 to July'19 against the installed capacity of 16 MLD. The electricity consumption of the CETP has been between 360157 units/month and 410795 units/month from Jul'18 to Jul'19. Variation of about  $\pm 7\%$  from the average electricity consumption was observed.
- As per the records of sludge disposal submitted, the amount of sludge disposed to CHWTSDF from July'18 to July'19 is 12592.15 MT i.e. approx. 32.3 MT/day. The CETP has authorization to dispose 50 MT/day sludge from MPCB.
- The CETP has provided online continuous effluent monitoring system for the parameters TOC, BOD, COD, TSS and pH at inlet and final outlet of CETP. The CETP has provided flow meter at the final outlet. The OCEMS readings of inlet and outlet during composite sampling:

Inlet to DBESA CETP						Outlet to DBESA CETP					
Time	BOD (mg/l)	COD (mg/l)	pH	TOC (mg/l)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Flow (m <sup>3</sup> /hr)	pH	TOC (mg/l)	TSS (mg/l)
13:00	357.3	833.7	7.1	595.5	278	14.76	65.88	--	7.1	52.7	32
14:00	398.1	928.9	7.1	663.5	278	26.07	116.4	546	7.1	93.09	28
15:00	368.22	859.18	7.1	613.7	278	14.07	62.83	539	7.1	50.26	33
16:00	337.08	786.52	7.1	561.8	290	14.31	63.88	541	7	51.1	29
17:00	317.94	741.86	7.1	529.9	284	24.79	110.7	538	7	88.52	34
18:00	318.18	742.42	7.1	530.3	285	20.99	93.73	516	7	74.98	28

179

Inlet to DBESA CETP						Outlet to DBESA CETP					
Time	BOD (mg/l)	COD (mg/l)	pH	TOC (mg/l)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Flow (m <sup>3</sup> /hr)	pH	TOC (mg/l)	TSS (mg/l)
19:00	284.34	663.46	7.1	473.9	279	15.43	68.86	523	7.1	55.09	33
20:00	294.48	687.12	7.1	490.8	279	16.72	74.65	519	7.1	59.72	31
AVG	334	780	7	557	281	18	82	532	7	66	31

The OCEMS values vary with the analyzed value of the sample collected during visit. During monitoring period average flow of 532 m<sup>3</sup>/hr was recorded. Hence, the CETP was operated at 12.768 MLD against the installed capacity of 16 MLD during visit.

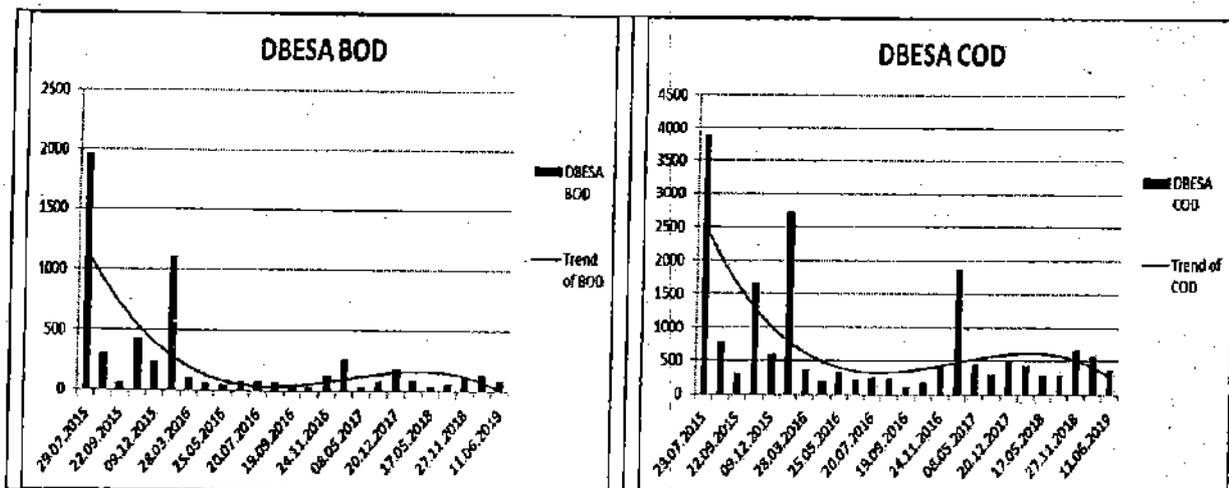
- The treated wastewater from CETP is discharged into the Ulhas creek (saline zone of Ulhas River) near Railway Bridge, Thakurli through pipeline provided by MIDC. However, as per CCA the treated wastewater should be disposed at the point suggested by NIO.
- The sample analysis results are depicted in table below.

Parameters	MPCB Inlet norms	Inlet of CETP, Grab	Inlet to CETP, Composite	Outlet of Primary Settling Tank, Composite	Outlet of CETP, Grab	Outlet of CETP, Composite	MPCB Discharge norms
pH	6.0-9.0	6.9	7.14	6.85	6.84	7.04	6.0-9.0
TSS	--	1040	332	88	52	130	100
TDS	--	2100	2828	2992	2436	2770	--
FDS	--	1435	1764	--	2174	2152	2100
COD	1600	1774	729	551	93	162	250
BOD	800	674	358	288	16	27	30
NH <sub>3</sub> -N	50	48.57	42.26	56.25	80.54	81.22	50
Phenols	5	1.95	1.35	1.57	0.3	0.35	1
Cl <sup>-</sup>	--	84	352	--	1018	988	1000
SO <sub>4</sub> <sup>-2</sup>	--	565	426	--	496	596	1000
NO <sub>3</sub> -N	--	5.75	4.75	--	0.62	0.43	10
PO <sub>4</sub> -P	--	0.26	0.21	--	BDL	BDL	5
Cr <sup>+6</sup>	2	BDL	BDL	--	BDL	BDL	0.1
S <sup>-2</sup>	--	22.42	3.04	--	0.28	0.84	2
F	15	7.6	3.13	--	1.27	1.19	2
CN	2	0.014	0.014	--	0.101	0.025	0.2
O&G	20	--	--	--	--	--	10
Cd	1.0	BDL	BDL	--	BDL	BDL	0.05
Cu	3.0	1.8	0.5	--	BDL	0.08	3
Pb	1.0	BDL	0.03	--	BDL	BDL	0.1
Mn	--	1.63	0.46	--	0.66	0.92	2
Ni	3.0	0.41	BDL	--	BDL	BDL	3
Fe	--	53.8	18.72	--	5.1	11.52	3
Zn	15.0	9.28	1.19	--	0.16	1.2	5

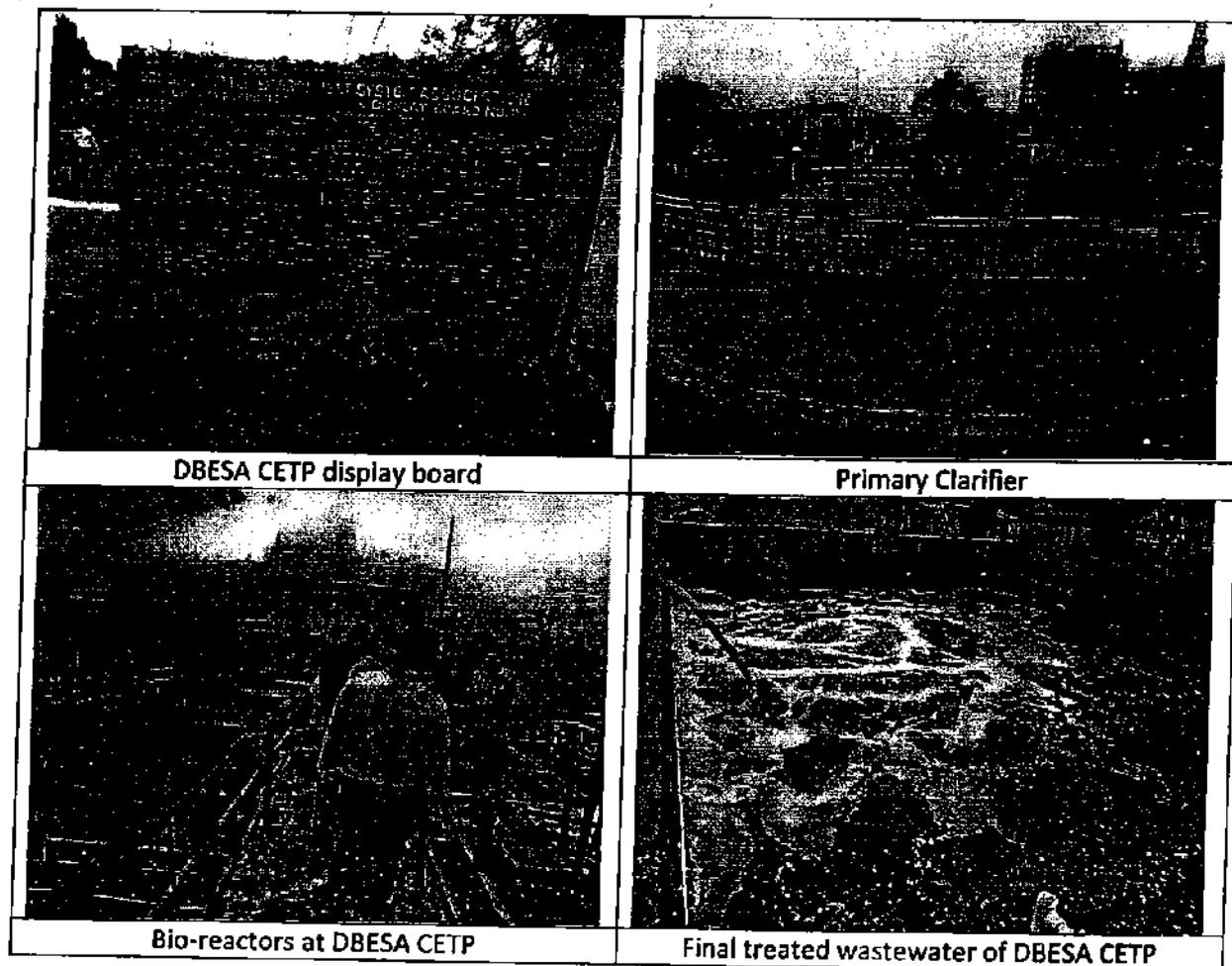
Note: All the values are reported in mg/l except pH

180

- A grab sample from the mixed outlet of 10 Bio-reactors were taken to check the MLSS and MLVSS. The concentration of MLSS and MLVSS was found 5575 mg/l and 2455 mg/l respectively. The ratio of MLVSS/MLSS was found to be 0.44 which shows the fraction of biomass in the activated sludge process. The optimum ratio of MLVSS/MLSS in activated sludge process should be 0.7-0.8. Less ratio shows more inorganic content in the system.
- Stage wise comparison of treatment efficacy is done by measuring percentage reduction in concentrations of indicative parameters BOD, COD and TSS. In the primary treatment, carbonaceous compound reduction is around 19%, 24% and 73.49% for BOD, COD and TSS respectively. This is due to the removal of primary sludge after addition of chemicals like poly electrolyte, poly aluminium chloride and lime. The overall reduction in concentration of BOD, COD and TSS was found to be 92.46%, 77.78% and 60.84% respectively.
- It is observed that concentration of ammonia increases from inlet to final outlet. This may be due to hydrolysis of protein and conversion to ammonia.
- The analysis result of composite sample collected from the collection tank reveals that the CETP is receiving wastewater having analyzed parameters within the MPCB prescribed standards. However in the grab sample the concentration of COD exceeds MPCB inlet prescribed standards. This indicates that the CETP receives varying concentration of COD from member industries at different times.
- The analysis results of the composite sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, FDS Ammonical Nitrogen and Fe. The analysis results of the grab sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for FDS, Ammonical Nitrogen and Fe.
- Based on the judgment of Hon'ble NGT in the matter Original Application no. 37 of 2013, dated 02.07.2015, CPCB has carried out monitoring of 05 CETPs in the area and submitted report to the registrar, NGT (WZ) from time to time. The compiled analysis result for various parameters of the CETP has been attached in Annexure II. The trend analysis of the DBESA CETP for the past year of monitoring is shown below:



Based on the trend, the DBESA CETP has shown remarkable improvement in the performance over the years. The present monitoring results shows that the CETP meets discharge standard for COD and BOD. However, exceeds for concentration of FDS, Ammonical Nitrogen and Fe.



### 5.0 DOMBIVLI CETP (CHEMICAL) (PHASE-II), DOMBIVILI, DIST THANE

#### About the CETP

M/s Dombivili Common Effluent Treatment Plant (DCETP) is located at Plot No. R-4/2 MIDC Phase II, Opp. W-4D, Dombivili (E), Dist. Thane. DCETP has obtained CCA from MPCB valid up to 31/12/2020 (Annexure III). It has installed capacity of 1.5 MLD. The CETP was issued closure by MPCB on 02.07.2016 due to non-compliance of consent conditions. On the basis of Hon'ble NGT order dated 24.05.2017 in the matter MA Application no. 347/2016, MPCB has issued conditional restart order on 25.07.2017 and directed this CETP to operate with 25% of the inlet design hydraulic capacity i.e. 0.375 MLD.

As informed, the CETP has 118 member units (31 member industries in MIDC, Phase I and 87 member industries in MIDC, Phase II).

#### Wastewater management and discharge

Wastewater from the member industries located in MIDC phase II is collected in a sump located at Phase II. The CETP pumps 25% of hydraulic load and remaining is sent to DBESA CETP.

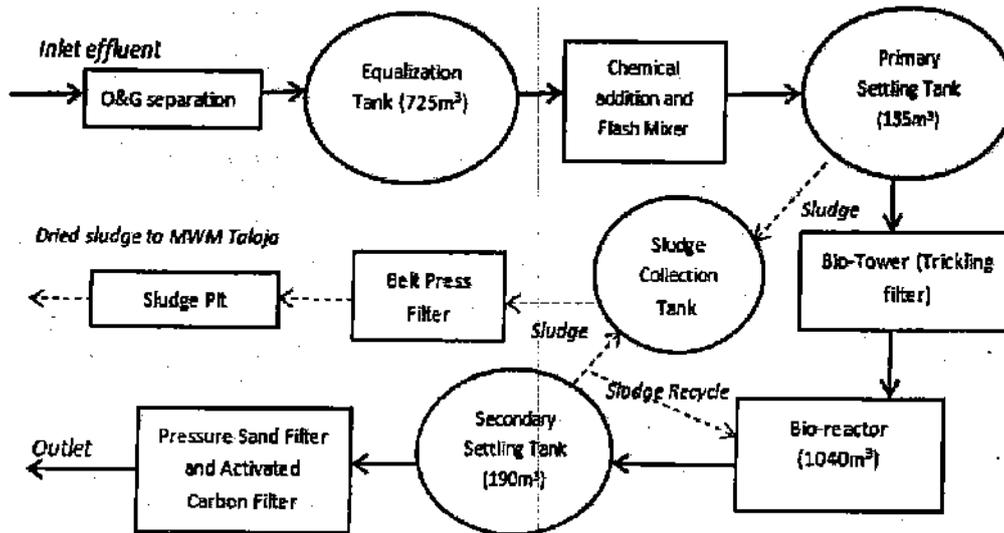
The DCETP has provided treatment technology comprising of primary, secondary and tertiary treatment. Capacity of main treatment unit provided for wastewater treatment is tabulated below

S.No.	Name Of Treatment Unit	Capacity
1.	Equalization Tank	725m <sup>3</sup>
2.	Primary Clarifier	135m <sup>3</sup>

182

3.	Bioreactor	1040 m <sup>3</sup>
4.	Secondary Clarifier	190m <sup>3</sup>
5.	Press Belt Filter	5 m <sup>3</sup> /hr

The wastewater treatment methodology provided at CETP is depicted below:



The chemicals and their average quantity used by the CETP are:

S.No.	Name of chemical used	Avg. quantity
1.	Poly Aluminum Chloride	869.93 lit/day
2.	Tri sodium phosphate	40 kg/day
3.	Alum	133.33 kg/day
4.	Poly anionic	2 kg/day

#### Sludge Management and disposal

The sludge from the primary settling tank and the secondary settling tank is dewatered by belt press filter and part of sludge generated from secondary clarifier is recycled back to the aeration tank to maintain MLSS. The sludge is sent to CHWTSDf site at M/s MWM, Taloja for disposal.

#### Submission by DCETP regarding steps taken to improve wastewater treatment

DCETP informed about several modifications undertaken in the wastewater treatment process at the CETP after closure direction dated 02.07.2016 by MPCB. Major modifications observed are as follows:

- Accumulated sludge from all the equipment was removed and sent for disposal.
- Diffuser membranes of bioreactors were replaced.
- Flowmeter was installed at the inlet.
- New activated carbon filter was installed.

Apart from the above mentioned modifications, the CETP also undertook maintenance for its equipment such as pumps and compressors.

#### Assessment of treatment efficacy of CETP

The treatment process in DCETP can be divided into three parts:

- Primary Treatment: The process from O&G chamber to Primary settling tank
- Secondary Treatment: The process from Bio-tower to Secondary settling tank

183

- Tertiary treatment: The process after secondary treatment, comprising of Pressure Sand filter and Activated Carbon filter.

In order to assess the adequacy of treatment processes of DCETP, the methodologies adopted are:

- a. Analysis of grab samples of inlet and final outlet of the CETP
- b. Analysis of composite samples of :
  - Primary Settling Tank outlet for assessing primary treatment
  - Secondary settling tank outlet for assessing secondary treatment
  - Final outlet for assessing tertiary and overall treatment process
- c. Analysis of MLSS and MLVSS of grab sample from bioreactor

#### Observations & findings

- The CETP was operational during visit on 16.09.2019 with CCA valid till 31.12.2020.
- As per record submitted of water consumption by member industries in Aug'19, the average daily water consumption by DCETP member industries in Phase I is 0.976 MLD and Phase II is 0.865 MLD. The CETP has been operated at approx. 0.287 MLD on an average from Aug'18 to Aug'19 i.e. 19% of its installed capacity. As informed, the remaining untreated wastewater from its member industries is sent to DBESA CETP for treatment.
- The electricity consumption of the CETP was found in the range of 50913 units/month to 67302 units/month for the period of July 2018 to July 2019. Variation of about -9% to +20% from the average electricity consumption was observed. This may be due to varying operation time of aeration system in bioreactor due varying hydraulic load.
- As per the CCA, DCETP is authorized to dispose 1.07 MT/day sludge to CHWTSDF. DCETP has submitted records for the disposal of sludge to CHWTSDF from July'18 to July'19. As per record, DCETP has disposed 224.8 MT sludge i.e. approx. 0.6244 MT/day during July'18 to July'19, which is around 58% of the authorized sludge quantity while running at less than 25% of its wastewater treatment capacity.
- Treated wastewater from DCETP is sent for final disposal to a sump at DBESA CETP from where it is pumped to the same disposal point of DBESA CETP at Khamadpada Nailah, Thakurli. However, as per CCA the wastewater should be discharged at the point suggested by NIO.
- The CETP has provided online continuous effluent monitoring system for the parameters COD, BOD, TSS, Temperature, NH<sub>3</sub>-N and pH at final outlet of CETP. The CETP has provided flow meter at the inlet and final outlet. The OCEMS readings of final outlet during composite sampling:

TIME (hrs.)	FLOW (m <sup>3</sup> /hr)	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TEMP (°C)	NH <sub>3</sub> -N (mg/l)	pH
11:05	13.86	127.82	29.04	23.69	27.4	32.42	5.88
12:05	15.65	101.22	28.32	16.18	27.55	32.38	5.91
13:05	15.85	110.62	28.71	18.65	27.5	32.28	5.92
14:05	15.78	97.22	28.53	19.83	27.7	31.94	5.9
15:05	15.44	95.59	27.68	15.58	27.8	31.78	5.89
16:05	15.5	113.73	27.98	22.42	27.6	31.67	5.8
17:05	15.71	122.03	28.67	22.83	27.94	31.33	5.87
18:05	15.8	97.1	27.53	16.43	27.86	30.82	5.84
AVG.	15.44	108.17	28.31	19.45	27.67	31.83	5.88

184

- The sample analysis results are depicted in table below.

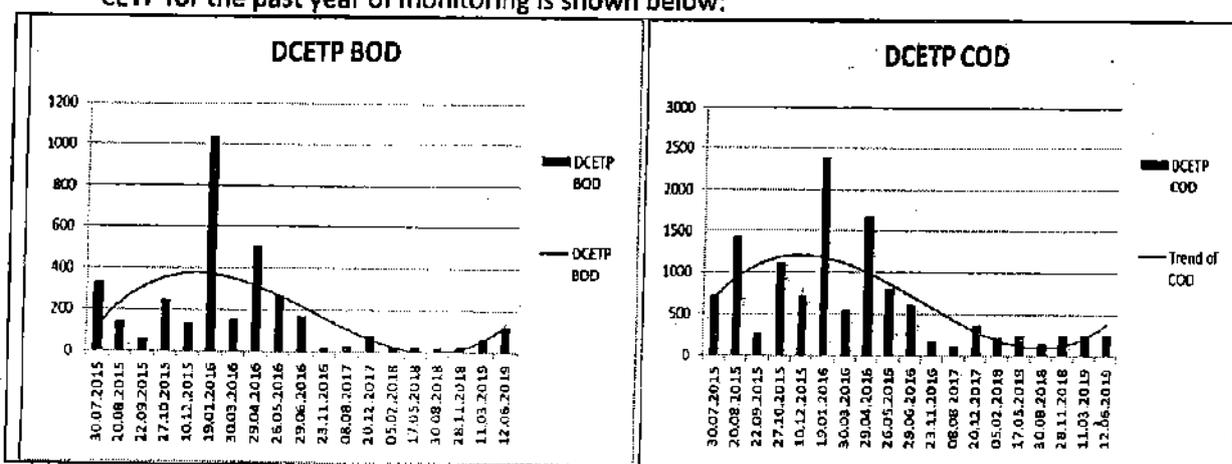
Parameters	MPCB Inlet norms	Inlet to DCETP, Grab	Inlet to DCETP, Composite	Outlet of Primary Clarifier, Composite	Outlet of Secondary Clarifier, Composite	Final outlet DCETP, Grab	Final outlet DCETP, Composite	MPCB Discharge norms
pH	6.0-9.0	5.99	6.68	5.68	6.39	6.88	7.14	6.0-9.0
TSS	--	148	196	112	160	164	126	100
TDS	--	2088	2380	2688	2597	2530	2448	--
FDS	--	1326	1624	--	--	2114	1970	2100
COD	3500	686	455	360	146	153	117	250
BOD	1500	345	158	137	24	26	16	30
NH <sub>3</sub> -N	50	25.24	11.8	20.85	3.02	0.96	1.1	50
Phenols	5	5.42	1.9	0.87	0.81	0.49	1.87	1
Cl <sup>-</sup>	--	361	411	--	--	626	607	1000
SO <sub>4</sub> <sup>-2</sup>	--	278	524	--	--	712	637	1000
NO <sub>3</sub> -N	--	4.89	2.3	--	--	15.69	15.08	10
PO <sub>4</sub> -P	--	BDL	0.54	--	--	4.71	4.46	5
Cr <sup>+6</sup>	2	BDL	BDL	--	--	BDL	BDL	0.1
S <sup>-2</sup>	--	2.48	2.44	--	--	0.6	0.52	2
F	15	3.54	3.06	--	--	1.65	1.45	2
CN <sup>-</sup>	2	0.018	0.029	--	--	0.215	0.079	0.2
O&G	20	--	--	--	--	1.96	--	10
Cd	1.0	BDL	BDL	--	--	BDL	BDL	0.05
Cu	3.0	0.05	0.07	--	--	0.08	0.06	3
Pb	1.0	0.3	0.16	--	--	BDL	0.04	0.1
Mn	--	1.21	1.4	--	--	0.45	0.5	2
Ni	3.0	0.46	BDL	--	--	BDL	BDL	3
Fe	--	39.6	30.0	--	--	4.21	4.15	3
Zn	15.0	2.54	1.95	--	--	0.27	0.28	5

Note: All the values are reported in mg/l except pH

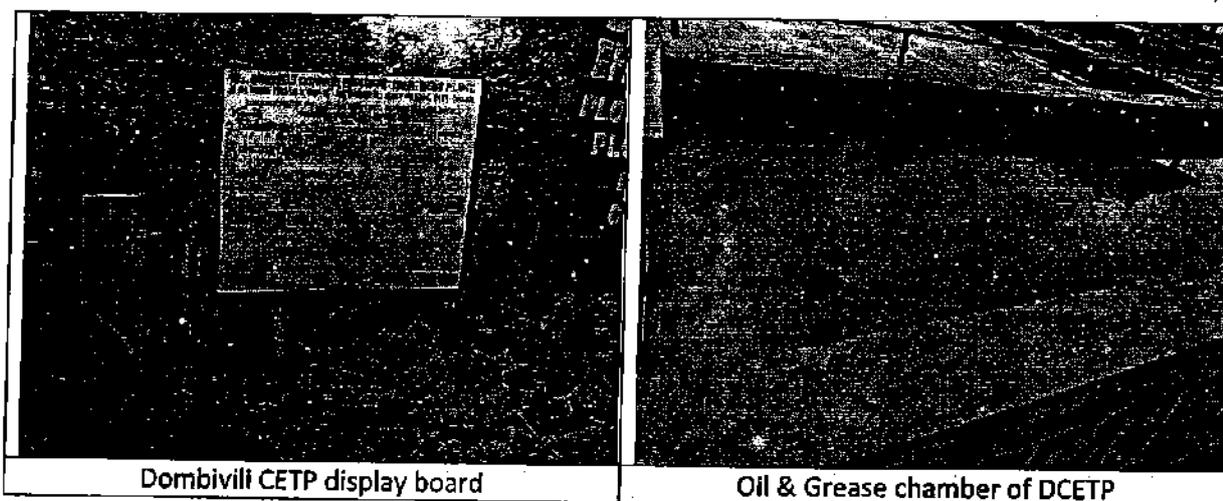
- A grab sample from the Bio-reactor was taken to check the MLSS and MLVSS. The concentration of MLSS and MLVSS was found 1825 mg/l and 770 mg/l respectively. The ratio of MLVSS/MLSS was found to be 0.42 which shows the fraction of biomass in the activated sludge process. The optimum ratio of MLVSS/MLSS in activated sludge process should be 0.7-0.8. Less ratio shows more inorganic content in the system.
- Stage wise comparison of treatment efficacy is done by measuring percentage reduction in concentrations of indicative parameters BOD, COD and TSS. In the primary treatment, carbonaceous compound reduction is around 13.29%, 20.88% and 42.86% for BOD, COD and TSS respectively. This is due to the removal of primary sludge after addition of chemicals like poly electrolyte, poly aluminum chloride and lime. In the secondary treatment, carbonaceous compound reduction is around 82.48% and 59.44% for BOD and COD. The overall reduction in concentration of BOD, COD and TSS was found to be 89.87%, 74.29% and 35.71% respectively.

185

- The analysis result of composite sample collected from the collection tank reveals that the CETP is receiving wastewater having analyzed parameters within the MPCB prescribed standards. However in the grab sample the concentration of phenols exceeds MPCB inlet prescribed standards.
- The analysis results of the composite sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, phenols, nitrate and Fe. The analysis results of the grab sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, FDS, Nitrate and Fe.
- Based on the judgment of Hon'ble NGT in the matter Original Application no. 37 of 2013 dated 02.07.2015, CPCB has carried out monitoring of 05 CETPs in the area and submitted report to the registrar, NGT (WZ) from time to time. The compiled analysis result for various parameters of the CETP has been attached in Annexure IV. The trend analysis of the DCETP CETP for the past year of monitoring is shown below:



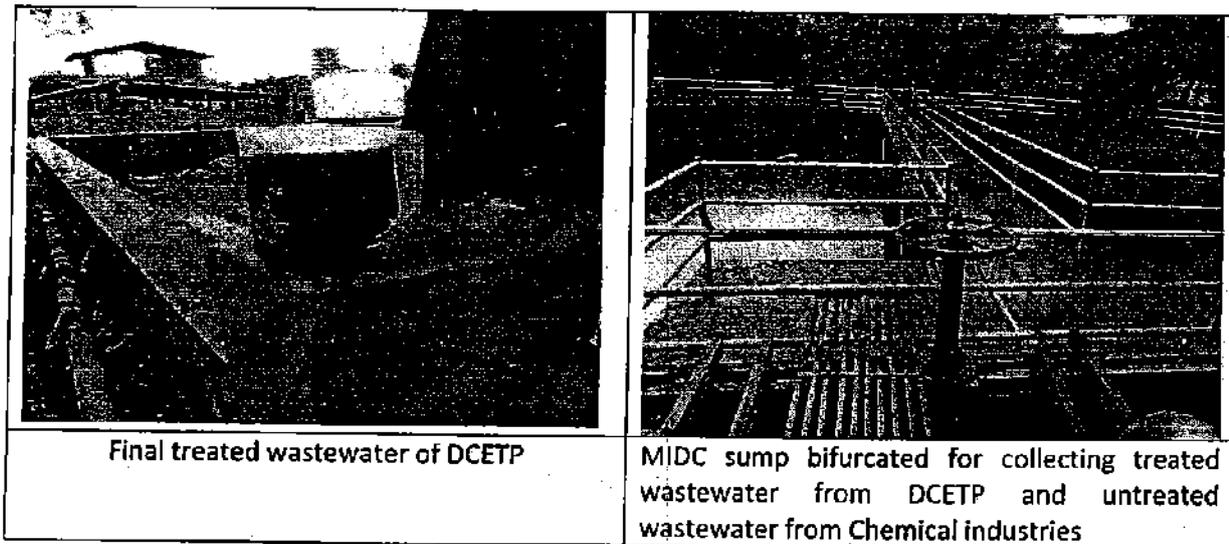
Based on the trend, the DCETP has shown remarkable improvement in the performance over the years. The present monitoring results shows that the CETP meets discharge standard for COD and BOD. However, exceeds for concentration of FDS, TSS, phenols, nitrate and Fe



Dombivili CETP display board

Oil & Grease chamber of DCETP

186



## 6.0 ADDITIONAL AMBERNATH MIDC AND CETP, AMBERNATH, DIST THANE

### About MIDC

MIDC has developed 231.5 Ha of industrial area in Ambernath. Additional Ambernath industrial area is located south of existing Ambernath industrial area and is spread over approximately 479.16Ha in two stages i.e. Phase I and Phase II. There is one CETP in Additional Ambernath MIDC namely AAMA CETP (7.5 MLD).

As per records submitted, in Additional Ambernath MIDC there are about 830 nos. of small and big size industrial units and out of these about 85nos. are effluent generating industries. MIDC has provided HDPE pipe line network, underground collection system, of about 11.85 Kmlong with two sumps & pump houses located at Plot No. AM-16 & AM-11 for effluent channeling to AAMA CETP. MIDC gave contract of up-gradation, operation, and maintenance of AAMA CETP and collection system on BOT basis for period of 30 years on "as is where basis is" to M/s. Bharat Udyog Pvt. Ltd. in Jun-2010. However, due poor performance of the CETP, MIDC issued contract termination notice and took over possession of CETP and allied structures on 22/02/2016 from M/s. Bharat Udyog Pvt. Ltd. and handed over the same to Additional Ambernath Manufacturer's Association (AAMA) for operation and maintenance of the CETP and allied. Subsequently, MPCB gave show cause notice dated 25.05.2016 for closure, followed by closure directions dated 02.07.2016 under section 33(A) of the Water (P&CP) Act, 1974 & under section 31 A of the Air (P&CP) Act, 1981 to the CETP for noncompliance of various conditions. Since then, the CETP and collection network is not in operation.

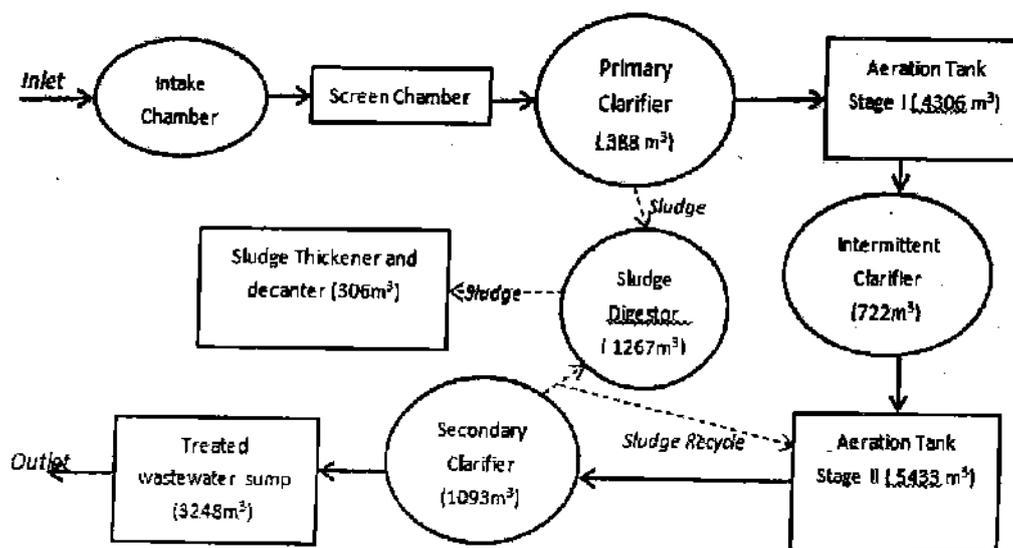
Meanwhile, MPCB issued directions to MIDC vide letters dated 06/03/2017 & 20/03/2017 to operate non-performing 07 CETPs situated in various industrial areas, including AAMA CETP, at its own or by appointing an expert agency. In response to it, MIDC invited tenders for the work of "Design Build and Commissioning including Rehabilitation, Upgrade /Expansion of ACMA CETP (0.25 MLD) CMET (0.8 to 1.35 MLD) and AAMA CETP (7.5 MLD) on DB basis with Operation & Maintenance in Ambernath and Additional Ambernath Industrial Areas". However, the work order has been recently awarded to M/s. Krystal-Aquachem (JV) vide letter no D- 07993 of 2019 dated 18/09/2019 for "Design, Build and Commissioning including Rehabilitation, Upgrade/Expansion of AAMA CETP (7.5 MLD) on DB basis with Operation & Maintenance in Additional Ambernath Industrial Area". Accordingly, possession of CETP has been handed over back to MIDC by AAMA on 25.09.2019.

### About AAMA CETP

M/s Ambarnath MIDC CETP company Pvt. Ltd. (M/s Bharat Udyog Ltd.) was established in 1995-96 and is located at Plot No. AM-13, opp. fire station, MIDC additional Ambarnath, Tal. Ambarnath, Dist. Thane. CETP had obtained consent to operate from MPCB which was valid up to 31.12.2014. Thereafter MPCB has issued renewal of CCA dated 21.05.2018 which is valid upto 31.12.2019. However, the CETP is non-operational since last 4 years due to closure directions dated 02.07.2016 from MPCB.

### Wastewater treatment methodology

The installed capacity of CETP is 7.5 MLD. The wastewater treatment process provided by the CETP is depicted below:



Reported capacity of main treatment unit provided for wastewater treatment is tabulated below

S.NO.	NAME OF TREATMENT UNIT	CAPACITY (M <sup>3</sup> )
1.	Primary Clarifier	388
2.	Aeration Tank stage I	4306
3.	intermittent Clarifier	722
4.	Aeration Tank stage II	5433
5.	Secondary Clarifier	1093
6.	Treated wastewater Disposal Sump	3248
7.	Sludge Digester	1267
8.	Sludge Thickener	306

### Sludge Management

Sludge Digester followed by sludge thickener and decanter is provided for sludge generated from primary clarifier as well as partly generated from secondary clarifier. Part of sludge generated from secondary clarifier is recycled back to the aeration tank to maintain MLSS. The CETP has obtained membership (No. AMB-2978) from CHWTSDF (M/s Mumbai Waste Management Ltd.) for disposal of sludge.

### Wastewater discharge

When CETP was operational, the treated wastewater used to be disposed at Nallahnear forest nakathrough underground pipeline provided by MIDC. However as per the consent condition the treated effluent shall be connected to the sewerage system provided by MIDC and finally discharged

188

into marine coastal areas, at a point suggested by National Institute of Oceanography. As informed, MIDC has taken up the work of extending the present disposal point deep into Ulhas creek, at a point suggested by National Institute of Oceanography (NIO) 17.50 Km. away from the existing disposal point at Forest Naka. The work order has been issued for the work "Providing, Joining and laying 710 mm dia (OD) HDPE pipeline for disposal of treated effluent from Ambernath, Addl Ambernath & Badlapur Indl Area from OS-3 Ambernath Indl area upto Ulhas Creek" vide letter No. A-76847 to M/s MEPL-GYAN (JV) on 27/02/2019. The stipulated time period is of 36 calendar months up to 26/02/2022.

#### **Major steps taken to rejuvenate the CETP**

During visit, the committee was informed about the major steps taken till now and future planned activities. After visit it was submitted that, as per the directions of the MPCB the Additional Ambernath Manufacturing Association handed over the AAMA CETP to the MIDC on 25/09/2019.

The existing CETP was revamped by complete cleaning and removing accumulated sludge from all the clarifiers, aeration tanks etc. The sludge was removed, sun dried by providing temporary HDPE lined lagoons and disposed at CHWTSDF by MIDC and Industrial association. However closure directions of the CETP were not revoked and it was not in operation during visit.

MIDC has undertaken a study about modifications in the treatment process of the CETP through a consultant M/s CH2M Hill. The DPR/Feasibility Report by the consultant concludes that the CETP has been originally designed for BOD and COD removal only with no provision for nitrogen removal. Accordingly, several modifications in design have been proposed. Some of the significant modifications proposed include:

- Modification of Digester to an 'Equalization Tank'
- New 'Flash Mixing Tank' and 'Flocculation Tank' after 'Equalization Tank'
- New 'Anoxic Tank' after Primary Clarifier
- Modification of Intermediate Clarifier to 'Aeration Tank 3'
- Upgradation of Aeration Tank 1 & 2

As per records submitted by MIDC Additional Ambernath, the total supply of water to member industries in the MIDC decreased from 16,29,616 m<sup>3</sup> during Jul'15 to Jun'16 to 9,36,354 m<sup>3</sup> during Jul'18 to Jun'19. Therefore, a decrease 43% of the water supply to member industries is observed after Additional Ambernath CETP became non-operational. The records of water supply to the individual member industries in the years 2015-2019 reveal that out of 85 member industries of MIDC, around 42 have significantly decreased their water consumption, 28 have significantly increased their water consumption, 11 industries have maintained about similar consumption value and 4 industries have reduced their water consumption to near zero. As informed by MPCB, the member industries were directed not to discharge any wastewater to CETP or nearby area after closure directions issued to the CETP.

#### **7.0 STATUS OF RECIPIENT ENVIRONMENT**

Joint committee, along with representatives from MIDC, applicant, DCETP and DBESA CETP visited area of MIDC Phase I and Phase II for an inspection of the locality for sample collection. Applicant has shown locations in the MIDC and discussed following issues:

- Problem of odor in front of MIDC collection sump in Phase II MIDC, which is presently used for collection of wastewater from chemical and textile industries located at Phase II, was informed by the applicant. As informed by MIDC, this collection sump will now be used for collection of segregated wastewater from textile industries.

189

- Problem of leakage from MIDC chambers was informed by the applicant. MIDC has informed that revamping of chambers and construction of new chambers has been carried out to address the issue. During visit leakages from chambers were not observed.
- Water in a drain (19°11'56.2"N 73°05'53.8"E) flowing near M/s Saptararna Colourant Pvt. Ltd. located at W-230, MIDC Phase II, was found coloured (greenish). It was also found that runoff from the said industry carrying coloured wastewater also flowing in the nallah and there are few dye manufacturing units located in that patch. A grab sample of water flowing in the nallah was collected during visit. The analysis results are shown below:

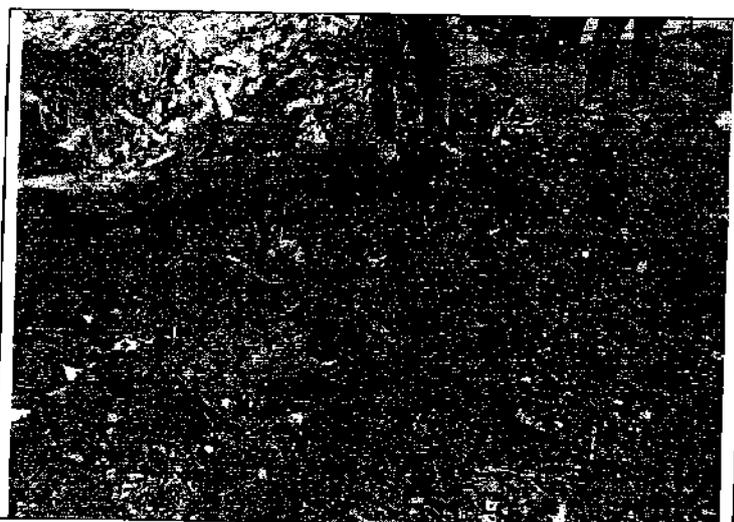
pH	TSS	TDS	COD	BOD	NH <sub>3</sub> -N	Phenols	Cl <sup>-</sup>	SO <sub>4</sub> <sup>-2</sup>
6.41	66	734	66	20	4.93	0.15	131	127

*Note: all values are reported in mg/l except pH*



Water in a drain flowing near M/s Saptararna Colourant

- It was also observed at one location on the road side of nallah (19°11'56.2"N 73°05'53.8"E) that the soil patch was having color and it seemed to be contaminated. A sample of soil from the location was also collected during visit. The soil analysis result is attached in Annexure V.



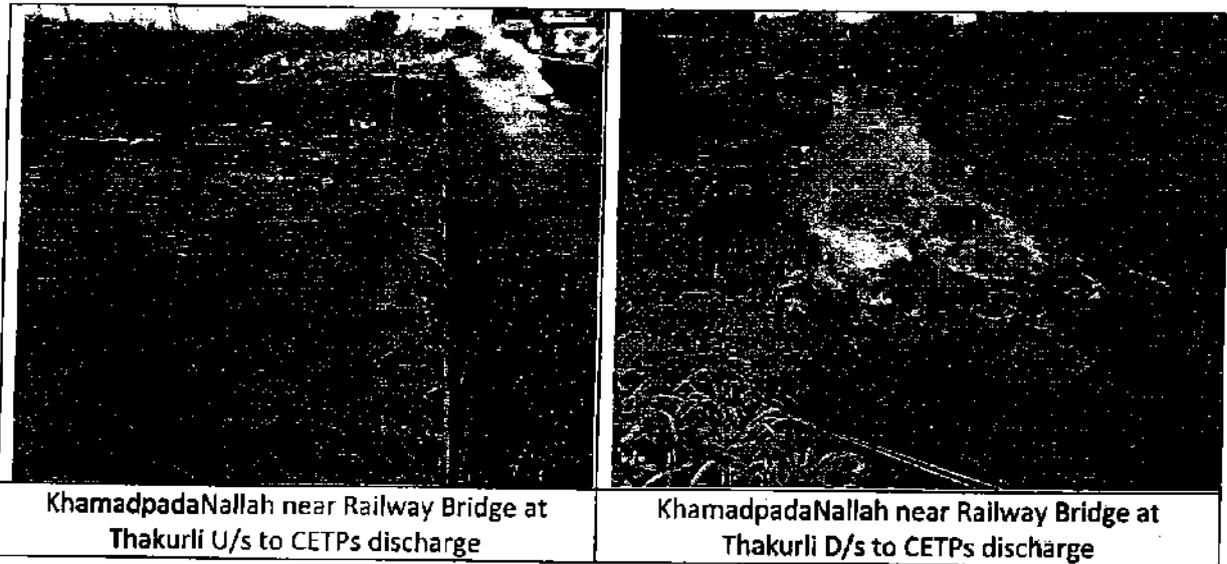
Soil near drain flowing near M/s Saptararna Colourant, Phase II MIDC Dombivili

190

- The major compounds found in the soil, other than C, H, N and O are Al, B, Ba, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Na, Nb, Nd, Ni, P, Pb, S, Si, Sr, Ti, V, Yb, Zn and Zr using Inductive Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES) at IIT Bombay. Among these Fe, Pb, Co, Cu, Zn and Cd dominated in the soil. The values of these metals are 8400 (1600), 650 (500), 32 (20), 345 (270), 120 (500), 10 (6) mg/Kg Soil, respectively. The values in the parentheses indicate the nominal values in an agricultural soil (Adagunodo, Sunmonu and Emeterere, Heavy metals data in soils for agricultural activities, Data Brief, 2018 18: 1847-1855). The dominating presence of these heavy metals in the soil sample indicates contamination resulting from dye and/or chemical industries.
- A portion of open land near Tempo Naka, Ganesh Temple was shown to the committee. It was informed that waste is dumped in that open area. The portion of land where dumped was alleged was also visited, no such dumping was observed during visit. MIDC and MPCB informed that sewage from the residential area is entering this plot due to overflow of drains during rainy season. During visit the entire open plot was marshy.
- Periodic cleaning of MIDC chambers/drainage/drains in the area by third party assigned by MIDC has potential source of generation of hazardous waste. Mechanism for the storage and disposal of such waste need to be planned by MIDC with MPCB. The committee is in the opinion that MIDC may obtain authorization from MPCB and membership of CHWTSDF site for the safe disposal of such waste in scientific manner.
- Dumping of municipal solid waste was also observed at many places in the MIDC area. Action plan for handling, treatment and disposal of solid waste also need to be framed by concerned authorities in the area.
- Both the CETPs in the Dombivili disposes treated wastewater to KhamadpadaNallah (which meets ullhas creek) near Railway Bridge at Thakurli through common pipeline. Grab samples of wastewater from the upstream of KhamadpadaNallah (before discharge of CETPs) and downstream of KhamadpadaNallah (just after discharge of CETPs) were collected during visit. The analysis results are shown below:

Parameters	KhamadpadaNallah near Railway Bridge at Thakurli U/s to CETPs discharge (19°13'37.3"N 73°06'07.1"E)	KhamadpadaNallah near Railway Bridge at Thakurli D/s to CETPs discharge (19°13'39.9"N 73°06'06.1"E)
pH	6.95	6.98
TSS	50	48
TDS	442	592
COD	56	66
BOD	13	14
DO	1.8	2.5
NH <sub>3</sub> -N	3.75	4.76
Phenols	0.22	0.13
Cl <sup>-</sup>	72	82
SO <sub>4</sub> <sup>-2</sup>	60	62

191



- Nominal increase in concentration of BOD, ammonical nitrogen and COD was observed from upstream to downstream. Therefore, noticeable impact of discharge from CETP in present monitoring is not observed.
- During committee visit on 16-17.09.2019 due to sporadic rain in the area ambient air quality monitoring was not carried out. The committee has requested MPCB to carry out AAQ Monitoring at following two locations
  - Premises of DCETP
  - Premises of DBESA CETP

MPCB carried out Ambient Air Quality Monitoring in DBESA CETP, MIDC Dombivili Phase I and DCETP, MIDC Dombivili Phase II during 30.09.2019 to 01.10.2019 for 24 hours through M/s MahabalEnviro Engineers Pvt. Ltd. The analysis results (Annexure VI) reveal that all the parameters are within National Ambient Air Quality Standards except  $PM_{10}$  in both the monitoring locations. The value of  $PM_{10}$  is  $144 \mu\text{g}/\text{m}^3$  and  $124 \mu\text{g}/\text{m}^3$  for DBESA CETP and DCETP monitoring locations respectively against NAAQ standard of  $PM_{10}$  :  $100 \mu\text{g}/\text{m}^3$ .

## 8.0 CONCLUSION

The Monitoring committee constituted by Hon'ble NGT has carried out monitoring at three CETPs as per order namely M/s DBESA CETP, M/s DCETP and M/s Additional Ambernath CETP. DBESA CETP was found operational, DCETP was found operational with restricted capacity of 25% of hydraulic load and AAMA CETP was found non-operational due to closure direction from MPCB. Grab and stage wise composite monitoring of wastewater was carried out in the operational CETPs during visit to assess the treatment efficacy of CETPs.

The overall reduction in concentration of BOD, COD and TSS was found to be 92.46%, 77.78% and 60.84% respectively in DBESA CETP. The analysis result of the grab sample collected from the inlet of the CETP reveals that the concentration of COD exceeds MPCB inlet prescribed standards however the composite samples meets the inlet standards. This indicates that the CETP receives varying concentration of COD from member industries at different point of time. The analysis results of the composite sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, FDS Ammonical Nitrogen and Fe. The analysis results of the grab sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for FDS, Ammonical Nitrogen and

192

Fe. Though the concentration of ammonical nitrogen at inlet is within limits, however the concentration of ammonical nitrogen at the final outlet exceeds the discharge limit. This may be due to hydrolysis of protein and conversion to ammonia. Trend analysis results of DBESA CETP also indicate the higher concentration of ammonical nitrogen at the final outlet in past. Therefore, it can be concluded that the overall performance of DBESA CETP to achieve discharge standards in terms of reduction in BOD, COD and TSS found satisfactory. However, a special effort towards the treatment of parameters which exceeds discharge standards, especially ammonical nitrogen, is needed.

The overall reduction in concentration of BOD, COD and TSS was found to be 89.87%, 74.29% and 35.71% respectively in DCETP. The analysis result of composite sample collected from the collection tank reveals that the CETP is receiving wastewater having analyzed parameters within the MPCB prescribed standards. However in the grab sample the concentration of phenols exceeds MPCB inlet prescribed standards. The analysis results of the composite sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, phenols, nitrate and Fe. The analysis results of the grab sample collected from the final outlet of CETP reveals that the monitored parameters are found within MPCB discharge standards except for TSS, FDS, Nitrate and Fe. Therefore, it can be concluded that the overall performance of DCETP to achieve discharge standards in terms of reduction in BOD and COD was found satisfactory. However, a special effort towards the treatment of parameters which exceeds discharge standards, especially TSS and Nitrate, is needed.

During visit in the MIDC area, the joint committee observed contaminated soil patch at only one location and took a sample for analysis. Presence of heavy metals in the soil sample taken from the MIDC area may be due to contamination resulted from sporadic illegal discharge of wastewater/sludge from dye and/or chemical industries. Though, the soil quality at one location doesn't reflect the situation of the whole area, nevertheless, an action plan and strict vigilance from MPCB and MIDC is needed to check and take action against sporadic illegal discharges, if any, thereby holding the responsible parties accountable.

A mechanism need to be developed by MIDC and MPCB for the proper collection, storage and disposal of wastes generated during periodic cleaning of MIDC chambers/drainage/drains (which may be potential source of contamination near the chambers while cleaning and dumping). The committee is in the opinion that MIDC may obtain authorization from MPCB and membership from CHWTSDF site for the safe disposal of such waste in scientific manner.

Dumping of municipal solid waste was also observed in the MIDC area at many places. Municipal solid waste (MSW) management needs to be improved in the area. Concerned authorities in the area may frame detailed action plan for efficient collection & disposal of MSW in the area.

The water quality from the upstream of Khamadpada Nallah (before discharge of DBESA and DCETP) to the downstream of Khamadpada Nallah (just after discharge of CETPs) did not show noticeable impact of discharge from CETP in present monitoring.

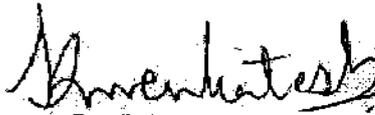
The AAQ monitoring at DBESA and DCETP shows that PM<sub>10</sub> concentration is exceeding the NAAQ standards. The high concentration of PM<sub>10</sub> may be due to various activities in the MIDC area such as

emission from stacks, construction activities, vehicular emission etc. and may not be attributed to operation of the CETPs. MPCB may prepare an action plan and carry out coordinated efforts towards reduction of PM<sub>10</sub> by involving various authorities.

Based on the order of Hon'ble NGT dated 02.07.2015 in OA 37/2013, CPCB RD(W) Vadodara started monitoring of CETPs located in Dombivili and Ambarnath area on monthly basis from July 2015 till November 2016 and thereafter continued with quarterly monitoring based on order dated 07.12.2016 in the same matter. The monitoring reports of CETPs with findings were submitted to Hon'ble NGT from time to time. The said direction of Hon'ble NGT with regular efforts from CPCB has shown remarkable improvement in the performance of CETPs over the years.

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194

Annexure I

CCA of DBESA CETP

<b>MAHARASHTRA POLLUTION CONTROL BOARD</b>																
Phone : 24010437/24020781 /24037124/24035273 Fax : 24044532/24024065 /24023516 Email : jdwater@mpcb.gov.in Visit At : <a href="http://mpcb.gov.in">http://mpcb.gov.in</a>	Kalpataru Point, 3rd & 4th floor, Sion- Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 400 022															
Date: 21/03/2016 Consent No: Format 1.0/BO/JD(WPC)/EIC No. - KN-16/R/CC MPCB/16/03941																
To, M/s. Dombivli Better Environment System Association (CETP), Plot No. OS-8, Opp. Savitribai Phule Natyagruh, MIDC, Phase I, Dombivli, Dist. Thane - 421 203.																
Subject: Renewal of Consent for Common Effluent Treatment Plant under RED category.																
Ref : Earlier consent granted vide no. BO/JDWPC/EIC-KN-6536-15/0/CC-14/00420 Dtd: 15/01/2014.																
Dated: 05/01/2016																
For: Renewal of Consent 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 Wastes (M, H & T M) Rules 2008 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 01/01/2016 upto 31/12/2020.																
2. The actual capital investment of the industry is Rs. 16.21 Crs. (As per the C.A. Certificate submitted by industry)																
3. The Consent is valid for																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sr. No.</th> <th>Treatment Facility</th> <th>Maximum Quantity</th> <th>UOM</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed</td> <td>16</td> <td>MLD</td> </tr> </tbody> </table>		Sr. No.	Treatment Facility	Maximum Quantity	UOM	1.	Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed	16	MLD							
Sr. No.	Treatment Facility	Maximum Quantity	UOM													
1.	Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed	16	MLD													
4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Permitted quantity of discharge</th> <th>Standards to be achieved</th> <th>Disposal</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Trade effluent Treatment</td> <td>16.00 MLD</td> <td>As per Schedule -I</td> <td>Marine Coastal Area, at a point to be specified by National Institute of Oceanography.</td> </tr> <tr> <td>2.</td> <td>Domestic effluent</td> <td>4.00 CMD</td> <td>As per Schedule -I</td> <td>Marine Coastal Area, at a point to be specified by National Institute of Oceanography.</td> </tr> </tbody> </table>		Sr. No.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal	1.	Trade effluent Treatment	16.00 MLD	As per Schedule -I	Marine Coastal Area, at a point to be specified by National Institute of Oceanography.	2.	Domestic effluent	4.00 CMD	As per Schedule -I	Marine Coastal Area, at a point to be specified by National Institute of Oceanography.
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M/s. Dombivli Better Environment System Association (CETP), S/O Kalyan (1/R)/94436000																
Page 1 of 9.																

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 (600 KVA)	01	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr. No.	Type of Waste	Quantity & UoM	Treatment	Disposal
--NA.--				

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	Sludge	34.3	50.0	MT/Day		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 Hon'ble High court order passed or being passed in the Writ Petition No. 17 of 2011 filed by Nicholas Almedia v/s State of Maharashtra & Others.

For and on behalf of the  
Maharashtra Pollution Control Board

Dr. Y. B. Sontakke  
Joint Director  
(Water Pollution Control)

Received Consent fee of -

Sr. No.	Amount (Lac)	DD. No.	Date	Drawn On
1.	1,17,000/-	175396	25/01/2014	Bank of Maharashtra

The balance consent fees of Rs. 1,48,000/- as per previous consent no. BO/JDWPC/EIC-KN-6596-19/O/CC-14/00420; Dtd: 15/01/2014 is utilized completely in this consent towards renewal.

Copy to:

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

196

**Schedule-I****Terms & conditions for compliance of Water Pollution Control:**

1) A) As per your application, you have provided Common Effluent Treatment Plant (ETP) with the design capacity of 16 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	
4	Phenolic Compounds	5.0
5	Ammonical Nitrogen (as N)	50
6	Cyanide (as CN)	5.0
7	Hexavalent Chromium (as Cr <sup>VI</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 having effluent less than 25 CMD, BOD of Maximum of 800 mg/l and COD of maximum 1600 mg/l will be allowed. In case of other primary and secondary treatment is required to meet consented standards before disposal to CETP.

Note

These standards apply to the small scale industries i.e total discharge upto 25 m<sup>3</sup>.

ii) All small Scale Units generating effluent quantity more than 25 m<sup>3</sup>/day and Large & Medium 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) 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 and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:

197

Sr. No.	Parameters	Standards prescribed by Board (If any)
	<b>I. General Parameters</b>	<b>Max. permissible values (in mg/l except pH &amp; Temperature)</b>
01	pH	6.0 to 9.0
02	BOD 3 Days 27 °C	30
03	COD	250
04	Suspended Solids	100
05	Fixed Dissolved Solids	2100
	<b>II. Specific Parameters</b>	<b>Max. permissible values (in mg/l except pH &amp; Temperature)</b>
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	60
10	Nitrate-Nitrogen	10
11	Phosphate as P	5
12	Chlorides	1000
13	Sulphate (as SO <sub>4</sub> )	1000
14	Fluoride	2
15	Sulphides (as S)	2
16	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	1
17	Total Residual Chlorine	1
18	Zinc	5
19	Iron	3
20	Copper	3
21	Trivalent Chromium	2
22	Manganese	2
23	Nickel	3
24	Arsenic	0.2
25	Cyanide (as CN)	0.2
26	Vanadium	0.2
27	Lead	0.1
28	Hexavalent Chromium	0.1
29	Selenium	0.05
30	Cadmium	0.05
31	Mercury	0.01
32	Bio Assay Test	90% survival of fish after 96 hrs. in 100% effluent

**Note:-**

- i) CETP shall achieve BOD 30 mg/L within three months period.
- ii) All efforts should be made to remove colour and unpleasant odour as per as possible.
- iii) 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.

198

D) Disposal: The treated effluent shall be connected to the sewerage system provided by MIDC and finally discharged into marine coastal area, at a point specified 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 27°C.	Not to exceed	100	mg/l

C) The overflow of septic tank shall be connected to MIDC sewer drainage system.

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	5.0
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.

199

**Schedule-II**

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

- 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 & Use	S %	SD <sub>0.5</sub> Kt/yr
1	D.G. Set (600 KVA)	----	3.0*	HSD	20 Lit./Hr	1.0%	6.72

(\*Above the roof of the building where D.G set is installed)

- 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.
- 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>
--------------------	---------------	-----------------------

- 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 comes to an end or erection of new pollution control equipment.
- 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).

Maharashtra Pollution Control Board

*[Handwritten Signature]*

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

**Bank Guarantee Proposed:**

Sr. No.	Consent (C to E/O/R)	BG Guarantee	Submission Period	Consent conditions	Compliance period	Validity
1	C to R	Rs.5.0 Lakhs	Renewal after expiry	Operation and Maintenance of CTP	Continuous	30.04.2021
2	C to R	Rs. 2.5 Lakhs	Renewal after expiry	Treatability Study	---	30.04.2021
3	C to R	Rs. 2.5 Lakhs	Renewal after expiry	Improvement in existing plants including sludge removal	---	30.04.2021
4	C to R	Rs. 2.5 Lakhs	Renewal after expiry	Online pH & flow meter & TOC analyser	Continuous	30.04.2021
5	C to R	Rs. 2.5 Lakhs	Renewal after expiry	Tertiary & advance treatment facility	---	30.04.2021
6	C to R	Rs. 5.0 Lakhs	15 Days	The treated effluent disposal shall be at a point suggested by NIO	Continuous	30.04.2021

**Bank Guarantee as per directions dtd: 25/02/2014:**

Sr. No.	BG Guarantee	Submission Period	Direction / Condition	Compliance period	Validity
1	Rs. 5.0 Lakhs	Renewal after expiry	Individual member related	---	30.04.2021
2	Rs. 10 Lakhs	Renewal after expiry	Operational related	Continuous	30.04.2021
3	Rs. 5.0 Lakhs	Renewal after expiry	Vigilance related	Continuous	30.04.2021
4	Rs. 5.0 Lakhs	Renewal after expiry	Performance related	Continuous	30.04.2021
5	Rs. 10 Lakhs	15 Days	Management related	Continuous	30.04.2021

201

**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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 HW(MH&TM) Rules 2008, 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 Waste (M,H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) of Hazardous Waste (M,H & TM) Rules, 2008 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.

202

- 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

## Results of previous monitoring of DBESA CETP

Monitoring results of grab sample collected from final outlet of CETP (Month wise):

Date of Monitoring	Parameter(s)															
	PH	TSS	TDS	COD	BO D	NH <sub>3</sub> -N	TKN	Phenol	Cr <sup>++</sup>	S <sup>2-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>-2</sup>	B	F	CN	O&G
29.07.2015	6.15	2194	3801	3906	1960	94.11	142.59	0.66	BDL	18.0	1659	1203	1.39	--	0.02	75.98
19.08.2015	7.50	288	7245	794	304	140.82	164.09	0.535		2.98	--	--	--	2.08	0.19	7.4
22.09.2015	7.27	91	4322	305	59	86.0	95.74	0.357	0.096	0.20	1467	1599	1.487	--	0.17	5.5
27.10.2015	7.26	1602	4848	1665	431	53.2	75	0.844	0.231	30.1	1774	1397	1.01	--	0.166	8.4
09.12.2015	7.41	171	5886	591	237	106	122	0.54	--	2.94	1033	5933	3.38	--	0.16	13.3
19.01.2016	7.41	3036	8046	2720	1105	182.5	284.9	1.95	0.023	45.8	4099	1810	--	6.76	0.125	76
28.03.2016	7.35	102	7335	353	103	109	123	0.3	0.061	1.61	3102	1785	--	2.11	0.082	2.5
27.04.2016	7.53	174	5364	192	55.8	66	81	0.146	BDL	1.22	1856	1553	--	2.5	0.092	9.02
25.05.2016	7.48	122	5864	324	42.4	155.69	172.53	0.24	BDL	1.34	2560	1843	--	0.533	0.106	6.6
29.06.2016	7.20	87	3832	226	77	100.92	111.53	0.25	BDL	0.32	2052	843	--	3.7	0.176	6.92
20.07.2016	7.17	79	3621	254	77	104.7	112.1	--	BDL	0.54	1881	1436	--	2.89	0.286	5.31
09.08.2016	7.49	956	3767	239	69.1	75.54	84.32	0.56	0.72	0.3	1457	818	--	2.19	0.23	5.13
19.09.2016	7.25	78	2570	105	31.2	44.2	50.4	0.17	BDL	BDL	1117	229	--	2.19	0.201	9.5
06.10.2016	7.42	108	4899	183	41	74.96	81.5	0.20	0.033	1.16	2299	1554	--	3.16	0.061	3.1
24.11.2016	7.44	101	6152	413	124	188.1	189.6	0.111	BDL	1.64	2650	2852	--	3.16	0.187	9.52
Outlet Norms (MPCB)	5.5-9.0	100	--	250	100	50	100	5.0	0.1	5.0	--	--	--	--	0.2	10
New Outlet Norms as per CC&A dated 21.03.16	6.0-9.0	100		250	30	50	50	1.0	0.1	2.0	1000	1000		2.0	0.2	10

Monitoring results of grab sample collected from final outlet of DBESA CETP (Quarter wise):

Date of Monitoring	Parameter(s)															
	PH	TSS	TDS	FDS	COD	BO D	NH <sub>3</sub> -N	TKN	Phenols	Cr <sup>++</sup>	S <sup>2-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>-2</sup>	F	CN	O&G
06.03.2017	7.40	2400	9571	--	1865	266	174	280	1.33	0.006	5.48	2541	1723	4.48	0.042	46.3
08.05.2017	7.17	144	7218	--	447	27.7	173	205.9	0.36	BDL	0.78	2499	1097	4.05	0.135	4.1
08.08.2017	6.90	60	5704	4833	308	82	120.68	--	0.45	0.029	0.31	2107	2079	2.38	0.152	3.7
20.12.2017	6.65	64	6128	5914	512	186	4.72	8.66	1.49	BDL	0.22	2283	2037	2.3	0.07	4.81
05.02.2018	6.92	132	7192	6748	432	90	166	250	36.46	BDL	BDL	3181	2098	1.58	0.038	2.58
17.05.2018	7.46	75	6876	6450	299	36.4	171	190	0.48	BDL	0.64	2862	1474	1.75	0.06	3.22
28.08.2018	6.78	58	5267	4969	284	61	175	278	0.32	BDL	0.92	2058	1184	2.06	0.16	6.5

204

Date of Monitoring	Parameter(s)															
	PH	TSS	TDS	FDS	COD	BOD	NH <sub>3</sub> -N	TKN	Phenols	Cr <sup>6+</sup>	S <sup>2-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	F	CN	O&G
27.11.2018	6.97	317	7670	7377	565	123	216	302	1.82	BDL	0.22	3013	1997	4.91	0.16	5.21
11.03.2019	6.4	108	8004	7598	560	133	237	268	0.55	BDL	--	2459	--	--	--	--
11.06.2019	6.23	106	6568	6222	381	92	149	166	0.518	0.007	0.18	2642	1409	3.3	0.08	7.4
Outlet Norms (MPCB)	5.5-9.0	100	--	2100	250	100	50	100	1.0	0.1	5.0	1000	1000	2.0	0.2	10

CCA of DCETP

**MAHARASHTRA POLLUTION CONTROL BOARD**

Phone : 24010437/24020781  
 24037124/24035273  
 Fax : 24044532/24024068 24023516  
 Email : jdwater@mpcb.gov.in  
 Visit At : <http://mpcb.gov.in>



Kaipataru Point, 3rd & 4th floor, Sio  
 Matunga Scheme Road No. 8, Opp. C. S.  
 Planet Cinema, Near Sion Circle, Sion (E),  
 Mumbai - 400 022

Red/LSI

Consent No: BO/JD(WPC)/KN/0000016720/R/HOD-1711000428

Date: 29/11/2017

To,  
 M/s. Dombivli Common Effluent Treatment Plant,  
 Plot No. R-4/2, MIDC, Phase II,  
 Opp. W-40, Dombivli (E),  
 Dist. Thane

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

Ref : Earlier consent granted vide no. BO/JDWPC/EIC-KN-15/R/GC-MPCB/16/03943 dtd: 21/03/2016.

Your application: MPCB-CONSENT-0000016720.  
 Dated: 29/11/2016

For: Renewal of Consent 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 6 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:

- The consent is granted for a period from 01/01/2017 upto 31/12/2020.
- The actual capital investment of the industry is Rs. 6.13 Crs. (As per the C.A. Certificate submitted by industry)
- The Consent is valid for -

Sr. No.	Treatment Facility	Maximum Quantity	UOM
1.	Common Effluent Treatment Plant - The daily quantity of industrial effluent to be treated shall not exceed	1.5	MLD



1. Conditions under Water (P&CP), 1974 Act for discharge of effluents

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1.	Trade effluent Treatment	1.5 MLD	As per Schedule-I	Ulhas Creek, at a point to be specified by National Institute of Oceanography.
2.	Domestic effluent	2.00 CMD	As per Schedule-I	Ulhas Creek, at a point to be specified by National Institute of Oceanography.

206

## 3. Conditions under Air (P&amp; CP) Act, 1981 for air emissions:

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1	D.G Set (82.5 KVA)	01	As per Schedule -II

## 4. Conditions about Non Hazardous Wastes:

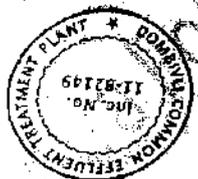
Sr. No.	Type of Waste	Quantity & UOM	Treatment	Disposal
-N.A.-				

## 5. Conditions under Hazardous &amp; Other Wastes (M &amp; TM) Rules, 2016 for treatment and disposal of hazardous waste:

Sr. No.	Type of Waste	Category	Quantity	UOM	Treatment	Disposal
1	Sludge	35.3	1.07	M <sup>3</sup> /Day		CHWTSDF

6. 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 grant of renewal is issued without prejudice to Hon'ble Supreme court order / Hon'ble National Green Tribunal / Hon'ble High court order.

For and on behalf of the  
Maharashtra Pollution Control Board



Dr. Y. B. Sontakke  
Joint Director  
(Water Pollution Control)

Received Consent fee of -

Sr. No.	Amount (Rs.)	TXN ID	Date	Modality
1.	25,000/-	TXN1611002688	30/11/2016	Online Payment
2.	90,000/-	NETT	28/02/2017	Bank Of India

Balance fees of Rs. 10,000 from earlier consent granted vide no. BO/JD(WPC)/EIC No.-KN-15/RCC-MPCB/16/08943. Dated-21.08.2016 is considered during this renewal. Though due to increase in C.I by 38 Lakhs consent fees of Rs. 15000 is deducted from total fees available with Board i.e. Rs. 1,25,000/-. Hence the Balance fees of Rs. 23,600/- from above submitted fees will remain with Board and will be considered during next renewal of consent.

Copy to:

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

Schedule-ITerms & conditions for compliance of Water Pollution Control:

- 1) A) As per your application, you have provided Common Effluent Treatment Plant (ETP) with the design capacity of 1.5 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	
2	Temperature	60 to 90
3	Oil & Grease	45°C
4	Phenolic Compounds	20
5	Ammonical Nitrogen (as N)	50
6	Cyanide (as CN)	50
7	Hexavalent Chromium (as Cr <sup>+6</sup> )	2.0
8	Total Chromium (as Cr)	2.0
9	Copper (as Cu)	2.0
10	Lead (as Pb)	3.0
11	Nickel (as Ni)	1.0
12	Zinc (as Zn)	3.0
13	Arsenic (as As)	15
14	Mercury (as Hg)	0.2
15	Cadmium	0.01
16	Selenium (as Se)	1.0
17	Fluoride (as F)	0.05
18	Boron (as B)	15
		2.0



In case of SSI Unit having effluent less than 25 CMD, 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 to meet consented standards before disposal to CETP.

Note :-

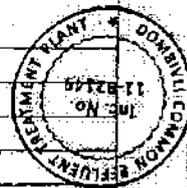
- i) All Large & Medium Scale Units have to achieve the standards as prescribed in the letter of Consent issued to them individually under the Water (P & CP) Act 1974, Air (P & CP) Act 1981, Hazardous Waste (M&H) Amendment thereto before discharging the effluent into CETP.

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 and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards.

208

Sr. No.	Parameters	Standards prescribed by Board (If any)
	<b>I. General Parameters</b>	<b>Max. permissible values (in mg/l except pH &amp; Temperature)</b>
01	pH	6.0 to 9.0
02	BOD 3 Days 27 °C	30
03	COD	250
04	Suspended Solids	100
05	Fixed Dissolved Solids	2100
	<b>II. Specific Parameters</b>	<b>Max. permissible values (in mg/l except pH &amp; Temperature)</b>
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	10
11	Phosphate as P	5
12	Chlorides	1000
13	Sulphate (as SO <sub>4</sub> )	1000
14	Fluoride	2
15	Sulphides (as S)	2
16	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	1
17	Total Residual Chlorine	1
18	Zinc	5
19	Iron	3
20	Copper	3
21	Trivalent Chromium	2
22	Manganese	2
23	Nickel	3
24	Arsenic	0.2
25	Cyanide (as CN)	0.2
26	Vanadium	0.2
27	Lead	0.1
28	Hexavalent Chromium	0.1
29	Selenium	0.06
30	Cadmium	0.05
31	Mercury	0.01
32	Bio Assay Test	90% survival of fish after 96 hrs. in 100% effluent

**Note:-**

- i) CETP shall achieve BOD 30 mg/l within three months period.
- ii) All efforts should be made to remove colour and unpleasant odour as per as possible.
- iii) 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.

209

**D] Disposal:** The treated effluent shall be connected to the sewerage system provided by MIDC and finally discharged into Ulhas Creek, at a point to be specified 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 overflow of septic tank shall be connected to MIDC sewer drainage system.

- 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	2.5
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.



2/0

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-

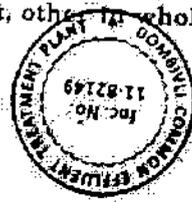
Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	W %
1	D.G. Set (825 KVA)		50'	HSD	25 Lit/Hr	1.0%	21.0

(Above the roof of the building where D.G set 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>
--------------------	---------------	-----------------------

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

Bank Guarantee Proposed:

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	To be Extended	Operation and Maintenance of GETP	Continuous	30.04.2020

211

## Annexure IV

## Results of previous monitoring of DCETP

Monitoring results of grab sample collected from final outlet of CETP (Month wise):

Date of monitoring	Parameter(s)															
	PH	TSS	TDS	COD	BOD	NH <sub>3</sub> -N	TKN	Phenols	Cr <sup>6+</sup>	S <sup>2-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	B	F <sup>-</sup>	CN <sup>-</sup>	O&G
30.07.2015	6.37	116	3986	733	333	38.84	53.37	0.66	0.034	5.0	212	1314	3.35	--	0.09	19.3
20.08.2015	7.01	727	8956	1436	147	88.84	125.4	0.542	BDL	4.2	--	--	--	1.91	0.04	12.4
22.09.2015	4.45	56	3010	272	60	28.24	34.49	0.267	BDL	0.8	1056	1280	0.882	--	0.12	3.7
27.10.2015	6.16	218	6822	1122	248	54.88	57.12	1.343	0.05	3.1	311	2368	1.37	--	0.123	8.3
10.12.2015	7.09	276	6247	722	135	77	249	0.73	--	0.87	1757	763.5	4.05	--	0.25	20.3
19.01.2016	6.45	465	10504	2388	1040	57.7	110.7	1.47	0.069	5.12	2899	4470	--	9.54	0.086	13.6
30.03.2016	6.04	381	7495	558	157	14.97	34	0.72	0.03	21.6	537	3544	--	1.85	0.05	35.9
29.04.2016	6.26	401	7750	1670	506	46.4	71	2.14	BDL	8.03	1563	2836	--	1.3	0.085	27.75
26.05.2016	6.77	231	4878	806	271	28.82	59.26	3.46	BDL	14.18	1268	2103	--	BDL	0.17	20.1
29.06.2016	6.89	99	2996	614	171	15.31	30.24	0.283	BDL	13.09	1270	1314	--	0.97	0.113	18.86
23.11.2016	5.78	83	3177	186	19	27.7	36.9	0.42	BDL	1.014	1150	285.5	--	1.83	0.266	2.77
Outlet Norms (MPCB)	5.5-9.0	100	--	250	100	50	100	5.0	0.1	5.0	--	--	--	--	0.2	10
New Outlet Norms *	6.0-9.0	100	--	250	30	50	50	1.0	0.1	2.0	1000	1000	--	2.0	0.2	10

Monitoring results of grab sample collected from final outlet of CETP (Quarter wise):

Date of monitoring	Parameter(s)															
	PH	TSS	TDS	COD	BOD	NH <sub>3</sub> -N	TKN	Phenols	Cr <sup>6+</sup>	S <sup>2-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	B	F <sup>-</sup>	CN <sup>-</sup>	O&G
08.08.2017	7.26	114	3856	132	32	1.96	--	0.106	.012	BDL	1299	1068	--	0.66	0.159	1.2
20.12.2017	7.25	136	3190	376	86	5.48	10.57	2.04	BDL	0.49	903	438	--	1.45	0.09	4.53
05.02.2018	7.1	138	5068	232	25.3	52	101.7	1.8	BDL	BDL	1821	3013	--	1.63	0.044	1.73
17.05.2018	7.43	233	5843	265	31	5.1	17	0.24	BDL	1.37	2275	1964	--	2.47	0.07	2.75
30.08.2018	6.76	84	4464	161	22	51	128	2.03	BDL	0.92	957	1670	--	0.74	0.12	3.5
28.11.2018	7.06	142	6658	253	29	63	108	0.75	BDL	BDL	1928	1872	--	3.37	0.24	3.47
11.03.2019	6.42	62	5892	256	65	52.4	63.7	BDL	BDL	3.32	1663	1775	--	0.22	0.52	5.6
12.06.2019	7.00	138	5628	265	123	54	65	0.114	BDL	0.31	1712	1663	--	8.93	0.09	2.8
MPCB Outlet Norms	6.0-9.0	100	--	250	30	50	50	1.0	0.1	2.0	1000	1000	--	2.0	0.2	10

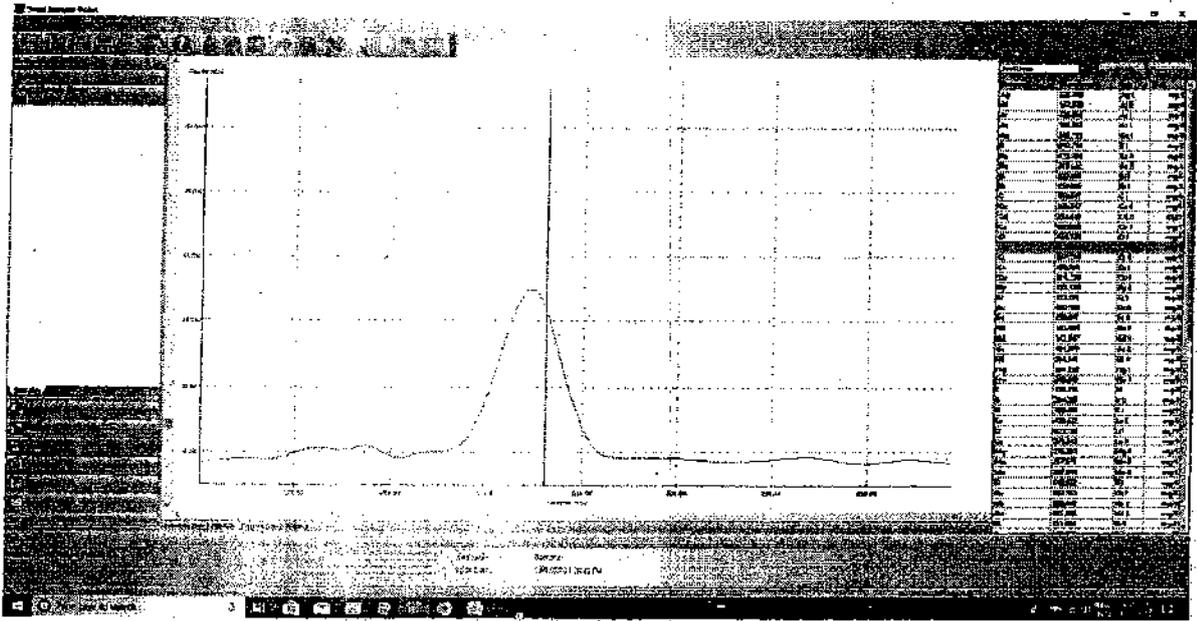
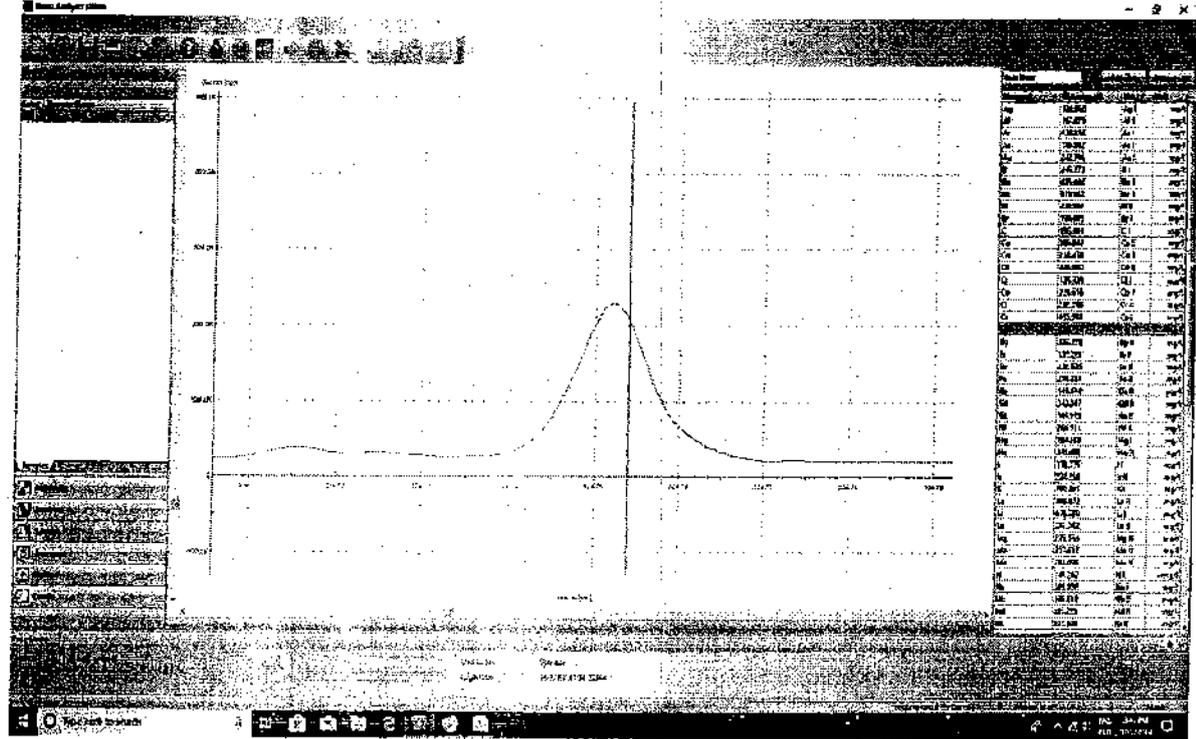
212

Annexure V

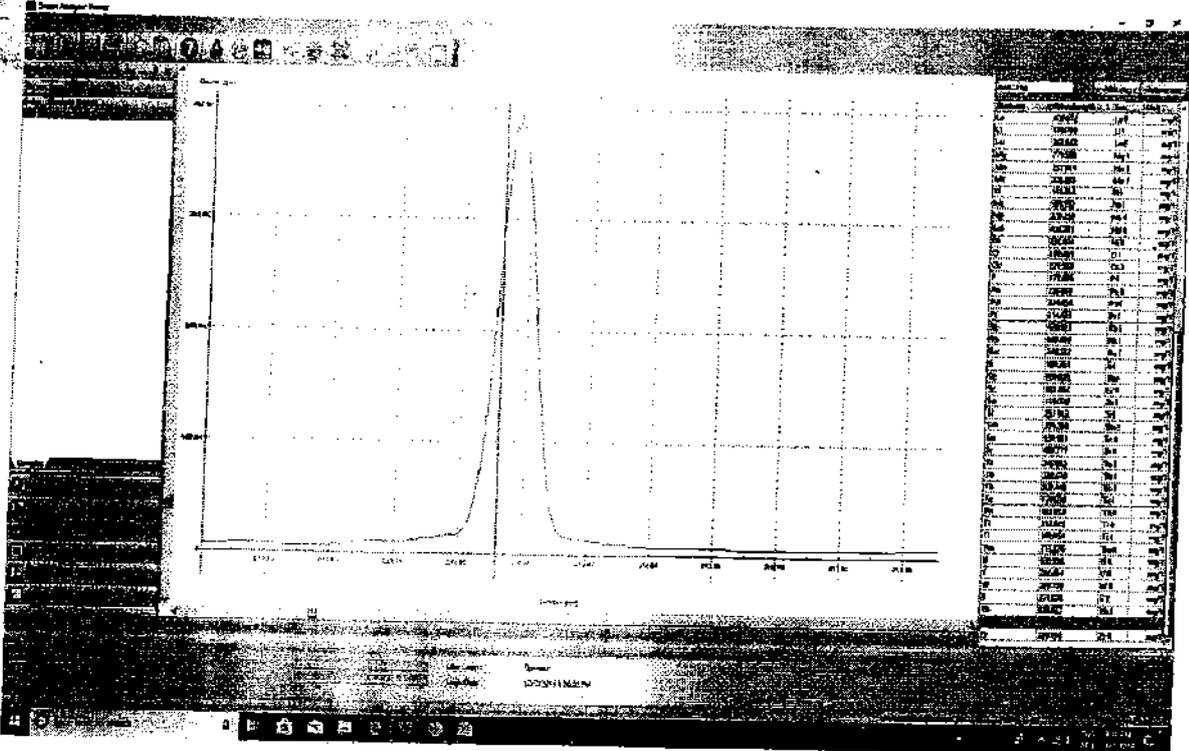
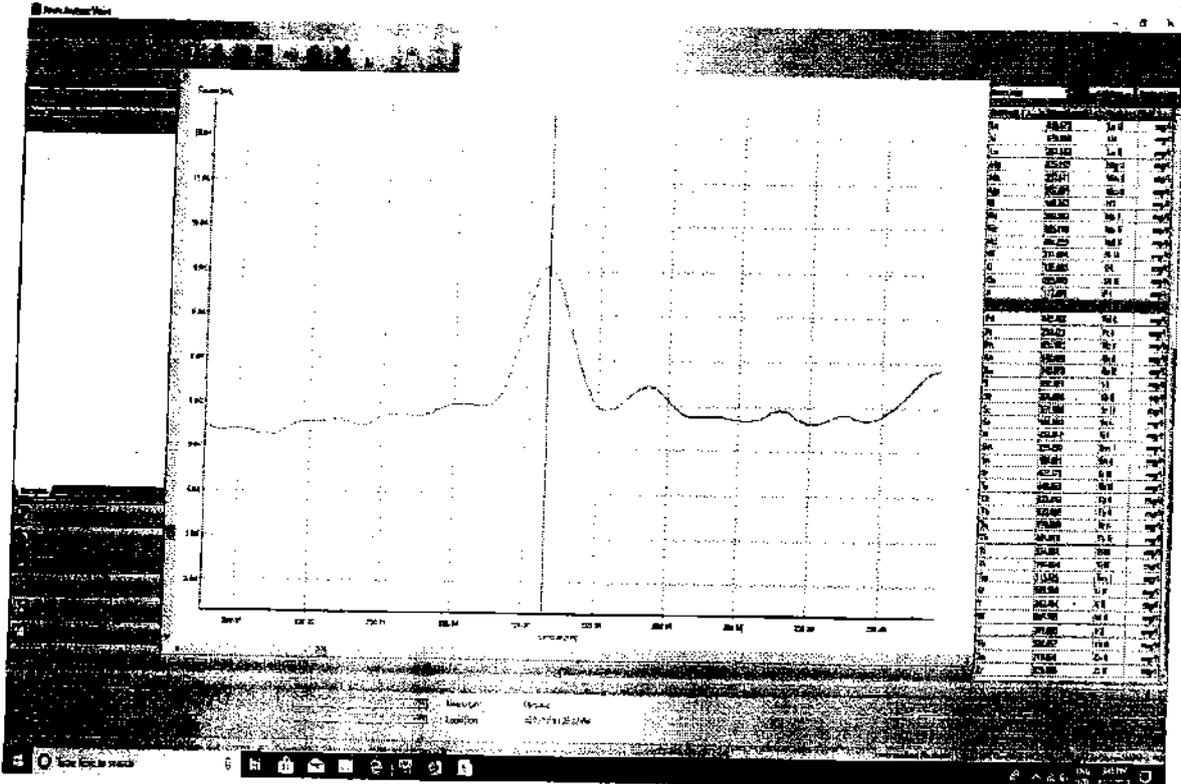
### Soil Analysis Report

## Heavy Metal Spectra from Soil Analysis

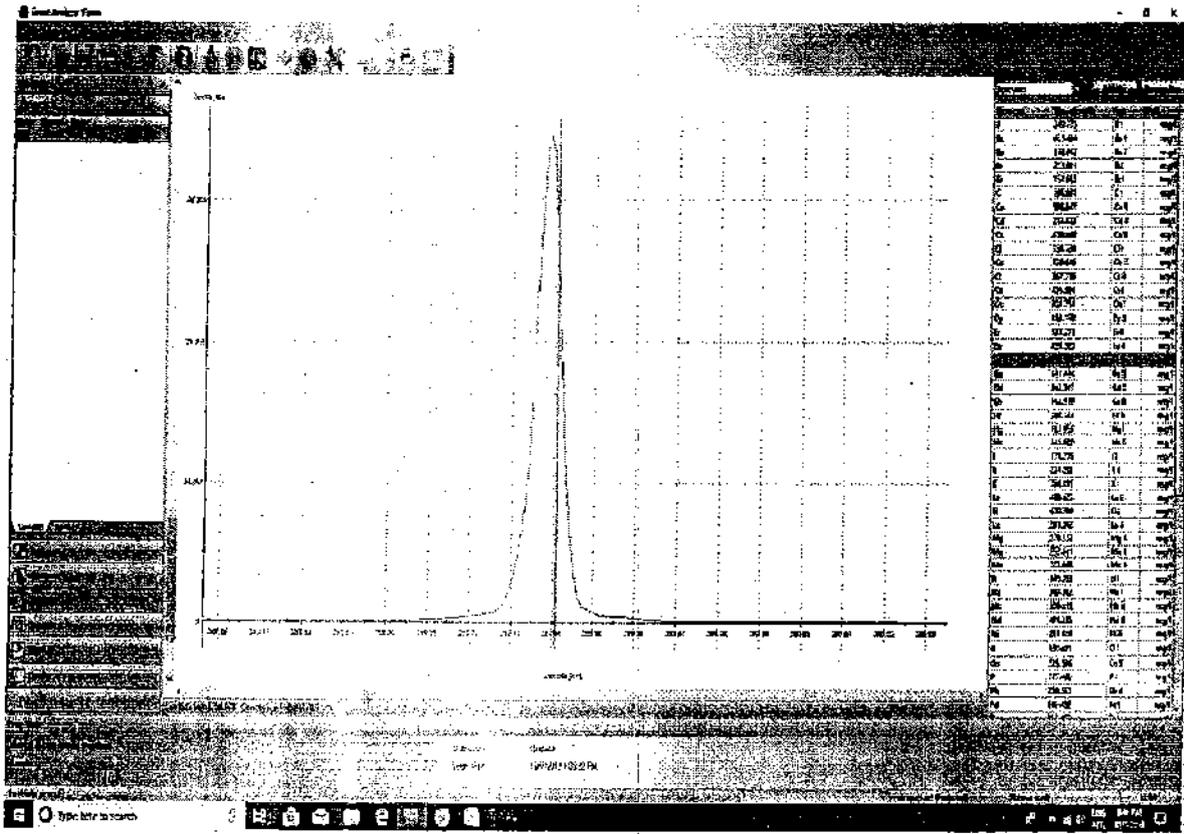
Inductive Coupled Plasma – Atomic Emission Spectrometry



213



214



## AAQ Monitoring report



# Mahabal Enviro Engineers Pvt. Ltd.

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 Phone : 91-712-2612162 T/Fax: 91-712-2612212 Email: nagpur@mahabal.com

## Ambient Air Quality Monitoring Report

<b>Report No.:</b> ME-NG16332-191005-SA-DCETP-DOMBIVLI		<b>Date:</b> 05.10.2019	
<b>Name and address of Customer</b>	D.B.S.A. (CETP) Phase - I, MIDC Dombivli Dombivli (E), Maharashtra		<b>Order Reference:</b>
			Verbal
<b>Sample Description/ Type</b>	Ambient Air Quality Monitoring	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Near Process Area	<b>Sample Quantity/Packing</b>	PM <sub>10</sub> , B(a)P, Ni, As, Pb: Filter Paper 1 X 3 No. PM <sub>2.5</sub> : Filter Paper 1 X 1 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NH <sub>3</sub> : 10 mL X 24 No. PVC Bottle O <sub>3</sub> : 10 mL X 1 No. PVC Bottle Charcoal Tubes: 2 X 3 No. CO: Bladder; 2L X 1 No.
<b>Date of Sampling</b>	30.09.2019 to 01.10.2019	<b>Date of Receipt of Sample</b>	02.10.2019
<b>Sampling Procedure</b>	As per Method reference		
<b>Date of Start of Analysis</b>	02.10.2019	<b>Date of Completion of Analysis</b>	04.10.2019

ULR-TC748719000016332F

Meteorological Data/Environmental Conditions					
Avg. Wind Velocity	Prominent Wind Direction	Relative Humidity (%)		Temperature (°C)	
		Max.	Min.	Max.	Min.
<b>Location</b>	Near Process Area		<b>Duration of Survey</b>	24 hours	
Parameter	Unit	Result	#NAAQM Standard	Method Reference	
<b>Discipline : Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)</b>					
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	6.66	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6	
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	8.63	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10	
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	144	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14	
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	51	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30	

Page 1 of 2  
 QPS.101-B/Issue No.01, Dt.01.02.2009, Amd.01 Dt.25.05.2018

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra  
 (600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room, Next to Ashida Electrical - near J B Sawant Bus Stop)  
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216


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Continuation Sheet

Report No.16332 Cont...

Parameter	Unit	Result	#NAAQM Standard	Method Reference
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.46-55
Carbon Monoxide(CO)	mg/m <sup>3</sup>	1.95	4.0	IS 5182 (Part 10):1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<4	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	2.14	5.0	IS 5182 (Part 11): 2006
Benzo (a) Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.2	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	<0.3	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	<3	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Remarks:</b> TWA - Time Weighted Average. #- NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead and Ammonia; 1 h. TWA in case of Carbon Monoxide, Ozone; Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.				
All above Parameter indicates Subcontracted testing.				

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Harish Mendhi  
**TECHNICAL MANAGER**


Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
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ULR- TC748719000016332F

Page 2 of 2

QF5.101-2/Time No.01, Dt.01.02.2008, Am.01Dt.25.05.2018

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 Phone : 91-712-2612162 T/Fax: 91-712-2612212 Email: nagpur@mahabal.com

## Ambient Air Quality Monitoring Report

<b>Report No.:</b> ME-NG16331-191005-SA-DCETP-DOMBIVLI		<b>Date:</b> 05.10.2019	
<b>Name and address of Customer</b>	DOMBIVLI COMMON EFFLUENT TREATMENT PLANT Phase - 2, MIDC Dombivli Dombivli (E), Maharashtra		<b>Order Reference:</b>
			Verbal
<b>Sample Description/ Type</b>	Ambient Air Quality Monitoring	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Near Process Area	<b>Sample Quantity/Packing</b>	PM <sub>10</sub> , B(a)P, Ni, As, Pb: Filter Paper 1 X 3 No. PM <sub>2.5</sub> : Filter Paper 1 X 1 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NH <sub>3</sub> : 10 mL X 24 No. PVC Bottle O <sub>3</sub> : 10 mL X 1 No. PVC Bottle Charcoal Tubes: 2 X 3 No. CO: Bladder: 2L X 1 No.
<b>Date of Sampling</b>	30.09.2019 to 01.10.2019	<b>Date of Receipt of Sample</b>	02.10.2019
<b>Sampling Procedure</b>	As per Method reference		
<b>Date of Start of Analysis</b>	02.10.2019	<b>Date of Completion of Analysis</b>	04.10.2019

ULR-TC748719000016331F

Meteorological Data/Environmental Conditions					
Avg. Wind Velocity	Prominent Wind Direction	Relative Humidity (%)		Temperature (°C)	
		Max.	Min.	Max.	Min.
<b>Location</b>	Near Process Area		<b>Duration of Survey</b>	24 hours	
Parameter	Unit	Result	#NAAQM Standard	Method Reference	
<b>Discipline : Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)</b>					
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	7.06	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6	
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	9.69	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10	
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	124	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14	
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	26	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30	

Page 1 of 2  
 QFS.101-2/Issue No.01.Dt.01.02.2009, And.01Dt.25.05.2018

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218

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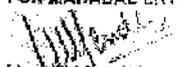
Continuation Sheet

Report No. 16331 Cont...

Parameter	Unit	Result	#NAAQM Standard	Method Reference
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide(CO)	mg/m <sup>3</sup>	1.84	4.0	IS 5182 (Part 10):1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<4	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	2.22	5.0	IS 5182 (Part 11): 2006
Benzo (a) Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.2	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	≤0.3	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	<3	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Remarks:</b> TWA - Time Weighted Average, # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead and Ammonia; 1 h. TWA in case of Carbon Monoxide, Ozone; Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.				
All above Parameter indicates Subcontracted testing.				

-END-

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Harish Mendhi  
 TECHNICAL MANAGER


Note:

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Page 2 of 2

QPS 101-B/Issue No.01, Dt.01.02.2009, And.G1Dt.25.05.2016

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra  
 (600 m from Hotel Rukhmani Palace Turn Opp Toyota Show Room, Next to Ashida Electrical - near J B Sawant Bus Stop)  
 Phone: 2582 0658 / 3139 / 1663 / 3154 Fax: 91-22-25823543 thane@mahabal.com

## Annexure-A

22

Report of CPCB and NEERI in compliance with order dated 07/9/2020 of the Hon'ble Supreme Court matter in the matter of IA No 53816 of 2020; Civil Appeal No.10582/2017; Ulhasnagar Municipal Corporation Versus Vanashakti Public Trust & Ors.

**INDEX**

1. INTRODUCTION
2. INSPECTION OF ULHAS AND WALDHUNI RIVERS
  - 2.1 PRESENT CASE STUDY AREA
  - 2.2 INDUSTRIAL ACTIVITIES AND CETP'S IN THE AREA
  - 2.3 MUNICIPAL CORPORATIONS AND MUNICIPAL COUNCILS
  - 2.4 MONITORING METHODOLOGY
  - 2.5 ANALYSIS METHODOLOGY
  - 2.6 OBSERVATIONS
  - 2.7 MONITORING RESULTS AND DISCUSSION
3. IDENTIFICATION OF UNITS CAUSING POLLUTION
  - 3.1 STATUS OF INDUSTRIES IN BADLAPUR; AMBERNATH; ADDITIONAL AMBERNATH, DOMBIVALI AND ULHASNAGAR
  - 3.2 CETPs AND ITS PERFORMANCE
  - 3.3 STPs AND THEIR PERFORMANCES
  - 3.4 IDENTIFICATION OF INDUSTRIAL UNITS CAUSING POLLUTIN BASED ON ETP SLUDGE AND OTHER CATEGORY OF HAZARDOUS WASTE GENERATION & THEIR MANAGEMENT
  - 3.5 IDENTIFICATION OF UNITS CAUSING POLLUTIN BASED ON FIELD INSPECTIONS
4. CONCLUSIONS
5. RECOMMENDATIONS IN REGARD TO THE STEPS REQUIRED TO BE TAKEN BY THE CONCERNED MUNICIPAL CORPORATIONS, REGULATORY BODIES AND UNITS TO REMEDY THE SITUATION
6. Annexures
7. Appendix

220

**Report of CPCB and NEERI in compliance with order dated 07/9/2020 of the Hon'ble Supreme Court matter in the matter of IA No 53816 of 2020; Civil Appeal No.10582/2017; Ulhasnagar Municipal Corporation Versus Vanashakti Public Trust & Ors.**

**1. INTRODUCTION**

In the matter of IA No 53816 of 2020; Civil Appeal No.10582/2017; Ulhasnagar Municipal Corporation Versus Vanashakti Public Trust & Ors., the Hon'ble Supreme Court vide order dated 07/9/2020 passed the following direction:

*"...6. The material which has been produced on record demonstrates that the situation warrants urgent and immediate remedial steps. There has been a failure of statutory bodies to discharge their responsibilities under the law. We direct CPCB and the NEERI to (i) inspect the Ulhas and Waldhuni rivers; (ii) identify the units causing pollution; and (iii) formulate recommendations in regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation. MPCB, the Department of Environment of the State of Maharashtra and all the concerned municipal corporations including the Municipal Corporations, or Councils as the case may be, of Ulhasnagar, Kalyan Dombivli, Kulgaon -Badlapur and Ambernath shall cooperate with the team of Commissioners appointed by this Court. The report shall be submitted within a period of three weeks from today. MPCB and the Department of Environment of the State of Maharashtra shall depute a team of officials to assist the Commissioners appointed by the court in the above terms. MPCB and the Department of Environment shall also immediately take remedial steps, including action against the defaulting units without waiting for the report of the Commissioners or for further directions of this Court. Logistical arrangements for the site visits, transportation and other incidental requirements of the team appointed by this court shall be made by MPCB and the Department of Environment. Costs, charges and expenses shall presently be borne by MPCB.*

*7. The Chief Engineer MIDC shall file a report in compliance with the previous order within a period of two weeks from today. The compliance report of MIDC and the report filed by MPCB shall be taken up on the next date. The court will also review whether compliance has been made of the time-lines set out in the previous order for the completion and commissioning of projects.*

*8. List on 7 October 2020."*

Copy of the said order dated 07/9/2020 of the Hon'ble Supreme Court is given at Annexure I.

In order to comply with aforesaid orders of the Hon'ble Supreme Court, team of CPCB and NEERI held a video conference on 13/9/2020 followed by inspection of Ulhas and Waldhuni rivers and inspection of 05 Common Effluent Treatment Plant(CETPs) and 47 industrial units during September 16-18, 2020 in catchment areas of the said rivers. 27 water samples from various

locations of the rivers/drains; 10 samples of CETP inlet/outlet effluent, and; 11 samples of industrial effluent from the inspected units were collected and analysed in the laboratory of NEERI. 05 samples of treated sewage from Sewage Treatment Plants were also collected and analysed in the laboratory of NEERI. The following officials from CPCB and NEERI participated in the said inspection of rivers/drains, CETPs and industrial units:

**Table 1: Officials from CPCB and NEERI participated in inspections-cum-sampling of rivers/drains, CETPs, STPs and industrial units during September 16-18, 2020 and prepared this report**

Officials from CPCB		Officials from NEERI	
1.	Sh. Bharat Kumar Sharma Regional Director, Regional Directorate Pune	1.	Dr. Nitin Goyal Scientist-in-Charge, Mumbai Zonal Centre, CSIR-NEERI (Overall Co-ordinator of NEERI team)
2.	Shri Shashikant Lokhande, Scientist 'E'	2.	Dr. Tuhin Banerji
3.	Shri S. Pradeep Raj, Scientist 'D'	3.	Dr. Kumar Amrit
4.	Shri Nishchal C., Scientist 'D'	4.	Mrs. Arti Soni
5.	Dr. Nirpendra Semwal, Scientist 'C'	5.	Mrs. Komal Kalawapudi
6.	Shri Vishal Madhukar Bhandare Office Asst. (Scientific)	6.	Mr. Swapnil Dudhwadkar
		7.	Mr. Ojaswikrishna Dube

Officials from MPCB assisted the above teams of CPCB and NEERI during the aforesaid visits during September 17-18, 2020.

Information about hazardous waste generating units sending their Effluent Treatment Plant (ETP) sludge and other hazardous wastes to common Hazardous Waste Treatment, Storage, Disposal Facility (CHWTSDF) were also gathered so as to identify units causing pollution.

A meeting through video conference was also held with officials from MPCB and MIDC on 24/9/2020. This report outlines observations/findings during inspections of the aforesaid Ulhas and Waldhuni rivers; identification of units causing pollution, and; recommendations in regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation.

## 2. INSPECTION OF ULHAS AND WALDHUNI RIVERS

### 2.1 PRESENT CASE STUDY AREA

Ulhas River in the study area flows through Badlapur where it receives run-off from Chikhiloli Dam. Ulhas River meets Barvi River (water discharged from Barvi Dam) near water intake structure at Jambhul waterworks. From here on, the river flows for about 15 KM where Mohane

222

Dam is constructed. The river flows through Ulhasnagar in Thane district. Water is lifted for drinking water supply by Municipal Corporations and also by Maharashtra Industrial Development Corporation (MIDC) from Mohane dam. Mohane Dam overflows during monsoon only. During winter and summer entire water available in the dam is utilised for water supply. The Ulhas River serves about 532 MLD water to fulfil the need of Municipal Corporations and MIDC. Beyond this point the saline zone of Ulhas river starts and it merges with the creek water.

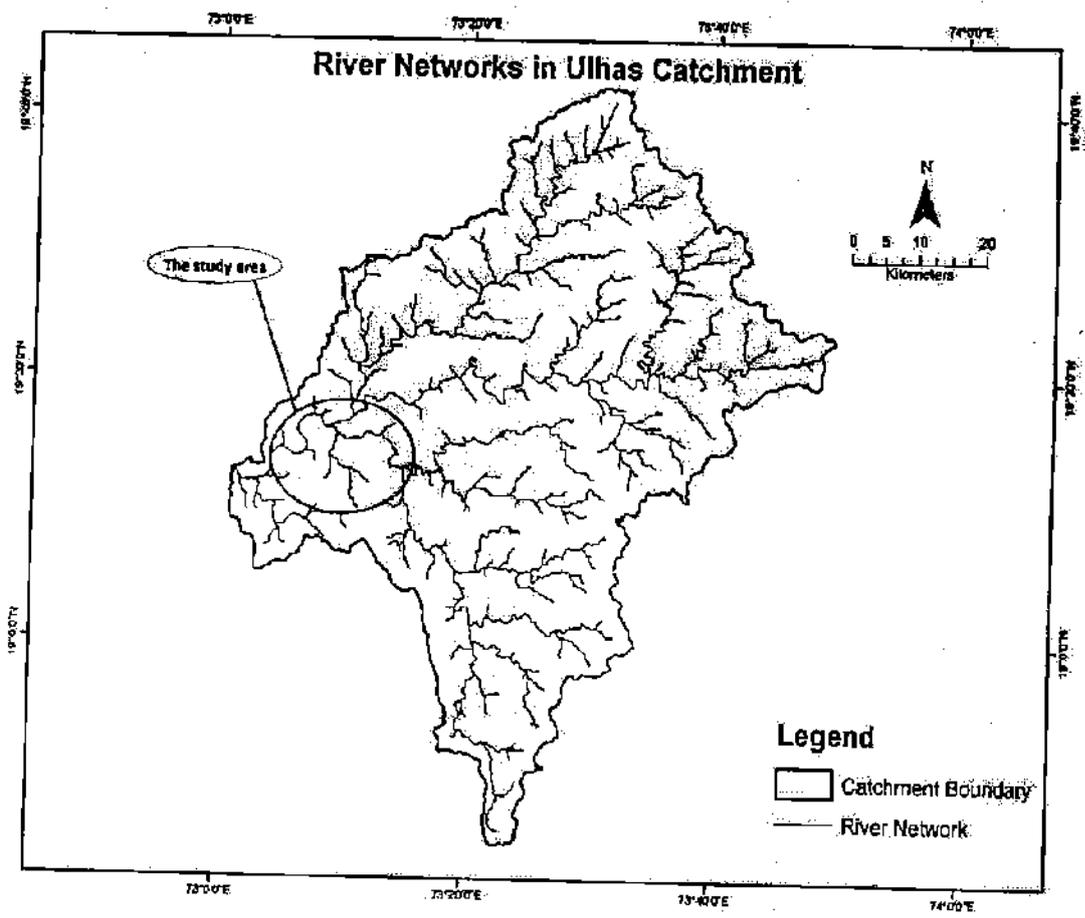
It then passes under the rail bridge connecting Ambivali and Shahad meeting with its tributary Waldhuni river and shortly after confluences with its biggest tributary formed by merging of Bhatsa River and Kalu River which together account for 55.7% of total catchment area of Ulhas River. Beyond Kalyan, nearly flowing at sea level, Ulhas River merges with the Vasai creek where its flow is influenced by tidal forces. From here on it forms an estuary and supports a mangrove forest near Reti bunder and beyond. The total length of the river from its origin in Western Ghats to its outfall in the Arabian Sea is 122 km. However, the length of Ulhas River in the study area is approximately 60Km.

Waldhuni River originates from Greater Indian Peninsula (GIP) dam, meets the Ulhas River saline zone after Mohane Dam. It passes mainly through Ambernath Municipal Council, Ulhasnagar Municipal Corporation and MIDC industrial areas of Additional Ambernath, Ambernath and Badlapur in its catchment area. Waldhuni River carries treated/untreated sewage from Ambernath Municipal Council, Badlapur Municipal Council and Ulhasnagar Municipal Corporation and also treated industrial effluent discharges from the CETPs in the area before joining the saline zone of Ulhas river after Mohane dam and its entire stretch is about 32 kms. The Waldhuni River bank has maximum encroachment from Ulhasnagar on the east and Ashok nagar and Shivaji nagar in Kalyan on the west of its bank.

Based on the above information, the study area were considered in two stretches:

- (a) Ulhas river stretch ie. overflow of Mohane Dam at Kalyan-Shahad road bridge, Kalyan, Thane district, till about 100 m downstream of Ganesh Ghat of saline zone of Ulhas river;
- (b) Waldhuni river stretch near its origin in GIP Dam including its other branches up to its confluence with saline zone of Ulhas river.

The study area is also shown in dark blue lines in Figure 1 encircled in green.



**Figure 1: Ulhas River catchment and the study area**

(Source: Assessment of Pollution Load in Ulhas River Catchment and Preparation of Action Plan for Control of Water Pollution of River Ulhas, River Waldhuni and Ulhas Creek, 2016)

**2.2 INDUSTRIAL ACTIVITIES AND CETP'S IN THE AREA** (Discussed in detail in subsequent sections)

The Maharashtra Industrial Development Corporation (MIDC) has developed industrial areas like Badlapur, Ambernath, Additional Ambernath, and Dombivali Phase-I & Phase II which are located in the study area and Common Effluent Treatment Plants (CETPs) for treatment of industrial wastewater generated from the industries are also operated. The CETPs located in Ambernath & Badlapur areas (04 CETPs) discharges their treated effluent in Waldhuni River.

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224

Whereas two CETPs located in Dombivali area discharge their treated effluent in Ulhas River through Khamadpada Nallah.

### 2.3 MUNICIPAL CORPORATIONS AND MUNICIPAL COUNCILS

The Municipal Councils of Ambarnath, Kulgaon-Badalapur and Municipal Corporation of Ulhasnagar discharges their treated and untreated domestic wastewater (sewage) in to Waldhuni River and Municipal Corporation of Kalyan Dombivali discharges their treated untreated domestic wastewater into the saline zone of Ulhas river.

### 2.4 MONITORING METHODOLOGY

In order to assess the influence of wastewater (domestic and industrial) in the aforesaid study area, two groups of samples were considered viz.

Group 1: Ulhas – Waldhuni River and Nallahs flowing into both the rivers as tributaries

Group 2: CETP, STP and Industrial Effluent samples

Total 53 (27 in Group 1 and 26 in Group 2) points were selected for monitoring. The coordinates of sampling locations of Group 1 are provided in the Table 2. All the sampling locations are also shown in Google Map in Figure 2, Figure 2A and Figure 2B.

### 2.5 ANALYSIS METHODOLOGY

The parameters like temperature, pH and conductivity were measured onsite with the portable meters. To analyze physicochemical parameters, samples were collected separately and preserved at the site and transported to NEERI-Mumbai Zonal Centre. All the water parameters were analyzed using standard protocol "Standard Methods for the Examination of Water and Wastewater (APHA)" 21st Edition. Certain tests, such as Faecal Coliform/Total Coliform, Ammonical nitrogen, Phenolic compounds, Heavy metals, etc., could not be performed due to paucity of time.

Table 2: Rivers / Nallah Sampling points

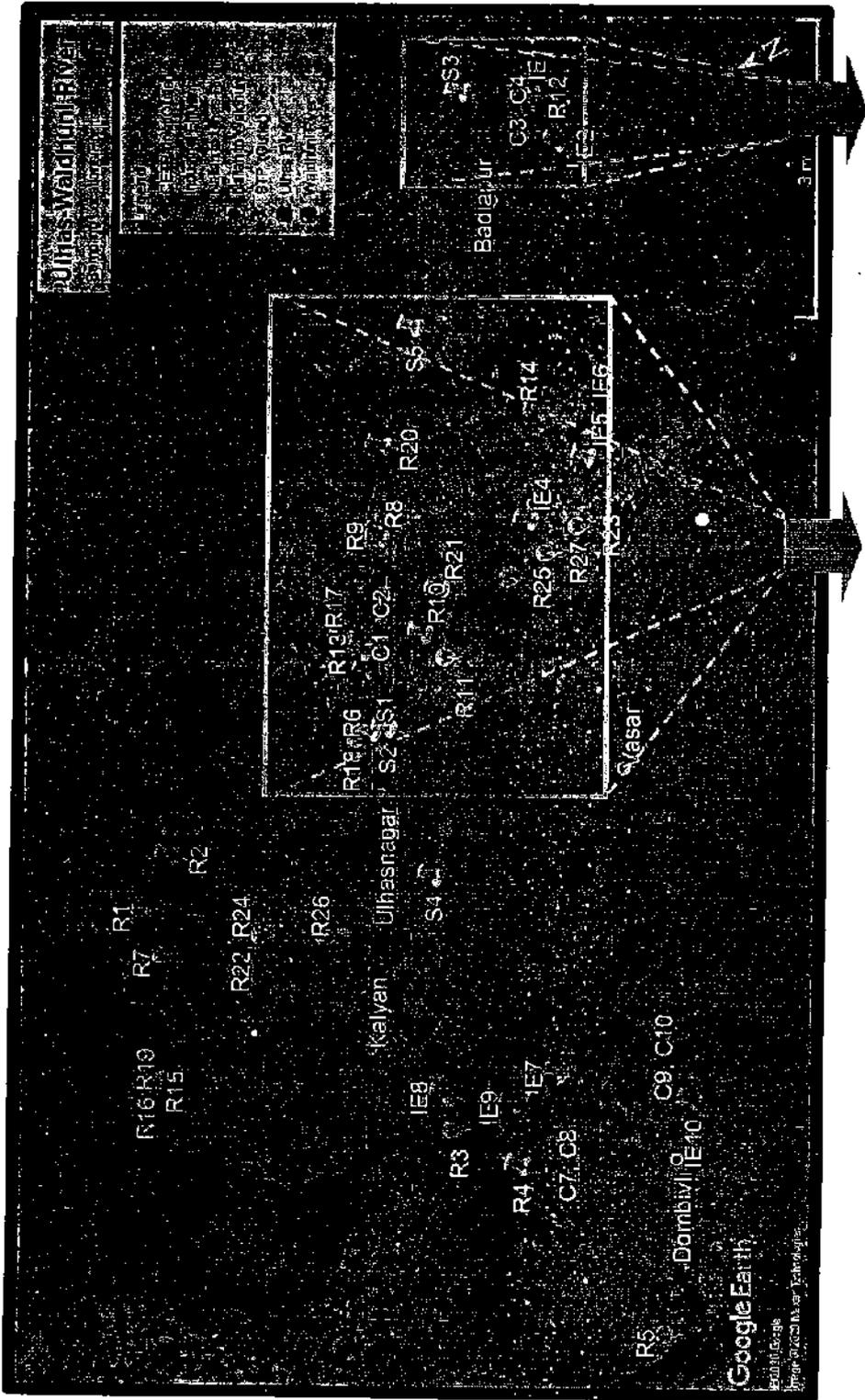
Sr. no.	Location Name / Sample Name	Latitude	Longitude	Sampling Date	Remarks	Sample Code	Area
1	Ulhas River (Mohane Road river bridge, Shahad)	19°15'23.15"N	73°08'50.56"E	17-09-20	CPCB Point A1 (old report), Ulhas River	R1	Shahad
2	Khemani nallah MIDC, Shahad	19°14'59.90"N	73°10'07.89"E	17-09-20	CPCB Point A2 (old report), Nallah to Ulhas River	R2	Shahad
3	Ulhas River (Kachore Ganesh Ghat, Kalyan (E))	19°13'55.96"N	73°06'43.19"E	17-09-20	CPCB Point B1 (old report), Ulhas River	R3	Kalyan
4	Khambal Pada nallah, Thakurl	19°13'38.33"N	73°06'6.94"E	17-09-20	CPCB Point B2 (old report), Downstream to DBESA CETP, Nallah to Ulhas River	R4	Thakurl
5	Ulhas River (Ganesh Ghat, Dombivli (W))	19°13'09.9"N	73°04'08.6"E	17-09-20	CPCB Point B3 (old report), Ulhas River	R5	Dombivli
6	Waldhuni River (Vadol, Ulhasnagar)	19°13'02.53"N	73°10'18.73"E	17-09-20	CPCB Point C1 (old report), Downstream to ACMA CETP, Waldhuni River	R6	Ulhasnagar
7	Waldhuni River (before Confluence to Ulhas river)	19°15'24.16"N	73° 9'23.19"E	17-09-20	Waldhuni river (Confluence before Ulhas River)	R7	Shahad
8	Random nallah 1, Morvati MIDC, Ambarnath	19°12'06.75"N	73°11'48.84"E	17-09-20	Downstream to Chikhli-Morvati CETP discharge point, Nallah to Waldhuni River	R8	Ambarnath
9	Random nallah 2, Morvati MIDC, Ambarnath	19°12'05.38"N	73°11'51.86"E	17-09-20	Reddish-orange colour industrial discharge to point R8, Nallah which meets Waldhuni River	R9	Ambarnath
10	Govind Puff, Ambarnath	19°12'11.32"N	73°10'51.22"E	17-09-20	Nallah to Waldhuni river	R10	Ambarnath
11	Waldhuni River (Shiv Mandir, Ambarnath)	19°12'02.17"N	73°10'35.38"E	17-09-20	Waldhuni river	R11	Ambarnath
12	Near Badlapur CETP, Badlapur	19°08'09.16"N	73°14'46.72"E	17-09-20	Downstream of Badlapur CETP discharge point, Nallah to Ulhas River	R12	Badlapur
13	Ambarnath rollover bridge, Ambaranth	19°12'42.60"N	73°10'58.90"E	17-09-20	Morvati (R8) and Tehsildar (R17) nallah downstream, Nallah to Waldhuni River	R13	Ambarnath
14	Anandnagar additional MIDC, Ambarnath	19°10'24.12"N	73°12'08.14"E	17-09-20	Duct outside Rubicon Research P.L. Ltd.	R14	Ambarnath
15	Ulhas River (Sandhari Bridge, Kalyan)	19°16'04.80"N	73°08'25.70"E	17-09-20	100m downstream of Bhatsa and Ulhas River confluence, Kalyan sapa road, Ulhas River	R15	Kalyan
16	Ganesh Ghat, Kalyan	19°16'01.76"N	73°08'22.42"E	17-09-20	Sewage flowing into Ulhas river, Nallah to Ulhas River	R16	Kalyan
17	opp. Tehsildar office nallah, Ambarnath	19°12'47.76"N	73°11'09.68"E	17-09-20	Nallah to Waldhuni river	R17	Ambarnath
18	Random nallah 3, Vadol, Ulhasnagar	19°13'02.53"N	73°10'18.73"E	17-09-20	Blue colour industrial discharge to point R6, Discharge directly in Waldhuni River	R18	Ulhasnagar
19	Ulhas River (Ganesh Ghat downstream) Near Ganesh Ghat	19°16'33.36"N	73° 8'19.21"E	16-09-20	100m downstream of Ganesh Ghat, Ulhas River	R19	Kalyan
20	Random nallah 4, Jeena wash area	19°11'43.28"N	73°12'33.33"E	16-09-20	Reddish-orange colour effluent, Nallah to Waldhuni River	R20	Ambarnath
21	MIDC Road	19°11'52.35"N	73°11'08.46"E	16-09-20	Nallah to Waldhuni River	R21	Ambarnath
22	Waldhuni River (Shahad Bridge, Shahad)	19°14'34.48"N	73°08'06.79"E	16-09-20	Downstream to Century Rayon, Waldhuni River (1st time Sampling on 16/09/20)	R22	Shahad
23	Waldhuni River (near GIP Dam, Ambarnath)	19°10'30.4"N	73°11'04.0"E	17-09-20	Waldhuni River Origin point	R23	Ambarnath
24	Waldhuni River (Shahad Bridge, Shahad)	19°14'34.48"N	73°08'06.79"E	17-09-20	CPCB Point C2 (old report), Waldhuni River, (2nd time Sampling on 17/09/20)	R24	Shahad
25	Waldhuni River (Pipeline Road, Ambarnath)	19°11'14.5"N	73°10'56.7"E	17-09-20	Waldhuni River	R25	Ambarnath
26	Waldhuni River (Regency Plaza)	—	—	17-09-20	Waldhuni River (Sampling done by CPCB officials)	R26	—
27	Waldhuni River (Vridheshram)	—	—	17-09-20	Waldhuni River (Sampling done by CPCB officials)	R27	—

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226

Table 3: STP treated wastewater sampling points

Sr. no.	Location Name / Sample Name	Latitude	Longitude	Sampling Date	Remarks	Sample Code	Area
1	Ambernath STP	19°12'59"N	73°10'17"E	18-09-20	STP Outlet, Outlet directly in Wadhuni River	S1	Ulhasnagar
2	Vaddi STP	19°12'51"N	73°10'15"E	18-09-20	STP Outlet, Outlet directly in Wadhuni River	S2	Ulhasnagar
3	Badapur STP	19°09'40"N	73°13'05"E	18-09-20	STP Outlet, Outlet directly in Ulhas River	S3	Badapur
4	Chinchpada STP	19°13'07"N	73°08'50"E	18-09-20	STP Outlet, Outlet on Nallah which meets Wadhuni River	S4	Kalyan
5	Chikhlor STP	19°10'56.6"N	73°13'23.0"E	18-09-20	STP Outlet, Outlet on Nallah which meets Ulhas River	S5	Badapur



Refer to Fig. 2A

Refer to Fig. 2B

Figure 2: Map of sampling location points for Ulhas – Waldhuni and nallahs emptying in to both the rivers, STP, CETP and Industrial effluent (within the Industrial premises) sampling points

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228



Figure 2A: Map of sampling location points for Ulhas – Waldhoni and nallahs emptying in to both the rivers, STP, CETP and Industrial effluent (within the industrial premises) sampling points

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Figure 2B: Map of sampling location points for Ulhas – Waldhuni and nallahs meeting into both the rivers, STP, CETP and Industrial effluent (within the industrial premises) sampling point

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230

## 2.6 OBSERVATIONS

- (i) The drain namely Khemani nallah meets the Ulhas River at the upstream of Mohane dam. The Khemani Nallah carries sewage and may also carry other discharges, if any, from Ulhasnagar Area. The Ulhasnagar Municipal Corporation has established a pumping station to pump the wastewater from Khemani nallah before it meets the Ulhas river drinking water intake and discharges it into Waldhuni River.
  - (ii) During visit the pumping station was operational (with two 150 hp pumps and one 80hp pump). The pumping station is having power backup/DG set to pump continuously in case of power failure. High flow during monsoon from Khemani Nallah meets the River and Ulhasnagar Municipal Corporation has not made provision for collection of effluent in case of overflows.
  - (iii) Littering of solid wastes were found in Waldhuni river stretches and various Khemani nallah, Ambika nallah, nallahs at Vadol, etc.
  - (iv) Leachate, from municipal solid waste dumpsite near railway overbridge, Chikhloi, Ambernath, was observed flowing into nallah meeting Waldhuni river.
- Mumbai monsoon season was ongoing when the sampling of rivers/drains has been carried out and the inferences drawing are from the observations and sampling results of this period only. Photographs taken during field visits are given in Appendix.

## 2.7 MONITORING RESULTS AND DISCUSSION

### Nallahs meeting to Waldhuni river:

- (i) Analysis results of 09 nallahs' samples collected at various locations reveal that the sampled water has pH range 6.7 to 7.7 except R9 and R18 samples which has pH value of 2.3 and 1.8 respectively. All the samples have presence of oil & grease and significant COD and BOD concentration. Most of these nallahs pass through MIDC industrial areas of Ambernath, Additional Ambernath and Badlapur and the said analysis results reveal that industrial effluent is also discharged into nallahs which meets Waldhuni river.

**Waldhuni River:**

- (i) Analysis results of 08 samples collected at various locations of Waldhuni river on 17/9/2020 reveal that the sampled water has pH range 6.4 to 7.2. Analysis results of R23 sample which is upstream of Waldhuni river and other subsequent downstream samples of the river reveal impact of BOD and COD in all the samples and DO is 0 - 0.6 mg/l in three of the analysed samples. Further, one sample i.e. R-22 taken near Shahad bridge on 16/9/2020 was having pH 6.6, BOD as 140 mg/l and COD 410 mg/l. Such findings reveal that there is impact of treated sewage/industrial effluent discharge from STPs and CETPs and also untreated sewage from various municipal corporation/council areas as well as untreated industrial effluent discharge from various MIDC areas in to Wadhuni river.
- (ii) When compared with MPCB Water Quality Standards for best designated usage A-III (Not fit for human consumption, fish & wildlife propagation); and CPCB Standards for Designated Best Use; Class D (Propagation of Wildlife and fisheries), the Waldhuni river does not meet the said usages for human consumption or fish & wildlife propagation or both in terms of O & G and BOD parameters at respective monitored locations. Further, DO is also not meeting the said usages criteria at the three monitored locations.

**Nallahs meeting to Ulhas river**

- (i) The analysis results of water samples of 03 nallahs R4, R12 and R16) meeting into saline zone of Ulhas river shows pH in the range of 5.7 – 7.5; DO in the range of 0-2 mg/l; BOD in the range of 54-105 mg/l and COD in the range of 149-491 mg/l. However, results of PH as 5.7; oil & grease 26; BOD as 105 mg/l and COD as 491 mg/l in R4 sample i.e. Khambalpada nallah passing through Dombivali MIDC areas reveal that industrial effluent is also discharged into nallahs which meets saline zone of Ulhas river .
- (ii) The analysis result of the R2 sample collected from the Khemani Nallah reveals that the Nallah is having organic load with BOD 15 mg/l and COD 60 mg/l in the samples collected. Color of water sample was pale yellow and oil & grease was found 30. It reveals that



232

besides untreated sewage, there are possibilities of effluent from industrial and commercial activities in the catchment of Kemani nallah mainly in Ulhasnagar area.

Ulhas river

- (i) The analysis results of R1 sample (i.e. at Mohane road overbridge, Shahad, which is downstream from Mohane dam) shows pH as 6.9, DO as 3.4 mg/l, BOD as 46 mg/l and COD as 152 mg/l. The analysis results of the other 04 water samples (R15; R19; R3 and R5 at various downstream locations of R1 sample location) does not reveal incremental effect in monitored parameters towards the downstream. This may be due to tidal effect of the sea. However, lower pH and higher COD at R1 as compared to the othr downstream sampling locations of Ulhas river may infer that Ulhas river has effect due to treated/untreated sewage and industrial effluent from Waldhuni river.

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233

Table 3: River / Nallah samples analysis data

Sample Code	pH	EC (mS/cm)	EC (µS/cm)	TDS (EC)	TDS (Probe) (ppm)	TSS (mg/L)	Sulphate (mg/L)	Phosphate (mg/L)	Nitrate (mg/L)	Chloride (mg/L)	DO (mg/L)	O & G (mg/L)	BOD (mg/L)	COD (mg/L)	Turbidity (NTU)	Colour
MPCR Standard	6.5 - 8.5	—	—	—	—	—	—	—	—	—	> 3.0	0.1	10	—	—	—
CPCB Standard	6.5 - 8.5	—	—	—	—	—	—	—	—	—	> 4.0	—	< 2.0	—	—	—
R1	6.9	0.1771	177	97	86	16	31.6	2.3	0.30	7	3.4	9	46	152	13	No colour
R2	6.8	0.4458	446	245	215	30	78.9	0.5	1.50	21	0.2	30	15	60	43	Pale yellow
R3	7.0	0.2948	285	157	140	22	75.8	1.4	0.89	16	1.3	23	50	144	47	No colour
R4	5.7	2.1380	2133	1173	1054	22	195.6	0.1	1.56	262	0.0	26	105	481	97	Black
R5	7.3	0.4389	439	242	214	30	4.3	0.6	1.56	43	1.0	19	11	28	62	Light grey
R6	6.9	1.1480	1149	632	560	34	22.3	0.7	7.02	128	0.5	20	49	145	52	Light grey
R7	6.4	1.1900	1190	655	583	18	12.6	1.0	0.19	138	0.6	10	72	246	48	Light Green
R8	6.8	4.0380	4038	2221	1969	192	1042.0	1.1	0.33	674	0.9	13	285	790	81	Dark grey
R9	2.3	7.2750	7275	4001	3761	22	810.0	1.2	0.19	177	0.0	7	125	354	41	Orange
R10	7.1	0.8333	833	458	412	26	148.4	1.9	1.42	64	0.4	9	48	133	48	Dark grey
R11	7.2	0.8818	882	485	312	26	276.2	2.1	1.77	46	0.0	56	56	117	48	Yellowish-Orange
R12	7.2	2.9100	2910	1601	1362	110	361.3	1.8	0.04	408	2.0	45	73	229	39	Light green
R13	6.7	6.9989	7000	3650	3698	24	1572.0	3.4	15.83	223	1.0	42	59	163	53	Yellowish-Orange
R14	7.7	8.1390	8139	4476	4157	16	2281.0	1.6	0.28	7	0.0	27	345	682	78	Black
R15	8.1	0.1803	180	99	80	28	26.2	1.3	0.12	38	3.5	10	27	71	32	No colour
R16	7.5	0.6173	617	340	311	12	70.0	2.7	7.01	35	1.3	2	54	148	40	No colour
R17	7.3	0.5848	585	322	300	32	275.7	2.0	5.38	35	0.8	12	49	157	35	No colour
R18	1.8	19.2600	19260	10593	251	44	120.3	1.2	0.84	46	0.6	9	60	224	51	Blue
R19	7.7	0.6098	610	335	458	14	14.1	0.6	0.07	32	0.8	21	37	117	41	No colour
R20	7.3	1.7740	1774	976	538	10	62.4	0.7	0.10	312	3.4	3	47	133	40	Orange
R21	7.1	0.9036	904	497	311	16	57.4	2.3	0.10	96	0.4	10	48	218	42	Light grey
R22	6.6	1.0660	1066	588	800	12	78.3	2.9	0.30	135	0.4	12	140	410	45	Light green
R23	6.8	0.161	161	89	488.4	2	BDL	0.5	BDL	BDL	-	13	16	25	33	No colour
R24	6.8	0.9046	905	488	485.9	38	BDL	1.0	0.56	213	-	31	62	141	64	Grey
R25	7.2	0.3724	372	205	196.4	2	50.5	0.5	0.29	803	-	151	31	63	36	Light yellow
R26	6.9	0.9288	928	511	491.1	12	BDL	BDL	0.48	177	-	99	40	100	53	Light green
R27	7.2	0.3431	343	189	181.6	8	26.5	0.1	0.27	248	-	140	14	35	13.7	No colour

# MPCB Water Quality Standards for best designated usage; # All (Not fit for human consumption, fish & wildlife propagation)

\* CPCB Standards for Designated Best Use; Class D (Propagation of Wildlife and Fisheries)

- Could not be analysed due to paucity of time

BDL: Below Detection Limit

NE

BD

234

### 3. IDENTIFICATION OF UNITS CAUSING POLLUTION

#### 3.1 STATUS OF INDUSTRIES IN BADLAPUR; AMBERNATH; ADDITIONAL AMBERNATH, DOMBIVALI AND ULHASNAGAR

There are 2216 industrial units in Badlapur; Ambernath; Additional Ambernath, Dombivali and Ulhasnagar area of which 741 are Red category and 230 Orange category industry. Status of industries in Badlapur; Ambernath; Additional Ambernath, Dombivali and Ulhasnagar area, as reported by MPCB, is given in Table 3 to 7 below:

**Table 3: Types of industries in Ambernath area and their waste water management**

Ambernath area Chemical Zone, Ambernath, Chikholi & Morivali MIDC, Ambernath						
Sl. No.	Size of the industry		Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		11	11	1	0
2.	Medium Scale Industry (MSI)		02	2	0	0
3.	Small Scale Industry (SSI)		178	47	137	72
4.	<b>Total</b>		<b>191</b>	<b>60</b>	<b>138</b>	<b>72</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	3	0	0	0
		Discharging to CETP	94	9	0	0
		Discharging to Waldhuni river/creeks/saline zone	0	0	0	0

- (a) Red category industries in Ambernath mainly comprises of Textile, API, Dyes & Dye intermediate, organic chemical and inorganic chemical, packing & repacking.
- (b) Orange category industries in Ambernath mainly comprises of Packing / Repacking, Pharma formulation, food industry & engineering with painting etc.
- (c) Green category industries in Ambernath mainly comprises of engineering & Plastic.
- (d) White category industries in Ambernath mainly comprises of fabrication.

**Table 4: Types of industries in Additional Ambernath area and their waste water management**

Sl. No.	Size of the industry		Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		29	11	0	0
2.	Medium Scale Industry (MSI)		10	5	2	0
3.	Small Scale Industry (SSI)		136	87	410	116
4.	<b>Total</b>		<b>175</b>	<b>103</b>	<b>412</b>	<b>116</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	80	25	0	0
		Discharging to CETP	0	0	0	0
		Discharging to Waldhuni river/creeks/saline zone	0	0	0	0

- (a) Red category industries in Additional Ambernath mainly comprises of organic chemical and inorganic chemical, API, Dyes & Dye intermediate.

- (b) Orange category industries in Additional Ambarnath mainly comprises of Packing / Repacking, Pharma formulation, food industry & engineering with painting etc.
- (c) Green category industries in Additional Ambarnath mainly comprises of- engineering.
- (d) White category industries in Additional Ambarnath mainly comprises of- fabrication

**Table 5: Types of Industries in Badlapur area and their waste water management**

Sl. No.	Size of the industry	Category of Industry				
		Red	Orange	Green	White	
1.	Large Scale Industry (LSI)	4	4	0	0	
2.	Medium Scale Industry (MSI)	3	0	1	0	
3.	Small Scale Industry (SSI)	183	19	75	29	
4.	<b>Total</b>	<b>190</b>	<b>23</b>	<b>76</b>	<b>29</b>	
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	01	0		
		Discharging to CETP	112	6	0	0
		Discharging to Waldhuni river/creeks/saline zone	0	0	0	0

- (a) Red category industries in Badlapur mainly comprises of Textile, API, organic chemical and inorganic chemical, Dyes & Dye intermediate.,
- (b) Orange category industries in Badlapur mainly comprises of Pharma formulation & engineering with painting etc.
- (c) Green category industries in Badlapur mainly comprises of engineering.
- (d) White category industries in Badlapur mainly comprises of fabrication.

**Table 6: Types of industries in Dombivali area and their waste water management**

Sl. No.	Size of the industry	Category of Industry				
		Red	Orange	Green	White	
1.	Large Scale Industry (LSI)	07	01	01	00	
2.	Medium Scale Industry (MSI)	10	03	01	00	
3.	Small Scale Industry (SSI)	162	23	166	00	
4.	<b>Total</b>	<b>179</b>	<b>27</b>	<b>168</b>	<b>90</b>	
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	14	01	NA	00
		Discharging to CETP	165	09	NA	00
		Discharging to Waldhuni river/ creeks/saline zone	Nil	Nil	NA	00

- (a) Red category industries in Dombivali mainly comprises of Textile, API, Dyes & Dye Intermediate, organic chemical and inorganic chemical.
- (b) Orange category industries in Dombivali mainly Engineering units.
- (c) Green category industries in Dombivali mainly comprises of Engineering & Plastic.
- (d) White category industries in Dombivali mainly comprises of – Fabrication & Assembling.

*PS*

*dt*

**Table 7: Types of Industries in Ulhasnagar area and their waste water management**

Sl. No.	Size of the Industry		Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		1	3	0	0
2.	Medium Scale Industry (MSI)		0	0	0	0
3.	Small Scale Industry (SSI)		5	14	36	8
4.	<b>Total</b>		<b>6</b>	<b>17</b>	<b>36</b>	<b>8</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	1	0	0	0
		Discharging to CETP	0	0	0	0
		Discharging to Waidhuni river/creeks/saline zone	1		0	0

- (a) Red category industries in Ulhasnagar mainly comprises of Textile / chemical.  
 (b) Orange category industries in Ulhasnagar mainly comprises of food industry etc.  
 (c) Green category Industries in Ulhasnagar mainly comprises of Plastic moulded Items.  
 (d) White category Industries in Ulhasnagar mainly comprises of fabrication.

### 3.2 CETPs AND ITS PERFORMANCE

The following five operational CETPs in Dombivali, Ambernath and Badalapur were monitored on 17.09.2020:

- (i) M/s. Badlapur CETP Association; Plot No. OS-4, MIDC Badalapur, Dist. Thane
- (ii) M/s Chikholi-Morivali Effluent Treatment; Plot No. P-17, MIDC Morivali, Ambernath, Dist. Thane
- (iii) M/s ACMA - CETP-Co-operative Society Ltd.; Plot No. W-30, MIDC Chemical zone, Ambernath (W), Dist. Thane
- (iv) M/s Dombivali Better Environment System Association (DBESA); Plot No. OS-08, Opp Telephone Exchange, MIDC Phase - I, Dombivali (E), Dist. Thane
- (v) M/s Dombivali CETP (Chemical) (Phase-II); Plot No. R-4/2 MIDC Phase II, Opp. W-40, Dombivali (E), Dist. Thane

One CETP viz. M/s Ambernath MIDC CETP; Plot no. AM-13, Opp. Fire station, MIDC Additional Ambernath, Tal. Ambernath, Dist. Thane, is not operational due to closure direction issued by MPCB on 02.07.2016. Inspection report is given at Annexure-II.

**OBSERVATIONS**

- (a) The CETPs in Badlapur, Dombivali phase-I and Phase-II receives effluent from their member industries through underground pipeline of MIDC and the ACMA CETP and the Chickloli Morivali CETP received effluent from their member industries through tankers.
- (b) The CETPs receiving effluent through pipelines does not have flow meters in their inlets to measure the quantity of the effluent being received from the member industries and does not have any flow measuring device or online monitoring system to monitoring the quality of the effluent being received by the CETP. The CETPs are manually collecting samples at their inlet and analyzing for basic parameters on regular basis.
- (c) The CETPs receiving effluent from the member industries through tankers maintains record of the tankers including the quantity received on daily basis and also carry out analysis of the effluent samples for basic parameters in their in-house laboratory to ensure compliance of quality of effluent being received from the member industries to meet the CETP inlet norms.
- (d) The CETPs receiving effluent from their member industries through the MIDC pipelines does not have efficient mechanism to check/ ensure the quality and quantity of the effluent being discharged by the member industries to meet the CETP inlet norms.

However, it was gathered from the discussion with CETPs/ MPCB personnel that the CETPs which are receiving effluent through pipelines receives shock loads at many occasions which disturbs the performance of CETP operation.

- (e) All the 05 operational CETPs were monitored and analysis results of the samples collected from the outlet of CETPs are compared with the discharge standards prescribed by MPCB and the same is given in the table below:



238

Table 8: Analysis results of the samples collected from the outlet of CETPs

	Monitored CETPs					Discharge Standards of MPCB*
	Badlapur CETP Association	Chikhli-Morivali Effluent Treatment	ACMA - CETP-Co-operative Society Ltd.	Dombivali Better Environment System Association	Dombivali CETP (Chemical) (Phase-II)	
Capacity	8 MLD	0.8 MLD (800 m <sup>3</sup> /day)	0.25 MLD (250 m <sup>3</sup> /day)	16 MLD	1.5 MLD	
Area served	Badlapur MIDC	MIDC Ambarnath and Morivali	MIDC Ambarnath Chemical Zone	About 11.5 MLD from Dombivali MIDC Phase I and about 4.5 MLD from Dombivali IDC Phase II	Dombivali MIDC Phase II	
Parameters	Analysis results of the samples collected from the outlet of CETPs					
pH	7.7	7.6	6.1	7.1	7.4	6.0-9.0
TSS	500	300	100	100	100	100
TDS	6056	1366	1555	4401	4744	--
BOD	300	38	44	41	37	30
COD	1632	153	227	332	336	250
Sulphate	906.5	140.5	25.5	725	2387	1000
Phosphate	6	4.5	0.5	BDL	3.5	5
Nitrate	8.92	19.10	3.49	0.64	1.26	10
Chloride	1879	851	993	1418	1276	1000
Sulphide	136	20	24	24	16	2
O & G	35	14	18	7	23	20 (10**)
Colour	Dark Green	Light Yellow	No colour	Light Pink	Orange	

Note: All the values are reported in mg/l except pH

\*Discharge standards prescribed in consent issued by MPCB.

\*\* Standard for O&G is 10 mg/l as amended vide MoEF notification GSR- 739 R dated 09.09.2010.

(f) The analysis results of the samples collected from the outlet of all the CETPs reveals that all the CETPs in the region are not meeting the discharge norms prescribed by MPCB for any one or the other monitored parameters. The discharge limit of 30mg/L for the parameter BOD and 2mg/L for sulphide are not achieved by any of the CETPs. The COD and Chloride concentrations in the higher capacities CETPs (CETP of Badlapur, DBESA CETP and Dombivali CETP). The TSS concentration in the treated effluent of Badlapur CETP and Chikhli Morivali CETP are not exceeding the discharge standards.

The Oil & Grease concentrations in the samples collected from all the CETPs are exceeding the discharge norms except the CETP of DEBSA. The sulphate concentration is very much high in the treated effluent sample collected from Dombivali CETP. The treated effluent samples collected from all the CETPs have visible colour except ACMA CETP.

- (g) The treated effluent from the CETPs are presently not being disposed at the point/location as per the condition prescribed in the Consent issued by MPCB. MPCB has recommended for disposal of the treated effluent in the point specified by National Institute of Oceanography (NIO). The details of current discharging points of treated CETP effluent vis-à-vis conditions stipulated under the "consent to operate" by MPCB are given in the table below:

Table 9: Details of current discharging points of treated CETP effluent vis-à-vis conditions stipulated under the "consent to operate" by MPCB

Name of the CETP	Condition prescribed in Consent issued by MPCB for disposal	Present disposal point/ location
M/s. Badlapur CETP Association; MIDC Badalapur	Marine Coastal Area at a point to be specified by NIO.	In Waldhuni nallah near Railway Railway over Bridge (ROB) at Forest Naka Ambernath which joins the Waldhuni River
M/s Chikhloii-Morivali Effluent Treatment; Ambernath	Waldhuni River, at a point to be specified by NIO	In a drain passing adjacent to the CETP and the drains discharges into Waldhuni River.
M/s ACMA - CETP-Co-operative Society Ltd.; MIDC Chemical Zone, Ambernath	Marine Coastal Area at a point to be specified by NIO	In a drain passing adjacent to the CETP and the drains discharges into Waldhuni River.
M/s Dombivali Better Environment System Association (DBESA); MIDC Phase - I, Dombivali (E)	Marine Coastal Area at a point to be specified by NIO	In Khamadpada Nallah near Railway Bridge at Thakurli. This nallah meets saline zone of Ulhas river at distance of about 500m downstream
M/s Dombivali CETP (Chemical) (Phase-II); MIDC Phase II, Dombivali (E)	Ulhas Creek at a point to be specified by NIO	The treated effluent from CETP is pumped to MIDC treated effluent sump located in the premises of DBESA CETP (Phase-I) and from there it is disposed through common pipeline at the same location of DBESA CETP by MIDC.

The progress of work of disposal of treated CETP effluent at points identified by National Institute of Oceanography (NIO) is under consideration of the Hon'ble

240

Supreme Court in the matter of Civil Appeal No(s). 10582/2017; Ulhasnagar Municipal Corporation Versus Vanashakti Public Trust & Ors.

### 3.3 STPs AND THEIR PERFORMANCES

Treated sewage at outlet of 05 STPs were collected on 18.09.2020. The details of such 05 STPs and sampling are given in Table 10 below:

**Table 10: Details of 05 STPs from where treated sewage as outlet of STP were collected**

	Name of the STP	GPS Co-ordinates	Treatment Capacity (MLD)	Avg. Sewage received (MLD)	Status	Remarks / Observations
1.	Ambarnath STP	19°12'59"N, 73°10'17"E	45	20	In operation	Power cut during sampling Treated sewage disposal in Waldhuni river
2.	Ulhasnagar STP -Vadol unit	19°12'51"N, 73°10'15"E	20.72	5-6	In operation from March 2020	Power cut during visit. All units working except chlorination unit due to pending electrical work Treated sewage disposal in Waldhuni river
3.	Badalapur STP	19°09'40"N, 73°15'05"E	22	20	In operation	Treated sewage partly used for plantation & gardening in premises and Nagar Parishad garden Remaining treated sewage disposal in stream meeting Ulhas river
4.	KDMC-Chinchpada STP	19°13'07"N, 73°08'50"E	40	7	In operation	Treated sewage disposal into Kharigavali nala meeting Ulhas river
5.	Chikhli-Moravali STP	---	9	5	In operation	Treated sewage disposal in Waldhuni river

All the 05 STPs visited are based on Sequencing Batch Reactor (SBR) technology. Analysis results of the monitored parameters in the outlet samples of the said 05 STPs are given in Table 11 below:

Table 4: Analysis results of treated sewage as outlet from 05 STPs

Parameters	Standards*	Name of STP				
		Ambarnath STP	Vadol STP, Ulhasnagar	Badalapur STP	Chinchpada STP	Chikloli STP
pH	6.5 to 8.5	7.7	8.0	7.8	7.7	7.3
Turbidity	--	10.9	11.8			
EC	--	574	510	504	602	473
TDS	--	302	265	266.9	315.3	248.2
TSS	--	2	8	2	2	4
Sulphate	--	44.1	39.1	31.5	0.	0.0
Phosphate	--	2.5	1.0	0.8	0.3	BDL
Nitrate	45	0.15	0.57	0.70	0.11	0.28
Chloride	--	248	177	213	106	248
BOD	30	42	19	59	58	36
COD	--	64	44	143	98	71
Colour	--	No Colour	No Colour	No Colour	No Colour	No Colour

\*Standards prescribed under consent to operate by MPCB

The analysis results reveal that all 05 STPs, whose samples were collected, are complying with the stipulated standards of pH and Nitrate as prescribed by under the consent to operate by MPCB. However, BOD is exceeding in all the 05 STPs except Ulhasnagar STP - Vadol unit. Thus, all the 05 STPs were found discharging treated sewage not complying with the norms except the Ulhasnagar STP -Vadol unit when compared with analysed parameters.

#### 3.4 IDENTIFICATION OF INDUSTRIAL UNITS CAUSING POLLUTIN BASED ON ETP SLUDGE AND OTHER CATEGORY OF HAZARDOUS WASTE GENERATION & THEIR MANAGEMENT

All waste water generating industrial units generate ETP sludge if waste water is treated in their effluent treatment plant. Such ETP sludge, identified as hazardous waste, requires to be sent to the authorised common TSDF only and not to store the same beyond 90 or 180 days, as applicable depending on quantum of ETP sludge generation, as stipulated under

242

Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Only 02 common TSDFs namely M/s Mumbai Waste Management Facility, Taloja (Raigad district) and M/s Trans Thane Creek Waste Management Association, Mahape (Thane District) are authorised common TSDF operators catering to hazardous waste generating units including ETP sludge in Ambernath, Additional Ambernath, Badlapur, Ulhasnagar and Dombivali.

Industrial units requiring to treat its waste water and thereby categorically generating the hazardous waste ETP sludge, not sending ETP sludge regularly within the said 90 or 180 days by such operational unit to the authorised common TSDF reveals that either ETP sludge is not generated indicating that waste water is not treated in their ETP or not treated properly or the generated ETP sludge is improperly managed or indiscriminately disposed causing adverse impact on soil or water bodies or both as are evident from most of the attributing drains/river stretch passing through industrial areas which show industrial effluent impacts (refer Chapter 2 of this report). Such units may also, therefore, be treated as units causing pollution. Similarly, units categorically generating other types of hazardous wastes during their production process such as process residues/sludge, Multi Effect Evaporator (MEE) salts, Spent Acid etc. stipulated to be disposed in common TSDF and are in operation but not sending such hazardous wastes regularly within the said 90 or 180 days to the authorised common TSDF are also polluting units as the same are either improperly managed or indiscriminately disposed causing adverse impact on soil and water bodies.

In order to identify such polluting units, list of the common TSDF member industrial units, who have not sent any category of hazardous wastes including ETP sludge for disposal since 01/4/2019 till 14/9/2020, was sought from the said 02 authorised common TSDF operators. The said 02 common TSDF operators provided list of 257 such units which was forwarded to MPCB to verify, as per authorisation document issued to them, if the listed units generate categories of hazardous wastes including ETP sludge and about status of their operation. MPCB has informed verification details of the same and status is given in Table 12 below:



**Table 12: Industrial units who have not sent any of their hazardous wastes since April, 2019 till 14/9/2020 and their operational status**

Area Name (1)	Total Units (2)	Closed Units (3)	Units recently started / Unit not started (4)	Units in operatio n (5)	Among operational units (column 5), nos. of units generating various hazardous wastes (HW) (6)		
					Only ETP sludge or other category of HW also in addition to ETP sludge generation	No ETP sludge but other category of HW generatio n	No generatio n of HW
Dombivali	36	20	2	13	7	3	3
Ambarnath	87	40	3	44	25	5	14
Addl. Ambarnath	62	15	0	47	29	9	9
Badlapur	64	16	2	46	35	4	7
Ulhasnagar	8	7	0	1	0	0	1
<b>Total</b>	<b>257</b>	<b>98</b>	<b>7</b>	<b>151</b>	<b>96</b>	<b>21</b>	<b>34</b>

The above table reveals that among the list of 257 units, 96 units are operational units who are expected to generate and send the ETP sludge and other categories of hazardous wastes to the common TSDF but have not sent the same since more than one and a half year. 21 other units, who generate hazardous wastes other than ETP sludge, also didn't send the same for more than one and a half year. Such 96 units are not treating their industrial waste water in their ETP or ETP not operated properly or the generated ETP sludge is improperly managed or indiscriminately disposed causing adverse impact on soil or water bodies including river or both. Similarly, 21 units are not managing their hazardous waste or indiscriminately disposing causing adverse impact on soil or water bodies including river or both. List of such 117 units causing pollution is given at Annexure III.

Similarly, list of units who have sent hazardous wastes but have not sent one or the other category of hazardous wastes including ETP sludge during any of the year 2019-2020 or 2020-2021 or both have also been sought from the said 02 common TSDF operators. List of such units, as provided by the common TSDF operators, has been forwarded to MPCB to

244

verify if the listed units generate categories of hazardous waste including ETP Sludge as per authorisation document issued to them and about status of their operation. MPCB has informed that verification of the same is under progress.

### 3.5 IDENTIFICATION OF UNITS CAUSING POLLUTIN BASED ON FIELD INSPECTIONS

In order to identify industrial units causing pollution in Waldhuni river and Ulhas river, industrial estates of MIDC in Badlapur; Ambernath; Additional Ambernath, and; Dombivali; were also visited by the joint teams of CPCB and NEERI during September 17-18, 2020 and random inspection of units were carried out. Ulhasnagar area was also visited on September 18, 2020, where illegal jeans washing units were also reported and electricity supply/water supply were disconnection in 2017. Results of all the samples collected and analysed has been provided in Annexure IV.

- A. 47 industrial units in Badlapur, Ambernath, Additional Ambernath, Dombivali and Ulhasnagar areas were randomly inspected by teams of CPCB and NEERI officials and inspection reports are given at Annexure V. The reports reveal that:
- (a) 40 units were operational;
  - (b) 03 units were found illegally operating; (01 unit engaged in jeans washing activity in Dombivali and 01 unit engaged in plastic related activities in Ulhasnagar without having "consent to operate" from MPCB, and; 01 unit engaged in thread dyeing in Ulhasnagar despite closure direction from MPCB);
  - (c) 04 units were found not having adequate equipment required to achieve Zero Liquid Discharge (ZLD) conditions prescribed under the "consent to operate";
  - (d) 14 units were found either not meeting the stipulated discharge standards prescribed under the "consent to operate" or not operating the ETP properly;
  - (e) 01 unit was found illegally disposing hazardous waste in open land near boundary wall about 10 meters from Waldhuni river;

The aforesaid 22 units, as listed at (b) to (e) above, are, therefore, causing pollution either directly to the attributing drain/river or through CETP. List of the said 22 units are given at Annexure VI.

Such 22 identified units (apart from 117 identified polluting units) may not be comprehensive list of units causing pollution. There could be more especially among Red and Orange category of industries which needs to be similarly identified by MPCB.

#### B. OTHER OBSERVATIONS ON POLLUTING UNITS

- (i) The quality of water in river and attributing drains reveal that industrial effluent are being discharged through attributing drains passing through industrial areas. During meeting of CPCB and NEERI officials with MPCB and MIDC officials on 24.09.2020, MIDC also informed that there have been 5-6 instances when MIDC noticed discharge of unauthorized industrial effluent in storm water drains and the same have been intimated to MPCB for necessary action.
- (ii) Among the aforesaid 22 polluting units, 12 units are ZLD units/ not permitted to discharge any industrial effluent and 10 of such 12 inspected units are in Additional Ambarnath MIDC where all waste water generating units are stipulated to meet ZLD/not permitted to discharge any industrial effluent by MPCB due to closure direction issued to namely AAMA CETP (7.5 MLD) and owned by MIDC was facilitating treatment of industrial effluent of units in Additional Ambarnath MIDC.
- (iii) There is no monitoring/check on movement of tankers in the industrial areas. It was also gathered during the meeting with MIDC and MPCB officials that possibilities of malpractices of disposal of untreated industrial effluent or hazardous wastes in to drains/open land/river during the night could not be ruled out and, hence, needs vigilance mechanism.



246

- (iv) Most of the units have either not provided flow measurement devices or not maintaining the flow record for quantity of effluent treated in ETP/sent to CETP or recycled / reused, as applicable.
- (v) In attributing drains and Waldhuni river, colour is a concern which though may not be toxic but attracts public perception about pollution. Presence of Textile and chemical units especially dye & dye-intermediate in the areas under reference may contribute to such colour in drains and Waldhuni river. During the said meeting on 24/9/2020, it was learnt that colour standard has not been prescribed in effluent discharge standards of individual units or CETP by MPCB.
- (vi) Various types of materials not intended to be produced also get generated during production and some of such materials are claimed by units as by-products especially by dye & dye-intermediate, API and other organic/inorganic chemical manufacturing units. Categorising the same as by-products (which may not have demand or techno-economical feasibility for their use such as contaminated or diluted HCl, H<sub>2</sub>SO<sub>4</sub>; Manganese Sulphate Solution; Sodium Sulphate Solution, etc.) gets an escape from regulated generation, movement, utilization, disposal etc. from the ambit of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and causes illegal disposal on to open land or water bodies.
- (vii) With regard to status of 392 illegal jeans washing units in Ambernath and Ulhasnagar, whose electricity/water supply was disconnected in 2017, team of CPCB and NEERI also visited Khatri compound located at Ulhasnagar Camp 3 area and near Shantiprakash School in Dharmaji Patil area of Ulhasnagar-5, where about 100 nos. of such jeans washing units existed. The team visited 05 nos. of industries which were closed. They were generally found to be converted to stitching/embroidery activities and no jeans washing activities in these visited areas were observed. However, possibilities of illegal jeans washing units operating in other areas cannot be ruled out as one illegal jeans washing unit was found in Dombivali.

#### 4. CONCLUSIONS

Inspection of Ulhas and Waldhuni rivers with sampling & analysis of 27 water samples from various locations of the rivers/drains; random inspection of 47 industrial units with objective based sampling & analysis in 11 of such units and inspection of all 05 Common Effluent Treatment Plant (CETPs) with sampling & analysis of their inlet outlet effluent were carried out during September 16-18, 2020 in catchment areas of the said rivers. Further, 05 samples of treated sewage from Sewage Treatment Plants were also collected and analysed. All the samples were analysed in the laboratory of NEERI, Mumbai. A meeting through video conference was also held with officials from MPCB and MIDC on 24/9/2020. Conclusions drawn about inspected stretches of rivers/drains and polluting units are given below.

##### 4.1 INSPECTION OF ULHAS AND WALDHUNI RIVERS

Analysis results of water samples of drains/rivers and observations made at various locations of Ulhas River and Waldhuni River reveal that:

- (i) Waldhuni river receives treated sewage/industrial effluent discharge from STPs and CETPs and also untreated sewage from various municipal corporation/council areas as well as untreated industrial effluent discharges mainly from MIDC industrial areas of Ambernath, Additional Ambernath and Badlapur (some illegal units and diffused sources also maybe contributing). Analysis results indicate that the analyzed stretch of Waldhuni river and the nallahs which are tributaries to Waldhuni appear to be polluted with industrial effluent and sewage contents.
- (ii) Ulhas river has effect due to treated/untreated sewage and industrial effluent from Waldhuni river in its saline zone downstream to Mohane dam. Analysis results of Khambalpada nallah passing through Dombivali MIDC areas reveal that industrial effluent is also discharged into nallahs which meets saline zone of Ulhas river. The river also receives other treated sewage from STPs and CETPs besides polluted water from the other monitored nallahs/drains.
- (iii) The analysis results of Khemani Nallah reveal that the nallah is having organic load and there are possibilities of effluent from industrial and commercial activities in the catchment of Khemani nallah mainly in Ulhasnagar area. A pumping station to pump the wastewater from Khemani nallah into Waldhuni river was found operational. However, during pump failure events and high flow during monsoon from Khemani Nallah

248

meets the Ulhas river and Ulhasnagar Municipal Corporation has not made provision for collection of effluent in case of such overflows.

- (iv) Significant littering of solid wastes in and around Waldhuni river and nallahs were also observed across majority of the stretch during the visit and sampling. Leachate, from municipal solid waste dumpsite near railway over bridge, Chikhloi, Ambernathi, was observed flowing into nallah meeting Waldhuni river.
- (v) The limited sampling carried out and photographs (given in Appendix) indicate that influence of untreated industrial effluents is high. Sewage also contributes to the overall poor quality.
- (vi) The conclusion drawn herein also indicates that the problems may have been persisting for a long time and needs comprehensive measures which can be accomplished in short and medium terms.

#### 4.2 IDENTIFICATION OF UNITS CAUSING POLLUTION

(i) CETPs and STPs discharging treated industrial effluent/sewage not conforming to norms

- (a) All 05 operational CETPs in the region discharges their treated effluent at various points in Waldhuni nallah/ Waldhuni River/ Ulhas creek. The CETPs are not meeting the discharge standards prescribed by MPCB and contributing to the pollution load in the receiving water bodies.
- (b) One of the reasons for non-compliance of discharge standards by CETPs are due to inlet effluents not meeting to their design/prescribed quality. In Badlapur CETP, out of 06 nos. of aspirators, 03 nos. of aspirators in the aeration tank was under maintenance during the visit.
- (c) There is lack of efficient mechanism to check/ ensure the quality and quantity of the effluent being discharged by the member industries to meet the CETP inlet norms efficient.



(d) There is need to review BOD, COD, Ammonical Nitrogen and Colour as parameters with standards in CETP inlet effluent and Colour and O&G in CETP outlet effluent in all CETPs.

(e) Among the 05 STPs from where treated sewage as outlet of STPs were sampled and analysed, the analysis results reveal that 04 of the 05 monitored STPs were found non-compliant with the BOD parameter (among the analysed parameters) as stipulated under the consent to operate by MPCB. The compliant STP was Ulhasnagar STP -Vadol unit and non-compliant STPs are Badalapur STP; KDMC-Chinchpada STP; Chikholi-Moravali STP and Ambarnath STP.

(ii) **Industrial units identified as causing pollution**

(a) 117 units (list given at Annexure III) were identified causing pollution as they are not treating their industrial waste water in their ETP or ETP not operated properly or the generated ETP sludge and/or other category of hazardous wastes are improperly managed or indiscriminately disposed causing adverse impact on soil or water bodies including river or both. The same have been identified after verification from MPCB that such 117 operational units have not sent any of their ETP sludge or other category of hazardous wastes for disposal to the requisite authorised common TSDF since more than one than a half years whereas requirement under the Rules is not to store the same beyond 90 or 180 days, as applicable depending on quantum of hazardous waste generation.

Further, verification of other units, who have though sent hazardous wastes but have not sent one or the other category of hazardous waste(s) including ETP sludge during any of the year 2019-2020 or 2020-2021 or both, as informed by the common TSDF operator to CPCB and NEERI, is under progress at MPCB about categories of hazardous wastes being generated and their operational status. List of polluting units shall be identified accordingly.

(b) 21 units of the 40 inspected operational industrial units by team of CPCB and NEERI during Sept. 17-18, 2020 have also been identified as units causing pollution either directly to the attributing drains/rivers or through CETP as they

250

were found illegally operating or not having adequate equipment required to achieve Zero Liquid Discharge (ZLD) conditions prescribed under the "consent to operate" or not meeting the stipulated discharge standards prescribed under the "consent to operate" or not operating the ETP properly. In addition, 01 unit was found illegally disposing hazardous waste in open land near boundary wall about 10 meters from Waldhuni river. List of such 22 units causing pollution is given at Annexure VI;

Among the aforesaid 22 polluting units, 12 units are ZLD units/ not permitted to discharge any industrial effluent. There are 125 ZLD units of which 105 alone are in Additional Ambarnath MIDC where all waste water generating units are stipulated to meet ZLD/not permitted to discharge any industrial effluent by MPCB due to closure direction issued to namely AAMA CETP (7.5 MLD).

Most of the units have either not provided flow measurement devices or not maintaining the flow record for quantity of effluent treated in ETP/sent to CETP or recycled / reused, as the case may be. MIDC has noticed incidences of discharge of unauthorized industrial effluent in storm water drains in industrial area. There is need to closely monitor operation of such ZLD facilities.

Claim of various unintended produced material (such as contaminated or diluted HCl, H<sub>2</sub>SO<sub>4</sub>; Manganese Sulphate Solution; Sodium Sulphate Solution, etc.) as by-products needs to be revisited by MPCB especially by dye & dye-intermediate, API and other organic/inorganic chemical manufacturing units. Most of such materials may not have actual utilizer and discharging of the same into drains/river could not be ruled out.

Therefore, such 22 and 117 identified units may not be the comprehensive list of units causing pollution. There could be more especially among Red and Orange category of industries and ZLD/no effluent discharge condition units which needs to be similarly identified by MPCB.



**Other observations**

- (i) There is no monitoring/check on movement of tankers in the industrial areas. Possibilities of malpractices of disposal of untreated industrial effluent or hazardous wastes in to drains/open land/river during the night could not be ruled out and, hence, needs vigilance mechanism.
- (ii) Due to discharge of colour treated effluent by CETPs and illegal discharges by industries by Textile and Chemical units especially dye & dye-intermediates, colour in attributing drains and Waldhuni river is a concern which though may not be toxic but attracts public perception about pollution.
- (iii) Visits to Ulhas nagar areas (Khatri compound located at Ulhasnagar Camp 3 area and near Shantiprakash School in Dharmaji Patil area of Ulhasnagar Camp-5), where about 100 nos. of the 392 illegal jeans washing units (closed in 2017) were located, revealed no activities of jeans washing activities in the visited areas. -

**5. RECOMMENDATIONS IN REGARD TO THE STEPS REQUIRED TO BE TAKEN BY THE CONCERNED MUNICIPAL CORPORATIONS, REGULATORY BODIES AND UNITS TO REMEDY THE SITUATION**

Multidimensional approach is required with participation of various agencies to control sewage and industrial effluent pollution in Waldhuni river and Ulhas rivers. These recommendations have been drawn up with this short term study (carried out in monsoon season and COVID times- which has caused many industries to be closed and also much dilution in the river samples) and a longer scientific study may be carried out to formulate the environmental damage cost assessment and take further scientific remedial measures.

Given large nos. of wastewater generating units in catchment zone of Waldhuni river and Ulhas river, there is need of round the clock surveillance about movement/transfer of effluent coupled with automated control system with application of information technologies. The following immediate and short/long term actions are recommended:



Table 13: Recommendations In regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation

Sl. No.	Actions Required	Responsible agency(ies)	Time target
<b>Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers</b>			
1.	Setting up vigilance teams for monitoring of storm water drains and river stretches of MIDCs and other potential Municipal corporation/council limits during day and night times to identify illegal discharge in the storm water drain or such river stretch and also identify the polluter(s) or identification of leakages in conveying pipelines.	MIDC, concerned Municipal corporation (for outside MIDC jurisdiction) and MPCB  (Nodal agency – MIDC for areas within its jurisdiction and concerned Municipal Corporation for outside MIDC jurisdiction)	Immediate and continuous
2.	Installation & commissioning of pH sensor (with siren/hooter in non-residential zone) connected with SMS alerts to the aforesaid vigilance team members at strategic location of drains/river stretches of MIDCs	MIDC and respective Municipal Corporation as per their jurisdiction	02 months
3.	Setting up of 24/7 CCTV monitoring at hotspots identified by MIDC and MPCB	MPCB and MIDC	03 months
4.	Setting up vigilance teams for verification of quality & quantity of effluent of member industries being sent to CETP	CETPs, MIDC and MPCB (Nodal agency – MPCB)	Immediate and continuous
5.	Feasibility study & setting up of pipeline network (preferably above the ground) for conveying industrial effluent to CETPs of Chikholi-Morivali and ACMA	MIDC	1 year
6.	Commissioning of GPS tracking system and monitoring thereof in all identified dedicated tankers operated by CETPs for collection of effluent from CETP member industries till the completion of the pipeline network	Respective CETPs and MIDC (Nodal agency – MIDC)	02 months
7.	Enclosing MIDC areas with walls (if economically feasible) and commissioning of barriers/gates at all entry and exit points of MIDC fitted with CCTV cameras	MIDC	03 months
8.	Issuance of necessary orders by Commissioner of Police banning tanker movement in MIDC during 6 PM to 6 AM in MIDC areas	Commissioner of Police	Immediately upon commissioning of gates/barriers by MIDC

*PS*

*AK*

Sl. No.	Actions Required	Responsible agency(ies)	Time target
9.	Round the clock surveillance of unauthorised tankers movement in MIDCs by deputing Police personnel	Commissioner of Police	Immediate
10.	Commissioning of SCADA-PLC system at appropriate zones/locations of effluent collection sumps to identify & regulate quantity of effluent discharge by each individual CETP member unit. The collection sumps be equipped with individual online monitoring system comprising of pH sensor, electro-magnetic flow meter, auto cut-off valve and manual valve to regulate the effluent discharge from member industries and auto sample collection to be analysed need based.	MIDC and CETP operators (except CETPs of Chikholi-Morivali and ACMA till pipeline network is commissioned)  (Nodal agency - MIDC)	07 months
11.	Industry specific recalcitrant (High COD) streams and biodegradable streams to be identified. The segregated recalcitrant stream to be treated by tertiary treatment system at industry level in accordance with consent conditions and then combined with regular treatment of CETP.	Respective units, CETP operators and MPCB (Nodal agency - MPCB)	06 months
12.	Reviewing & stipulating colour as standard in outlet effluent of Textile and chemical units especially dye & dye-intermediates	MPCB	03 months
13.	Reviewing & stipulating BOD, COD, Ammonical Nitrogen and Colour as parameters with standards in CETP inlet effluent and Colour and O&G in CETP outlet effluent in all CETPs.	MPCB	03 months
14.	Reviewing by-products in "Consent to Operate" issued to industrial units and their management as per the CPCB guidelines	MPCB	03 months
15.	Taking actions against the listed units identified as causing pollution and further identification of polluting units with more emphasize on Red and Orange category units and ZLD/no discharge condition units	MPCB	Immediate and continuous
16.	Upon enforcement of Sl. No. 4, 10, 11, 12 and 13, upgradation of CETP to meet the discharge standards and increased flows, as the resultant situation warrants.	MIDC	DPR within 6 months and commissioning within 1.5yr after DPR.
17.	Third party environmental and waste audit to be carried out on a yearly basis based on Gujarat model. Modalities and auditing agencies to be finalised by MPCB	MPCB	1 year
18.	Capacity reduction/closure and fines' structure in case of defaulters should be formalised and informed to all industries in these areas. This should also be available on MPCB website. List of such defaulters should also be shared with CPCB	MPCB	Continuous activity

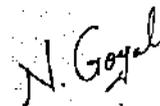
254

and MIDC every quarter.			
<b>Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers</b>			
19.	Performance improvement of the 04 operational STPs (Badalapur STP; KDMC- Chinchpada STP; Chikholi-Moravali STP and Ambarnath STP) so as to meet the prescribed standards of treated sewage being discharged into Waldhuni and Ulhas rivers	Respective Municipal Corporations & Councils	06 months
20.	Identifications of illegal industrial or commercial activities contributing sewage & commercial/industrial waste discharge into Khemani nallah and closure of the same	Ulhasnagar Municipal Corporation and District Administration (Nodal agency – District Administration)	02 months
21.	Identification of drains contributing sewage to Waldhuni and Ulhas river and channelizing the same through STPs by preparing feasibility report thereof.	Respective Municipal Corporations/Councils	Feasibility report to be made within 3 months
22.	Cleaning of dumped solid wastes at various stretches of rivers & drains and installation of barriers/fencing at river bridges and other strategic locations of Waldhuni and Ulhas river to control littering of solid wastes	Respective Municipal Corporations/Councils	06 months
23.	Handling & management of solid waste and dumpsites in accordance with Solid Waste Management Rules, 2016	Respective Municipal Corporations/Councils and MPCB	Immediate
24.	Upgradation and capacity increment of all old STPs to meet the actual flows and also achieve the standards for discharge. Create decentralised STPs where large STPs or pipe networks are not possible/prohibitively expensive.	Respective Municipal Corporations/Councils	06 months for DPR and 2 years for commissioning
25.	There are many septic plants and soak pits in this area and the overflow of these freely reach the rivers. Thus, there is an urgent need to draw up and execute proper septage treatment plans.	Respective Municipal Corporations/Councils	03 months for DPR and 09 months for commissioning

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(Sh. Bharat Kumar Sharma)  
Regional Director, Regional Directorate Pune  
Central Pollution Control Board



(Dr. Nitin Goyal)  
Scientist-in-Charge, Mumbai Zonal Centre  
CSIR-NEERI

25

Annexure-I<sup>58</sup>

1

ITEM NO.25

Court 3 (Video Conferencing)

SECTION XVII

S U P R E M E C O U R T O F I N D I A  
R E C O R D O F P R O C E E D I N G SCivil Appeal No.10582/2017

ULHASNAGAR MUNICIPAL CORPORATION

Appellant(s)

VERSUS

VANASHAKTI PUBLIC TRUST &amp; ORS.

Respondent(s)

(with appln.(s) for direction, exemption from filing c/c of the impugned judgment, permission to bring on record additional facts and documents, stay, exemption from filing O.T., appropriate orders/directions and permission to file additional documents/facts /Annexures)

Date : 07-09-2020 These matters were called on for hearing today.

CORAM :

HON'BLE DR. JUSTICE D.Y. CHANDRACHUD  
HON'BLE MR. JUSTICE K.M. JOSEPH

For Appellant(s)

Mr. S. C. Birla, AOR

Mr. Anjuman Tripathy, Adv.  
Mr. Aman Varma, AOR

Mr. Kush Chaturvedi, AOR

For Respondent(s)

Ms. Aishwarya Bhati, ASG  
Mr. Gurmeet Singh Makker, AOR  
Ms. Suhasini Sen, Adv.  
Ms. Nivedita Nair, Adv.

Mr. Colin Gonsalves, Sr. Adv.  
Ms. Anupradha Singh, Adv.  
Mr. Zaman Ali, Adv.  
Mr. Satya Mitra, AOR

Mr. Kavin Gulati, Sr. Adv.  
Mr. Mukesh Verma, Adv.  
Mr. Yash Pal Dhingra, AOR

Mr. Nishant Ramakantrao Katneshwarkar, AOR

Mr. Saurabh Mishra, AOR

Mr. S. C. Birla, AOR

Ms. Shyamali Gadre, Adv.

Mr. G. Pal, Adv.

Mr. Soumik Ghosal, AOR

Mr. Gaurav Singh, Adv.

Mr. Saurabh Mishra, Adv.

Mr. Onkar Singh, Adv.

Mr. Rakesh Chander, Adv.

UPON hearing the counsel the Court made the following  
O R D E R

IA No 53816 of 2020

- 1 The interlocutory application has been instituted by the first respondent, Vanashakti Public Trust, which has complained of the pollution which has been caused in the Ulhas and Waldhuni rivers during the period of the lock down as a result of the discharge of untreated effluents by polluting industries.
- 2 In 2019, the above rivers were severely polluted with industrial effluents discharged by industrial units engaged in the activity of washing jeans - fabric. To remedy the situation, orders were passed by this Court on 14 November 2017 and 14 December 2017. On 5 February 2020, a comprehensive order was passed by this Court laying down time-lines for the completion of work regarding construction of Sewage Treatment Plants and for restoration of the area.
- 3 The first respondent has submitted that immediately on noticing the pollution in the Ulhas and Waldhuni rivers caused in particular by industries located in Ulhasnagar and Ambemath, a representation was submitted by an email dated 23 March 2020 to the Maharashtra Pollution Control Board

(MPCB), Principal Secretary, Environment and Collector, Thane, together with photographs. The Central Pollution Control Board (CPCB) took cognizance of the complaint and communicated with the first respondent on 22 April 2020. CPCB issued a direction to MPCB to take into account the evidence produced by the first respondent and to take action on the ground. The first respondent thereafter submitted another representation on 17 May 2020. Finding that no action had been taken, CPCB sent an email on 20 May 2020. The grievance is that no action has been taken despite the first respondent having submitted another representation on 6 June 2020 highlighting the grievance.

- 4 Mr Colin Gonsalves, learned senior counsel appearing on behalf of the first respondent submits that a serious situation has arisen from the discharge of untreated effluents in Ulhas and Waldhuni rivers. By the interlocutory application, a request has been made to this Court, to direct CPCB and National Environmental Engineering Research Institute (NEERI) to inspect the above rivers, identify the units causing pollution and to affix responsibility and to direct the State of Maharashtra and the municipal corporations concerned to eliminate the causes of pollution.
- 5 Mr Kavin Gulati, learned senior counsel appearing on behalf of MPCB states that on receipt of the complaint, the Board initiated remedial steps. On 25 May 2020, action was directed to be taken against the defaulting units and on 15 June 2020 action was directed to be taken against the operator of the common effluent treatment plant.
- 6 The material which has been produced on record demonstrates that the situation warrants urgent and immediate remedial steps. There has been a failure of statutory bodies to discharge their responsibilities under the law. We direct CPCB and the NEERI to (i) inspect the Ulhas and Waldhuni rivers; (ii) identify the units causing pollution; and (iii) formulate recommendations in regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation. MPCB, the Department of Environment of the State of Maharashtra and all the

258

concerned municipal corporations including the Municipal Corporations, or Councils as the case may be, of Ulhasnagar, Kalyan Dombivali, Kurlgaon - Badlapur and Ambemath shall cooperate with the team of Commissioners appointed by this Court. The report shall be submitted within a period of three weeks from today. MPCB and the Department of Environment of the State of Maharashtra shall depute a team of officials to assist the Commissioners appointed by the court in the above terms. MPCB and the Department of Environment shall also immediately take remedial steps, including action against the defaulting units without waiting for the report of the Commissioners or for further directions of this Court. Logistical arrangements for the site visits, transportation and other incidental requirements of the team appointed by this court shall be made by MPCB and the Department of Environment. Costs, charges and expenses shall presently be borne by MPCB.

- 7 The Chief Engineer MIDC shall file a report in compliance with the previous order within a period of two weeks from today. The compliance report of MIDC and the report filed by MPCB shall be taken up on the next date. The court will also review whether compliance has been made of the time-lines set out in the previous order for the completion and commissioning of projects.
- 8 List on 7 October 2020.

(CHETAN KUMAR)  
AR-cum-PS

(SAROJ KUMARI GAUR)  
BRANCH OFFICER

## Annexure- II

### STATUS OF CETPS LOCATED AT AMBERNATH, DOMBIVALI AND BADLAPUR AREA

#### 1. BACKGROUND

Hon'ble Supreme Court of India has passed an order in the Civil Appeal No. 10582 / 2017 and IA No. 53816 / 2020. To comply with the order passed by Hon'ble Supreme Court, CPCB and NEERI carried out inspection and monitoring of industrial units in Ambernath, Dombivali region with respect to wastewater management and also carried out monitoring of creeks and rivers in that region mainly to address the pollution issues in Waldhuni and Ulhas Rivers.

Since, most of the industrial units in the Dombivali, Ambernath and Badlapur regions comprises of small & medium scale industries, the effluent or partially treated effluent from those industrial units are being sent to Common Effluent Treatment Plants (CETPs) for further treatment and disposal. The CETPs operating in these regions disposes their treated effluent at various locations in Waldhuni nallah or Waldhuni River or at Ulhas Creek. Therefore, considering the importance of the common facilities, mainly the CETPs, due to handling of industrial effluent in huge quantities and chances of contributing to the pollution load in the water bodies, monitoring of CETPs in that region was also carried out jointly by CPCB and MPCB.

The details of the CETPs in Dombivali, Ambernath and Badlapur region monitored on 17.09.2020 by team of officials comprising of Shri S. Pradeep Raj, Scientist-D, CPCB and Shri Sandeep Shinde, Field Officer, MPCB-HQ, Mumbai are given below:

- i. M/s. Badlapur CETP Association; Plot No. OS-4, MIDC Badlapur, Dist. Thane
- ii. M/s Chikholi-Morivali Effluent Treatment; Plot No. P-17, MIDC Morivali, Ambernath, Dist. Thane
- iii. M/s ACMA - CETP-Co-operative Society Ltd.; Plot No. W-30, MIDC Chemical zone, Ambernath (W), Dist. Thane
- iv. M/s Dombivali Better Environment System Association (DBESA); Plot No. OS-08, Opp Telephone Exchange, MIDC Phase-I, Dombivali (E), Dist. Thane
- v. M/s Dombivali CETP (Chemical) (Phase-II); Plot No. R-4/2 MIDC Phase II, Opp. W-40, Dombivali (E), Dist. Thane

One CETP viz. M/s Ambernath MIDC CETP; Plot no. AM-13, Opp. Fire station, MIDC Additional Ambernath, Tal. Ambernath, Dist. Thane, is not operational due to closure direction issued by MPCB on 02.07.2016.

#### 2. OBSERVATIONS

- a) The CETPs in Badlapur, Dombivali phase-I and Phase-II receives effluent from their member industries through underground pipeline of MIDC and the ACMA CETP and the Chikholi Morivali CETP received effluent from their member industries through tankers.
- b) The CETPs receiving effluent through pipelines does not have flow meters in their inlets to measure the quantity of the effluent being received from the member industries and does not have any flow measuring device or online monitoring system to monitoring the quality of the effluent being received by the CETP. The CETPs are manually collecting samples at their inlet and analyzing for basic parameters on regular basis.

260

- c) The CETPs receiving effluent from the member industries through tankers maintains record of the tankers including the quantity received on daily basis and also carry out analysis of the effluent samples for basic parameters in their in-house laboratory to ensure compliance of quality of effluent being received from the member industries to meet the CETP inlet norms.
- d) The CETPs receiving effluent from their member industries through the MIDC pipelines does not have adequate mechanism/ fool proof system to check/ ensure the quality and quantity of the effluent being discharged by the member industries to meet the CETP inlet norms. However, it was gathered from the discussion with CETPs/ MPCB personnel that the CETPs which are receiving effluent through pipelines receives shock loads at many occasions which disturbs the performance of CETP operation.
- e) All the 05 operational CETPs were monitored and analysis results of the samples collected from the outlet of CETPs are compared with the discharge standards prescribed by MPCB and the same is given in the table below;

Analysis results of the samples collected from the outlet of CETPs

	Monitored CETPs					Discharge Standards of MPCB*
	Badlapur CETP Association	Chikholi-Morivali Effluent Treatment	ACMA-CETP-Co-operative Society Ltd.	Dombivali Better Environment System Association	Dombivali CETP (Chemical) (Phase-II)	
Capacity	8 MLD	0.8 MLD (800 m <sup>3</sup> /day)	0.25 MLD (250 m <sup>3</sup> /day)	16 MLD	1.5 MLD	
Area served	Badlapur MIDC	MIDC Ambernath and Morivali	MIDC Ambernath Chemical Zone.	About 11.5 MLD from Dombivali MIDC Phase I and about 4.5 MLD from Dombivali IDC Phase II	Dombivali MIDC Phase II	
Parameters						
pH	7.7	7.6	6.1	7.1	7.4	6.0-9.0
TSS	500	300	100	100	100	100
TDS	6056	1366	1555	4401	4744	
BOD	300	38	44	41	37	30
COD	1632	153	227	332	336	250
Sulphate	906.5	140.5	25.5	725	2387	1000
Phosphate	6	4.5	0.5	BDL	3.5	5
Nitrate	8.92	19.10	3.49	0.64	1.26	10
Chloride	1879	851	993	1418	1276	1000
Sulphide	136	20	24	24	16	2
O.B.G	35	14	18	7	23	20 (10**)
Colour	Dark Green	Light	No colour	Light Pink	Orange	

		Yellow				
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Note: All the values are reported in mg/l except pH

\*Discharge standards prescribed in consent issued by MPCB.

\*\*Standard for O&G is 10 mg/l as amended vide MoEF notification GSR- 739 R dated 09/09/2010.

- f) The analysis results of the samples collected from the outlet of all the CETPs reveals that all the CETPs in the region are not meeting the discharge norms prescribed by MPCB for any one or the other monitored parameters. The discharge limit of 30mg/L for the parameter BOD and 2mg/L for sulphide are not achieved by any of the CETPs. The COD and Chloride concentrations in the treated effluent samples collected from CETPs with higher capacities (CETP of Badalapur, DBESA CETP and Dombivli CETP) are not meeting the discharge standards, whereas the CETP with lesser capacities namely M/s. Chikholi-Morivali and M/s. ACMA CETP are meeting the norms with respect to COD & Chloride concentrations. The TSS concentration in the treated effluent of Badalapur CETP and Chikholi-Morivali CETP are not exceeding the discharge standards. The Oil & Grease concentrations in the samples collected from all the CETPs are exceeding the discharge norms except the CETP of DBESA. The sulphate concentration is very much high in the treated effluent sample collected from Dombivli CETP. The treated effluent samples collected from all the CETPs have visible colour interference except ACMA CETP.
- g) The treated effluent from the CETPs are presently not being disposed at the point/location as per the condition prescribed in the Consent issued by MPCB. MPCB has recommended for disposal of the treated effluent in the point specified by National Institute of Oceanography (NIO). The details of current discharging points of treated CETP effluent vis-à-vis conditions stipulated under the "consent to operate" by MPCB are given in the table below:

**Details of current discharging points of treated CETP effluent vis-à-vis conditions stipulated under the "consent to operate" by MPCB**

Name of the CETP	Condition prescribed in Consent issued by MPCB for disposal	Present disposal point/location
M/s. Badalapur CETP Association; MIDC Badalapur.	Marine Coastal Area at a point to be specified by NIO.	In Waidhuni nallah near Railway over Bridge (ROB) at Forest Naka Ambernath which joins the Waidhuni River
M/s. Chikholi-Morivali Effluent Treatment; Ambernath	Waidhuni River, at a point to be specified by NIO.	In a drain passing adjacent to the CETP and the drains discharges into Waidhuni River.
M/s. ACMA - CETP Co-operative Society Ltd.; MIDC Chemical Zone, Ambernath	Marine Coastal Area at a point to be specified by NIO	In a drain passing adjacent to the CETP and the drains discharges into Waidhuni River.
M/s. Dombivli Better Environment System Association (DBESA); MIDC Phase - I, Dombivli (E)	Marine Coastal Area at a point to be specified by NIO	In Khamadpada Nallah near Railway Bridge at Thakurli.  This nallah meets saline zone of Ulhas.

262

		river at distance of about 500m downstream
M/s Dombivli CETP (Chemical) (Phase-I); MIDC Phase-I, Dombivli (E)	Ulhas Creek at a point to be specified by NIO	The treated effluent from CETP is pumped to MIDC treated effluent sump located in the premises of DBESA CETP (Phase-I) and from there it is disposed through common pipeline at the same location of DBESA CETP by MIDC.

The progress of work of installation of pumping station & extension of pipeline from the present disposal points of treated effluent to the disposal point suggested by NIO by MIDC is under consideration of the Hon'ble Supreme Court in the matter of Civil Appeal No(s).10582/2017; Ulhasnagar Municipal Corporation Versus Vanashakti Public Trust & Ors.

### 3. CONCLUSIONS

Based on the visit to the CETPs and information collected and based on the analysis results of the samples collected from CETPs, the following is concluded:

- a) All the CETPs in the region discharges their treated effluent at various points in Waldhuni nallah/ Waldhuni River/ Ulhas creek. The CETPs are not meeting the discharge standards prescribed by MPCB and contributing to the pollution load in the receiving water bodies.
- b) The Badlapur CETP is not meeting the discharge norms prescribed by MPCB which may be due to the non-operational of treatment units in the CETP (Out of 06 nos. of aspirators, 03 nos. of aspirators in the aeration tank was under maintenance during the visit) or due to the substandard effluent quality being discharged by the member industries to CETP through pipeline which are higher than the design criteria of CETP.
- c) The Chikoli CETP is not meeting the discharge norms prescribed by MPCB, which may be due to the inadequate treatment system of CETP or due to inadequate operation of treatment units in the CETP or due to the high quantity of sewage being mixed in the effluent treatment system.
- d) The ACMA CETP is not meeting the discharge norms prescribed by MPCB which may be due to the non-operational of treatment units in the CETP or inadequate treatment units in the CETP.
- e) The DBESA CETP is not meeting the discharge norms prescribed by MPCB, as the CETP is presently receiving the mix effluent from chemical and textile industries, though the CETP is designed to treat the effluent from textile industries. The segregation of textile and chemical cluster effluent is necessary as the textile effluent quality permitted is 1600 ppm COD whereas Chemical Cluster effluent quality permitted is 3500 ppm which causes overload to CETP. The pipeline for segregation of effluent from textile and chemical cluster

are not yet completed. The DBESA CETP has engaged consultant during 2019 to revise the design of CETP to treat the effluent to achieve the revised discharge standards (BOD-30ppm, COD-250ppm) and the project is to be executed by MIDC for which the subsidy procedure by MIDC & MPCB is awaited.

- f) The Dombivall CETP is not meeting the discharge norms prescribed by MPCB, which reveals that the CETP is not treating the effluent properly or the unit operation are adequate to treat the effluent.
- g) The CETPs of Badalapur and DBESA, Dombivall have set up individual vigilant teams for inspection & verification of ETP of member industries to verify the quality of effluent being discharged by the member industries on random basis. However, the current practices of verification by vigilant team appears inadequate as it is understood that the CETPs receiving effluent through pipelines are receiving shock loads at many occasions which disturbs the performance of CETP operation.
- h) As per the notification of MoEF&GG dated: 01.01.2016, the Inlet quality standards for General Parameters, Ammonical Nitrogen and Heavy Metals as per design of the Common Effluent Treatment Plant (CETP) and local needs and conditions will be prescribed by the State Boards for each Common Effluent Treatment Plant (CETP). The consent issued to the CETPs by MPCB does not have parameters like BOD, COD, Ammonical Nitrogen, Colour for the Inlet criteria of CETP.

#### 4. RECOMMENDATIONS

The CETPs are contributing to the pollution load in the nallahs and rivers in that region in addition to the pollution caused by industries and domestic sewage. The following suggestions are given based on the monitoring and observations made during the visit.

- The CETPs should install flow measuring device at the Inlet of their CETP to ensure receiving effluent quantity within the limit.
- The CETPs should install online pH monitoring device at inlet of CETP.
- The non-complying CETPs may be asked to augment the unit operations and to operate the CETP properly to achieve the discharge standards prescribed by MPCB.
- The MPCB/ MIDC/ CETPs should have a dedicated vigilance team for monitoring the Industrial areas for illegal discharges in drains, unauthorized tanker movements, leakages in pipelines carrying effluent, to check the quality of effluent being pumped by the member industries.
- MIDC may be asked to provide collection sumps and closed pipeline conveying system for the collection/ conveying of effluent from the member industries to the CETPs which are presently conveying through tankers.
- To provide GPS based tracking system in the trucks carrying effluent from the member industries to the CETPs and to submit the data to MPCB/ MIDC and CETPs on regular basis till the provision of pipeline effluent conveying system.
- To have provisions for sampling from the chambers/ junctions/ sumps in the MIDC pipeline networks conveying effluent from member industries to the CETP and CETP to the disposal point.

264

- To provide SCADA based system for conveying effluent from the member industries to the CETP.
- MRCB may be asked to amend the consent of CETPs with incorporation of additional inlet parameters like BOD, COD, Colour, Ammonical Nitrogen (though prescribed in the outlet) as per the notification of MoEF&CC dated: 01.01.2016 and also to incorporate additional parameter, Colour in the discharge standard prescribed for CETPs.
- MIDC may be asked to expedite the process of providing the treated effluent disposal line from CETP to the disposal point suggested by NIO.
- MIDC may be asked to expedite the process of providing separate collection system for segregation of effluent from chemical and textile cluster in Dombivli MIDC area.
- Local municipal authorities may be directed to ensure non-discharging of domestic sewage in the natural drains/storm water drains.
- Local Municipal authorities/ MIDC may be asked to provide CCTV cameras at prominent places to have a check on the tanker movements.

Recommendations in regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation

Sl. No.	Actions Required (in Brief)	Responsible agency(ies)	Time target
1.	Setting up vigilance teams for verification of quality and quantity of effluent of member industries and identification of leakages in conveying pipelines and regular monitoring of industrial areas for identification of unauthorized tanker movements.	CETPs/ MPCB MIDC/	Immediate and continuous
2.	Regular monitoring of storm water drains in the MIDC areas during day and night times by dedicated team to identify illegal discharge in the storm water drain	CETPs/ MIDC/MPCB/ Local municipal corporation	Immediate and continuous
3.	Permission for new industries for discharge into CETP/ increase in effluent discharge quantity by the member industries should be intimated to CETP to check the adequacy of the installed capacity of the CETP.	MPCB/MIDC	Immediate
4.	Commissioning of GPS tracking system and monitoring thereof in all identified dedicated tankers operated by CETPs for collection of effluent from CETP member industries till the completion of the pipeline network.	Respective CETPs and MIDC (Nodal agency - MIDC)	02 months
5.	Installation & commissioning of pH sensor (with siren/hooter in non-residential zone) connected with SMS alerts to the aforesaid vigilance team members at strategic location of drains/rivers/stretches of MIDCs	MIDC and respective Municipal Corporation as per their jurisdiction	02 months
6.	Installation of CCTV cameras at prominent junctions	MIDC/ Local municipal	6 months

	and entries/ exit of MIDC areas to	corporation	
7.	Feasibility study & setting up of pipeline network (preferably above the ground) for conveying industrial effluent to CETPs of Chikholi-Morival and ACMA.	MIDC	1 year
8.	Segregation of effluent from Textile and Chemical clusters in Dombivli MIDC area.	MIDC	1 year
9.	Reviewing & stipulating BOD, COD, Ammonical Nitrogen and Colour as parameters with standards in CETP inlet effluent and Colour and D&G in CETP outlet effluent in all CETPs.	MPCB	03 months
10.	Commissioning of SCADA-PLC system at appropriate zones/locations of effluent collection sumps to identify & regulate quantity of effluent discharge by each individual CETP member unit. The collection sumps be equipped with individual online monitoring system comprising of pH sensor, electro-magnetic flow meter, auto cut-off valve and manual valve to regulate the effluent discharge from member industries and auto sample collection to be analysed need based.	MIDC and CETP operators (except CETPs of Chikholi-Morival and ACMA till pipeline network is commissioned)  (Nodal agency - MIDC)	07 Months

*S. Pradeep Raj*  
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Scientist-D, CPCB

266

## Annexure- III

## List of industrial units causing pollution (identified based on ETP sludge and other category of hazardous waste generation and their management)

Sr. No.	Name & Address of the industry.
1	M/s. A.L.A Chemicals Pvt, Ltd, Plot No. C-5, MIDC, Chemical Zone ,Ambernath, Dist: Thane – 421 501
2	M/s. Universal Chemicals & Industries Pvt, Ltd, C-1, C-2, C-3, MIDC Industries Area, Chemical Zone, Ambernath – 400 021.
3	M/s. Ambernath Organics Pvt. Ltd. Unit – I, Plot No. W-63 B, W-69, W-70, MIDC, Ambernath, Dist: Thane.
4	M/s. Raviraj Processor Pvt. Ltd, F1/8, Mankhavali, MIDC, KulgoanBadlapur (E), Dist – Thane
5	M/s. Kinnari Hosiery Industrie, F-1/4, MIDC, Near Rani Sati Textiles, Badlapur (E)
6	M/s. Asha Enterprises, Plot No. B-39, MIDC Chemical Zone , Ambernath, Dist – Thane.
7	M/s. Mayur Dyes & Chemicals , Shed No. 5, MIDC Industries, Chemical Zone Ambernath, Dist – Thane .
8	M/s. Veekay Chemicals , W-125A, Kharwai, MIDC Badlapur, Dist – Thane.
9	M/s. Sarvottam Chemicals Pvt. Ltd, Plot No. A-49, Morivli, MIDC Ambernath, Dist – Thane.
10	M/s. Vidushi Wires Pvt. Ltd, Plot No. C-6, Anand Nagar, Ambernath MIDC, Ambernath, Dist- Thane.
11	M/s. Rudilee Rubber Products Pvt. Ltd, Plot No. 67, MIDC Ambernath, Morivli, Ambernath, Thane.
12	M/s. Dhiraj Organic Pvt. Ltd, N-26, Anand Nagar, MIDC Ambernath – 421506.
13	M/s. Raniganj Chemical Works, Plot No. A-12, MIDC Chemical Zone, Kalyan-Badlapur Road, Ambernath, Dist – Thane.
14	M/s. Hindustan Organic Products, Shed No. W-3, Chemical Zone, MIDC Indl Estate, Ambernath (W), Dist. Thane - 421 501.
15	M/s. Premier Galvanizers, A-44, Add. Ambernath, M.I.D.C Ambernath, Dist: Thane.
16	M/s. Ankit Wash , Plot No. 52, MIDC Ambernath Area , ChikholiMorivali MIDC Ambernath, Ambernath (E).
17	M/s. ASB International Pvt. Ltd, Plot No. E-49, MIDC Industrial Area, Anand Nagar, Ambernath (E), Dist. Thane – 421506.
18	M/s. Jain and Jain , Plot W-37, MIDC Morivali , Ambernath, Dist. Thane.
19	M/s. Sahil Print Arts, Plot No. B-5, Morivali MIDC, AmbernathIndl Area, Near BSNL office, Ambernath ( West ) Dist. Thane -421501.
20	M/s. Bharat Metal Works, Shed No. W-83, (B), Chikhli MIDC, Ambernath Industrial Area, Taluka – Ambernath, Dist. Thane-421501.
21	M/s. Halide Chemicals, Plot No. 44, MIDC Morivali, Taluka Ambernath, Dist. Thane 421501.
22	M/s. Southern Spechem LLP , Plot No. F – 217, Ambernath Industrial Area, Ambernath, Dist. Thane-421501.
23	M/s. Co-Operative Resins & Chemicals, Plot No.56, MIDC, Morivli, Ambernath (W), Dist - Thane
24	M/s. Shruti Chemical Industries, Plot No. 119 Chikhli, MIDC Ambernath, Dist. Thane - 421505
25	M/s. Smirtlem Buckles India Pvt. Ltd, Shed No. 25, Plot No. 36, MIDC Shirgaon, Next to MIDC Office, Badlapur (E) Dist. Thane – 421502.
26	M/s. Atul Chem Industries, Plot A – 19, MIDC Badlapur, Dist. Thane.
27	M/s. Avon Consumer Products Pvt. Ltd, Shed No. 17, Plot No. 25, Badlapur MIDC, Dist.: Thane – 421503
28	M/s. Bhushal Health Care Pvt. Ltd, Plot No. W-11, MIDC Badlapur, Badlapur, Dist.: Thane .
29	M/s. Dhiraj Industries , Plot No. W-67A , Mankevli , MIDC, Badlapur (E), Dist. Thane -421 503
30	M/s. Disha Organic, Plot No. B9/2, Kulgaon MIDC Opp. Konkan Chemicals, Badlapur ( E ), Dist, Thane-421503

267

70

31	M/s. Ester (India), W 130 A, Kharvai, MIDC Badlapur (E).
32	M/s. Fine Organic Industries Pvt. Ltd, Plot No. W-124, Khervai MIDC Badlapur, Badlapur, Dist.; Thane – 421 503.
33	M/s. Fine Organics India Pvt. Ltd, W – 124(A), MIDC, Badlapur – 421503, Dist – Thane.
34	M/s. Himalaya Industries, Plot No. A- 54, MIDC Badlapur Industrial Area, Post: Kulgaon, Dist. Thane- 421503.
35	M/s. Jaguar Machinery and Spares, B-15, MIDC Badlapur (E), Dist. Thane.
36	M/s Mangalmurti Knit Industries, Plot No. A-30, Badlapur MIDC, Near State Bank of India, Badlapur, Dist - Thane.
37	M/s. Mukund Industry , Plot No. A- 4, MIDC Badlapur, Dist. Thane – 421 503.
38	M/s. Mukund Overseas , Plot No. A-23, MIDC Badlapur, Kulgaon, Dist. Thane .
39	M/s. Multichem Laboratories , A-18, MIDC Badlapur, Dist. Thane.
40	M/s. Pacific Organics Pvt. Ltd, Plot No. W-116 A, MIDC Kharvai, Badlapur, Dist – Thane .
41	M/s. R. B. Pigments And Dyes, W-17, MIDC. Badlapur, Dist – Thane .
42	M/s. Rupmani Chemicals, Plot No. F-15, MIDC Badlapur, Taluka – Ambernath, Badlapur, Dist. Thane
43	M/s. Sakhi Textiles, Plot No. B – 35/2, MIDC Badlapur, Badlapur ( E ), Dist. Thane-421503 .
44	M/s. SBL Colortech Pvt. Ltd, Plot No. C-4, MIDC Badlapur , Badlapur, Dist. Thane.
45	M/s. Sedan Speciality Chem Pvt. Ltd, F/16, MIDC, Mankivli Badlapur, Dist – Thane – 421503.
46	M/s. Shree Balaji Chemicals, Shed No. W/109-A, Badlapur MIDC Kulgaon, Dist – Thane
47	M/s. Smoothline Writing Instruments Pvt. Ltd, Plot No. G - 7, Kharvai MIDC, Badlapur ( E ), Dist. Thane - 421503
48	M/s. Square Chemicals, Plot. No. A – 61, MIDC Badlapur, Dist. Thane.
49	M/s. Thakkar Organics Pvt. Ltd, Plot No. F-19 , MIDC Mankavli, Badlapur (E), Dist.: Thane – 421503.
50	M/s. Vandana Powder Coating, Plot No. A -12, MIDC, Behind State Bank of India, Badlapur.
51	M/s. XL ASSOCIATES, Plot No. W – 66(A), MIDC Mankivli, Badlapur ( East), Dist. Thane – 421503.
52	M/s. Fit-Right Nuts & Bolts Pvt. Ltd, Plot No. E – 27, MIDC, Addl. Ambernath, Vill – Jambivli, Dist -Thane
53	M/s. RitikChem Pvt. Ltd, Plot No. N - 32, Additional Ambernath Indl Area, Ambernath (E), Thane.
54	M/s. J.K. Architectural Coatings , Plot No. N – 19, MIDC, Addl. Ambernath, Dist. Thane – 421502.
55	M/s. Pacific Organics Pvt. Ltd, Plot No: N-4, Additional MIDC, Ambernath (E), Dist: Thane.
56	M/s. Swan Chemicals, W – 26/A, Additional MIDC , Ambernath (E) – 421501.
57	M/s. Jaymco Polymers Pvt. Ltd, Plot No. N-16, Additional Ambernath, MIDC Ambernath, Anand Nagar, Dist.: Thane – 421 506.
58	M/s. G. Amphray Pharmaceuticals Pvt. Ltd, Plot No. 107, MIDC Indl. Area, Chikhli, Ambernath, Dist. Thane
59	M/s. Asolution Pharmaceuticals Pvt. Ltd, Plot No. K-3/8, Additional Ambernath MIDC Ambernath, Dist. Thane-421 506
60	M/s Green Field Material Handling Pvt Ltd, Plot No: N-49/1, MIDC, Additional Ambernath, Ambernath, Dist: Thane
61	M/s. Sai Steel Treatment Pvt. Ltd, Plot No. B-137, MIDC Additional Ambernath, Anandnagar Ambernath – 421 304
62	M/s. Vista Film Packaging, Plot No. B-84, Additional MIDC Anandnagar, Ambernath (E), Dist.: Thane – 421506
63	M/s. Juliet Industries, Plot No. E- 16, Additional MIDC, Ambernath (E), Dist. Thane- 421506 .
64	M/s. Auto Morse, Plot No. F-86/8 & F-86/8 (Part), MIDC Additional Ambernath, Anand Nagar, Ambernath (E) – 421503
65	M/s. SuneraChem, Plot No. N -10, Additional Ambernath Industrial Area, Anand Nagar, MIDC Ambernath (E) Dist Thane.

268

71

66	M/s. Anant Pharmaceuticals Pvt. Ltd, Plot No. W-57A, Additional Ambernath MIDC, Anandnagar, Ambernath (E), Dist. Thane - 421506
67	M/s. Mercury Organics , Plot No. M- 4/6, Additional AmbernathIndl. Area, Village Jambivali, Taluka - Ambernath, Dist. Thane .
68	M/s. Shree Steel, Plot No. A-72, MIDC Anand Nagar Additional Ambernath, Ambernath, Dist. Thane - 421506
69	M/s. Indokem Ltd, Plot No. 66, MIDC Industrial Area, Chikholi MIDC, Ambernath (West), Dist. Thane - 421501
70	M/s. ASB International Pvt. Ltd, Plot No. B - 85, Additional Ambernath MIDC, Anand Nagar, Ambernath (East) Dist. Thane - 421506
71	M/s. Solar Diamond Tools (India) Pvt. Ltd, Plot No. W - 14/1, Additional MIDC Ambernath , Taluka - Ambernath, Dist Thane - 421505.
72	M/s. AadityaSpeciality Chemicals, Plot No. G - 6, Additional Ambernath Area , Anandnagar MIDC, Ambernath, Dist. Thane
73	M/s. Machwel Engineering Services Pvt. Ltd, Plot No. A - 92, MIDC Indl. Area, Additional Ambernath, Ambernath, Thane- 421501
74	M/s. Altra Pure Chem, Plot No. N - 67, MIDC Additional Zone, Ambernath, Dist. Thane
75	M/s. Viral Enterprises Pvt. Ltd, Plot No. E - 59, Additional Ambernath MIDC, Ambernath, Dist. Thane- 421506.
76	M/s. Kalpsutra Chemicals Pvt. Ltd, Plot No. M - 12, Additional AmberanathIndl Area, Dist. Thane - 421506.
77	M/s. Getz Pharma Pvt. Ltd, PL-11, Additional Ambernath, Ambernath, Dist. Thane.
78	M/s. Vidushi Wires Pvt. Ltd, D- 57, MIDC Anandnagar, Addl Ambernath, Thane - 421 506.
79	Apurva Chemical, Tech Shed No.3, Badalapur MIDC
80	M/s. Chloral Chemicals (India) Pvt. Ltd, Shed No.24, Kulgaon, MIDC Badlapur, Dist : Thane.
81	M/s. D.K. PharmaChemP. Ltd, F-32/W-5/6/7, MIDC Badlapur, Dist. Thane.
82	M/s. Narmada Chemicals, A-17/2, MIDC Badlapur, Dist. Thane.
83	M/s. Ideal ChemiPlast Pvt. Ltd, A-1, MIDC Badlapur, Dist. Thane.
84	M/s. Speciality Polymers P.Ltd, Plot No. P-3, Near Makaria Co., MIDC Badlapur, Dist. Thane.
85	M/s. UrviSpeciality Chemicals, W-62A, MIDC Badlapur, Dist. Thane.
86	M/s. BushaiChemi-Pharma Pvt. Ltd, F-1/13 & F-33, M.I.D.C., Badlapur, Dist. Thane.
87	M/s. Supra Organics Pvt. Ltd, A/7, MIDC, Kulgaon, Opp. State Bank of India, Badlapur (East)-421503.
88	M/s. Noble Intermediates Pvt. Ltd, Plot No. A-36, Behind SBI Bank, MIDC Badlapur.
89	M/s. Ten Chemicals, A-7, MIDC KulgaonBadlapur, Dist. Thane.
90	M/s. N. Naseeb Garments Process, Plot No. F-21, MIDC Mankoli, Badlapur.
91	M/s. Monomer Chemical Ind.P.Ltd, Plot No.32, Chemical Zone, MIDC Ambernath, Dist. Thane.
92	M/s. Ordance Factory Ambernath, EMS Section, Kalyan-Badlapur Rd., Ambarnath (W),
93	M/s. Sima Products, W-14, MIDC Chemical Zone, Ambernath.
94	M/s. Sima Chemicals, W-13, Chemical Zone, Near Old Tel.Exchange, Ambernath (W).
95	M/s. Symphony Chemicals & Nutrients, Shed No.W-26, Chemical Zone , MIDC, Ambernath (E)-421506.
96	M/s. Mahanagar Gas Ltd, Plot Tak A, AmbernathIndl. Area, village - Chikholi, Ambernath.
97	M/s. Watson Pharma Pvt. Ltd, K-7, MIDC, Anand Nagar, Additional Ambernath, Ambernath.
98	M/s. Jubilant Life Sciences Ltd, N-34, Additional MIDC, Ambernath.
99	M/s. Watson Pharma Pvt. Ltd, N-15, MIDC, Anandnagar, Addl. Ambernath.
100	M/s. Just Textile Ltd, K-5, Addl. MIDC Ambernath, Dist. Thane.
101	M/s. Rasino Drugs Pvt. Ltd, N - 18, Addl. Ambernath MIDC , Dist. Thane.
102	M/s. Vivacious Pharmatex Pvt. Ltd, K-36, Additional MIDC , Anand Nagar, Ambernath.

269

72

103	M/s. Chemiquest Research India Pvt. Ltd, K-29/1, Add. MIDC, Opp. Bharat Serum, Anand Nagar, Ambernath(E).
104	M/s. Priyadarshini Microtech Pvt. Ltd, Plot No.N-74, Additional Ambernath MIDC, Ambernath.
105	M/s. Meta Bright Engineers, Plot No. D/9, Additional MIDC, Ambernath
106	M/s. Vertex Lifesciences Pvt. Ltd, W-77, Additional MIDC Anand Nagar, Ambernath (E)
107	M/s. PaiVerterinary Products Ltd, Plot No. B-9, Additional Ambernath MIDC, Dist. Thane.
108	M/s. Alok Dyeing & Bleaching Mills (Bom.) Pvt. Ltd, Plot. No: A-106, M.I.D.C., Phase 1, Dombivali, Dist. Thane - 421 203.
109	M/s. Enginemates Heat Transfer Pvt. Ltd, W-51, MIDC, Industrial Estate Phase - II, Manpada Road, Dombivli- 421 503.
110	M/s.HiMedia Laboratories Pvt, Ltd, W-239 PT, MIDC Phase II, Dombivli (East), Dist. Thane - 121 201
111	M/s. Unilab Chemicals & Pharmaceuticals Pvt. Ltd, Plot No. W - 34, MIDC Phase II,
112	M/s. Kamal Deep Colour Industries Pvt. Ltd, A-26, Phase II, MIDC Dombivali (E), Dist.:-Thane.
113	M/s. Nalanda Textiles Pvt. Ltd, B-34/2, MIDC Phase I, Dombivli (E). Dist - Thane.
114	M/s. B. R. Sons, Plot No. B - 8, MIDC Phase II, Sagaon, Dombivli ( E ) TalukaKalyan, Dist. Thane.
115	M/s. Shyamal Chemical Industries, Plot No. C - 2/ / 2, MIDC Phase I, Dombivli ( E ), Dist. Thane .
116	M/s. S. Zhaveri Pharmachem Pvt. Ltd, B-10 & 10-1, Dombivali MIDC,
117	M/s. Automotive Manufacturers Pvt, Ltd, Plot No. B-43, Phase I, MIDC,

## ANNEXURE IV - CETP / Industrial Effluent Sampling points

Sr. no.	Location Name / Sample Name	Latitude	Longitude	Sampling Date	Remarks	Sample Code	Area
1	Inlet of ACMA CETP co-op. society ltd (AC1)	19°12'45.4"N	73°10'48.0"E	17-09-2020	CETP Sample, Inlet sample from initial collection tank. Outlet sample from final outlet line. Outlet discharged in Nallah which meets Vaidhagni river	C1	Ambarnath
2	Outlet of ACMA CETP co-op. society ltd (AC2)			17-09-2020		C2	
3	Inlet of M/S Badlapur CETP Association (BC1)	19°09'06.8"N	73°14'35.7"E	17-09-2020	CETP Sample, Inlet sample from initial collection tank. Outlet sampled from V-notch chamber. Outlet discharged in Nallah which meets Ulhas river	C3	Badlapur
4	Outlet of M/S Badlapur CETP Association (BC2)			17-09-2020		C4	
5	Inlet of Chikholi Morivali CETP (CM1)	19°12'04.2"N	73°11'51.4"E	17-09-2020	CETP Sample, Outlet discharged in Nallah which meets Wadhvani river	C5	Ambarnath
6	Outlet of Chikholi Morivali CETP (CM2)			17-09-2020		C6	
7	Inlet of M/S Dombivli Better Environment system association (DBSA) (DB1)	19°13'04.1"N	73°06'21.7"E	17-09-2020	CETP Sample, Outlet discharged in Nallah which meets Ulhas river	C7	Dombivli
8	Outlet of M/S Dombivli Better Environment system association (DBSA) (DB2)			17-09-2020		C8	
9	Inlet of Dombivli CETP (DC1)	19°12'16.0"N	73°05'54.9"E	17-09-2020	CETP Sample, Outlet discharged in Nallah which meets Ulhas river	C9	Dombivli
10	Outlet of Dombivli CETP (DC2)			17-09-2020		C10	
11	Ashu Organics (AOL)	19° 9'11.14"N	73°14'48.74"E	17-09-2020	Industrial Effluent	IE1	Badlapur
12	Badlapur Textile Industries (BTI)	19° 9'9.06"N	73°14'14.54"E	17-09-2020	Industrial Effluent	IE2	Badlapur
13	Tulsi Cloth Processors Pvt. Ltd (TUC)			17-09-2020	Industrial Effluent	IE3	
14	Preme Nutrition, Additional MIDC, Ambarnath	19°10'55.5"N	73°11'18.4"E	17-09-2020	Industrial Effluent	IE4	Ambarnath
15				17-09-2020	Industrial Effluent	IE5	
16	Enaltech Pharma, Additional MIDC, Ambarnath	19°10'14.0"N	73°11'34.1"E	17-09-2020	Industrial Effluent	IE6	Ambarnath
17	Ullengal, Dombivli	19°12'58.7"N	73°06'41.9"E	18-09-2020	Industrial Effluent	IE7	Dombivli
18	Bishen dyleng and printing mills, Kalyan	19°13'55.8"N	73°07'01.6"E	18-09-2020	Industrial Effluent	IE8	Kalyan
19	M/S Mahesh textile processor private limited	19°13'28.8"N	73°06'38.9"E	18-09-2020	Industrial Effluent	IE9	Dombivli
20	Alipac Premises, MIDC Ph. 1, Dombivli	19°12'05.2"N	73°05'54.3"E	18-09-2020	Industrial Effluent	IE10	Dombivli
21	V & V Pharma Industries (V&V)			18-09-2020	Industrial Effluent	IE11	Dombivli

## ANNEXURE IV - CETP / Industrial Effluent samples analysis data (Contd..)

Sample Code	pH	EC (mS/cm)	EC (µS/cm)	TDS (EC)	TDS (ppm)	TSS (mg/L)	Sulphate (mg/L)	Phosphate (mg/L)	Nitrate (mg/L)	Chloride (mg/L)	Sulfide (mg/L)	O & G (mg/L)	BOD (mg/L)	COD (mg/L)	Turbidity (NTU)	Colour
Standard <sup>A</sup>	5.5 - 9.0	--	--	--	--	100	--	5	--	--	2	10	30	250	--	--
C1	7.6	5.602	5602	3081	2929	100	172.0	1.0	2.92	1524	8	-	50	330	426	Light Orange
C2	6.1	2.964	2964	1630	1555	100	295.5	0.5	3.49	993	24	18	44	227	54	No colour
C3	8.8	9.637	9637	5300	5105	200	1362.0	20.0	8.42	1312	36	-	540	2263	780	Yellow
C4	7.7	11.26	11260	6183	6056	500	908.5	6.0	8.92	1879	136	35	300	1632	410	Dark green
C5	7.0	4.06	4060	2233	2175	100	666.5	2.0	10.83	1134	28	-	75	1645	420	Olive green
C6	7.6	2.575	2575	1416	1366	300	140.5	4.5	19.10	851	20	14	38	153	410	Light yellow
C7	7.3	6.611	6611	3636	3560	300	532.0	1.0	0.72	1560	48	-	235	1017	490	Light green
C8	7.1	8.219	8219	4520	4401	100	725.0	BDL	0.64	1418	24	7	41	332	350	Light orange
C9	7.0	5.552	5552	3054	2942	300	794.5	79.0	4.14	1453	96	-	295	1960	136	Light pink
C10	7.4	8.958	8958	4927	4744	100	2387.0	3.5	1.26	1276	16	23	37	336	32	Orange
IE1	8.4	5.845	5845	3765	3647	200	677.5	4.5	57.68	744	BDL	-	24	67	48	Opaque
IE2	6.5	9.347	9347	5141	4958	200	357.0	BDL	0.59	1914	40	-	310	521	75	Purple
IE3	5.9	6.912	6912	3802	3656	200	1095.5	1.0	0.25	1241	8	-	305	723	130	Olive green
IE4	4.9	0.5239	524	288	280	100	192.5	3.0	0.17	603	44	-	280	1312	67	Light green
IE5	7.2	4.414	4414	2426	2333	500	42.5	41.5	0.00	532	8	-	220	902	93	Opaque
IE6	7.9	1.965	1965	1081	1035	300	16.5	1.0	0.19	674	4	-	36	119	35	No colour
IE7	8.0	11.36	11360	6248	6136	100	1604.0	BDL	0.00	1773	16	-	24	264	44	Light yellow
IE8	6.6	3.898	3898	2144	2093	100	3.0	BDL	0.76	1170	BDL	-	300	805	330	Wine red
IE9	6.8	3.726	3726	2049	1890	200	814.5	4.0	0.43	567	108	-	175	769	660	Dark grey
IE10	6.9	0.9308	931	512	500	300	38.0	BDL	0.00	674	48	-	49	170	360	Dark blue
IE11	7.4	0.1603	160	88	86	102	1183.5	14.0	0.00	1170	58	-	140	509	370	Orange

<sup>A</sup> General Standards for discharge of Environmental Pollutants; Part A - Effluents: Inland Surface Water (A)

- Could not be analysed due to paucity of time

BDL : Below Detection Limit

0.5

## Annexure-V

**BRIEF SITE VISIT REPORT ON STATUS OF INDUSTRIES WITH RESPECT TO  
EFFLUENT MANAGEMENT IN VARIOUS MIDC AREAS AND ULHASNAGAR**

**BACKGROUND**

In compliance of the Hon'ble Supreme Court order Civil Appeal No. 10582 / 2017 and IA No. 53816/ 2020, the inspection team was directed to carry out random inspection cum monitoring of industries in Additional Ambernath and Ambernath MIDC focussing on compliance status with respect to wastewater management including assessment of generation & management of hazardous wastes especially ETP sludge/salt etc. which are generated if waste water is treated. Accordingly, three teams comprising following officials of CPCB RD, Vadodara, CPCB RD Pune and NEERI Mumbai carried out inspection of 21 industries in Additional Ambernath MIDC and Ambernath MIDC on 17.09.2020 & 18.09.2020 and collected/ requested for documents like copy of consent and authorization, ETP flow diagram, flow records, sludge / salt disposal records etc. Few effluent samples, wherever felt necessary, were also collected and analysed at NEERI Mumbai.

1. Shri Shashikant Lokhande, So.E, CPCB RD Pune
2. Shri Nischal C., So. D, CPCB RD Vadodara
3. Dr. Nirpendra Semwal, So.C, CPCB RD Vadodara
4. Mrs. Arti Soni, So. C, NEERI Mumbai
5. Dr. Kumar Anrit, So. C, NEERI Mumbai
6. Mrs. Komal Kalawapudi, Technical Officer, NEERI Mumbai

**ABOUT ADDITIONAL AMBERNATH**

Maharashtra Industrial Development Corporation (MIDC) has developed industrial area in Ambernath. Additional Ambernath industrial area is located south of existing Ambernath industrial area and is spread in two stages i.e. Phase I and Phase II. As per MPCB records, there are 806 nos. industries in Additional Ambernath MIDC. The details of industries is given in the table below.

Sl. No.	Size of the industry	Additional Ambernath area				
		Red	Orange	Green	White	
1.	Large Scale Industry (LSI)	29	11	0	0	
2.	Medium Scale Industry (MSI)	10	5	2	0	
3.	Small Scale Industry (SSI)	136	87	410	116	
4.	Total	175	103	412	116	
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	80	25	0	0
		Discharging to CETP	0	0	0	0

There is one CETP in Additional Ambernath MIDC namely AAMA CETP (7.5 MLD). The CETP is not operational since 2016 due to Closure Direction issued by MPCB for noncompliance. As per information gathered from MPCB, presently possession of CETP is with MIDC. Drainage system along with intermediate collection sumps has been provided by MIDC for conveying the effluent from industries to CETP.

**ABOUT AMBERNATH MIDC**

As per MPCB records, there are 461 nos. industries in Ambernath MIDC. The detail is given in the table below.

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Ambernath area Chemical Zone, Ambernath, Chikholi & Morivali MIDC, Ambernath						
Sl. No.	Size of the Industry		Category of Industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		11	11	1	0
2.	Medium Scale Industry (MSI)		02	2	0	0
3.	Small Scale Industry (SSI)		178	47	137	72
4.	<b>Total</b>		<b>191</b>	<b>60</b>	<b>138</b>	<b>72</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	3	0	0	0
		Discharging to CETP	94	9	0	0

There is one CETP in Ambernath MIDC namely ACMA CETP (0.25 MLD). The CETP is presently operational.

It is gathered from MIDC officials during VC organised by CPCB RD Pune on 24.09.2020 that natural/storm water drains from Additional Ambernath and Ambernath MIDC converge to Waldhuni River after passing through areas having jurisdiction of MIDC followed by areas having jurisdiction of Ambernath Municipal Council. It was also informed in the VC by MIDC officials that water is supplied to the industries through pipelines and water meters are installed for individual industry. No industry is permitted to extract ground water in Additional Ambernath and Ambernath MIDC.

**OBSERVATIONS ABOUT UNITS CAUSING POLLUTION IN AMBERNATH AND ADDITIONAL AMBERNATH MIDC**

The details of observations made in 21 randomly inspected units are given at Annexure. of this report. It reveals that among 21 units inspected;

- (a) 04 units have not installed adequate equipment required to achieve ZLD conditions.
- (b) 05 units have provided the system but not operating it properly.
- (c) 02 units are not maintaining record for ZLD compliance.
- (d) 01 unit was found exceeding the prescribed consent standard for discharge and the industry is generating hazardous wastes, which are being sent to unauthorised recyclers without permission from MPCB. Also, these category of hazardous waste is not reflected in the CC&A.
- (e) 01 unit has not upgraded the ETP as per MPCB directions.
- (f) 01 unit is not operating the ETP properly.
- (g) 01 unit was found illegally disposing hazardous waste i.e. wet sludge (probably process residue and tank bottom sludge) in open pervious land near the boundary wall which may lead to contamination of soil/run-off water and water body thereof. River Waldhuni is flowing at about 10 meter distance from the boundary wall.

Apart from above, it is observed that most of the units have either not provided flow measurement devices or not maintaining the flow record for quantity of effluent treated in ETP and recycled / reused and also not provided separate energy meter for the ZLD / ETP. Therefore compliance of ZLD by these units has its own doubt. Moreover, it is gathered from MIDC officials during VC organised by CPCB RD Pune on 24.09.2020 that there have been 5 to 6 instances in last six months when MIDC noticed discharge of unauthorized effluent in storm water drains and the same has been intimated to MPCB for necessary action. MPCB officials informed in the VC that they are now putting the condition of flow meter for effluent in the consent for 17 category industries at the time of renewal of consent.

**CONCLUSIONS**

15 units among the 21 randomly inspected units are showing noncompliance w.r.t. one or other aspect of wastewater treatment and disposal and therefore, discharge of their non-compliant industrial

*Handwritten signatures and initials:* Anshikant, [Signature], [Signature], AA, NA, [Signature]

274

effluent either in drains/on land or to CETP cannot be ruled out and thus high probability of causing pollution in the surrounding environment (list of such units causing pollution is given at Annexure of this report). Such findings in about 70% of the units inspected points out that there could be other industries also in Ambernath and Additional Ambernath MIDC who do not have proper ZLD system/ETP/ unauthorized discharge of effluent / sludge or not operating the ZLD / ETP properly and thus causing pollution. In order to identify further such other units causing pollution, MPCB may take similar exercise of inspecting Red & Orange categories of units and units with ZLD conditions in Additional Ambernath and Ambernath MIDC area.

### ABOUT BADLAPUR MIDC

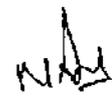
The industrial statistics of Badlapur MIDC is depicted in the table-I.

Table-I: Types of industries in Badlapur area

Sl. No.	Size of the industry		Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		4	4	0	0
2.	Medium Scale Industry (MSI)		3	0	1	0
3.	Small Scale Industry (SSI)		183	19	75	29
4.	<b>Total</b>		<b>190</b>	<b>23</b>	<b>76</b>	<b>29</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	01	0		
		Discharging to CETP	112	6	0	0
		Discharging to Waldhuni river/creeks/saline zone	0	0	0	0

- Red category industries in Badlapur mainly comprises of Textile- 34, API, Dyes & Dye intermediate, organic chemical and inorganic chemical- 65 & Other-91.
- Orange category industries in Badlapur mainly comprises of Pharma formulation & engineering with painting etc.
- Green category industries in Badlapur mainly comprises of engineering.
- White category industries in Badlapur mainly comprises of fabrication.

MPCB has informed that, no industry has been granted consent for discharge of untreated or treated effluent on to land or water body including Waldhuni River/Nala. There is one CETP in Badlapur MIDC namely M/s Badlapur Common Effluent Treatment Plant Association - CETP (8 MLD). The CETP is receiving effluent from member industries located in Mankhawali and Kharvai area of MIDC Badlapur. The mode of effluent conveyance to CETP is through underground pipeline, operated & maintained by MIDC. The CETP is equipped with primary, secondary and tertiary treatment facility. The treated effluent from CETP is sent to a collection sump of MIDC, thereafter it is disposed in the Nala flowing parallel to railway track at railway over bridge at Forest Naka, Ambernath. Further, the Nala joins the Waldhuni River. As per the CC&A conditions, given under the Water (Prevention and Control of Pollution) Act, 1974 for the discharge of treated effluent, the CETP is permitted to discharge the treated effluent in the marine coastal area at a point specified by the National Institute of Oceanography.

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**OBSERVATIONS ABOUT UNITS CAUSING POLLUTION IN BADLAPUR**

The details of observations made in 10 no. of randomly inspected industries are given at Annexure. Out of 10 industries visited in Badlapur MIDC, 07 industries were found operational, 03 industries were non-operational (as informed non-operational since last week of August, 2020). The industries located in Badlapur MIDC are member of CETP for further treatment of partially/treated effluent. It reveals that among 07 operational industries inspected:

- (a) All the 07 no. of operational industries have installed effluent treatment plant to achieve notified CETP inlet standards for further treatment at CETP.
- (b) 03 no. of industries are non-complied w.r.t. treated effluent discharge standards prescribed by MPCB and discharging treated effluent having higher concentration into CETP especially w.r.t. SS, BOD and COD respectively.
- (c) 01 no. of industry is operational without valid CC&A. It is gathered that renewal of CC&A is pending at MPCB.
- (d) 05 no. of industries were not provided designated and covered hazardous waste storage shed. As non-storage of hazardous waste under covered storage shed may lead to contamination of soil/run-off water and water body thereof.
- (e) 01 no. of industry is non-complied w.r.t. provisions of H&OW (M&TM) Rules, 2016 i.e. not sending incinerable hazardous wastes regularly to CHWIF.
- (f) All the 07 no. of operational industries have installed flow meter to record the effluent quantity being discharged to CETP.
- (g) All the 07 no. of operational industries have obtained membership of common environment infrastructure facility i.e. CETP and CHWTSDF for disposal of treated effluent and hazardous wastes. Further, except 01 industry rest of the industries are regularly disposing hazardous wastes to CHWTSDF.
- (h) Separate energy meter exclusively for ETP was not observed at 04 no. of industries:

**CONCLUSIONS**

Episodal discharge of colored effluent from member industries to CETP – Badlapur and its subsequent discharge from CETP – Badlapur into Waldhuni is a matter of concern. The industrial sector especially dyes and textile processing industries have not adopted adequate environment management system i.e. advanced treatment system for abatement of color in the final treated effluent. Though the member industries CETP – Badlapur have installed tertiary treatment units viz. pressure sand filter, activated carbon filter and multimedia filter as a polishing treatment, the color removal efficacy is not adequate; as it was evident from the inspection of industries during September, 2020. Further, there are several instances, wherein the CETP – Badlapur is receiving colored effluent from their member industries on piece-meal basis. In turn, MPCB had issued closure directions u/s 33-A of The Water (Prevention & Control of Pollution) Act, 1974 to various industries discharging colored effluent into CETP – Badlapur and directed to take corrective measures for abatement of color from the treated effluent.

The industries are not sending the hazardous wastes i.e. spent solvent/ residues to CHWIF on regular basis and also not provided designated and covered hazardous waste storage shed. As non-storage of hazardous waste under covered storage shed may lead to contamination of soil/run-off water and water body thereof. The industries are maintaining logbook to record various operational parameters of ETP. However, the logbook is neither updated on daily basis nor duly verified by concerned person.

Shashikant A. A. 4. N. B.

276

**ABOUT ULHASNAGAR:**

Ulhasnagar is a Municipal Corporation and the headquarters of the Tahsil. The town covers an area of 13 Km<sup>2</sup> and is divided into 285 blocks. It is a centre for the production of rayon silk, dyes, ready-made garments, electrical / electronic appliances & confectionaries. The town gets a protected water supply through MIDC.

As per the MPCB records provided in this area there are total 134 industries in this area. The detail is given in the table below.

Sl. No.	Size of the Industry		Ulhasnagar area			
			Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		1	3	0	0
2.	Medium Scale Industry (MSI)		0	0	0	0
3.	Small Scale Industry (SSI)		5	14	36	8
4.	Total		6	17	36	8
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	1	0	0	0
		Discharging to CETP	0	0	0	0
		Discharging to Waldhuni river/crecks/saline zone	1		0	0

**Observations:**

The details of industrial units visited in Ulhasnagar area are attached as Annexure. The observations made during these visits shows that:

- On 17/09/2020, the first monitoring day, team visited industry namely M/s. Swastik Plastic, located at Ulhasnagar Camp 3, Ulhasnagar which was in operation and operating without consent of MPCB was engaged in plastic related activities.
- The second industry which was visited was M/s. Hindustan Dyeing Works, located at O.T. Section, Ulhasnagar-2. MPCB has served closer direction to the industry, however, it was in operation and it was carrying out thread dyeing activity. The effluent generated was being directly discharged into the municipal sewer. The discharge point was closed approachable so unable to take sample.
- The third industry visited was served with closer direction from MPCB and the industry was closed.
- There is one red category industry, it is a textile unit viz. M/s. Khemes Dyeing & Bleaching Works, located at O.T. Section Road, in Ulhasnagar area which is a Zero Liquid discharge (ZLD) industry. This industry has installed ETP with tertiary treatment plant and 100% recycling its treated effluent. This industry was closed in lock down period and has it was started the process just seven days before visit day, as informed by the industry. The unit has sent its ETP sludge to CHWTSDF on 14/03/2020. This industry was found complying the MPCB norms.
- The Khatri compound located at Ulhasnagar Camp 3 area was visited where earlier jeans washing activities used to take place. The team visited 05 nos. of industries which were closed.
- The team visited the another area where earlier jeans washing activities used to take place behind Shantiprakash School called as Dharmaji Patil area of Ulhasnagar-5 (19.1951100, 73.1689990), where many jeans washing units (about 100 nos.) were in operation before December 2017. However, after closer direction from MPCB in December 2017 all the jeans washing activity in this area have been stopped since Dec 2017. During visit to this area all these Shops / Gals have been converted to

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stitching/ embroidery activities. There are no jeans dyeing and washing activities in this area observed by team.

**Conclusion:**

- ✓ Based on the two unit's observations, which were operating without consent from MPCB, there may be more such industries operating consent from MPCB in Ulhasnagar, which may be contributing untreated wastewater to Waldhuni River through Khemani Nalla. One Red category SSI unit was observed operating without consent. MPCB needs to keep a vigil on such units which are operating without consent.
- ✓ The Ulhasnagar Municipal Corporation is not having full-fledged Sewage Treatment plants and its sewage is directly mixing with Waldhuni River causing its pollution so the effluent from this kind of illegal operating industries also contribution of pollution in to the Waldhuni River.
- ✓ The areas where earlier jeans washing used to take place, after the MPCB closure direction in Dec 2017, the team does not found any jeans washing unit in those areas on random basis visit in that area on 17/09/2020. In those units now jeans stitching activity was observed. However, possibility of illegal jeans washing activity may not be ruled out.

**ABOUT DOMBIVALI MIDC:**

There are mixed typed of industries viz. textile, chemical and engineering. In phase - I, there are mainly textile and in Phase-II there are dominated chemical industries. In between these two phases Residential area is developed which has about 2.0 lakh population. MIDC has provided all basic infrastructure viz. water supply network, drainage network for collection and convey wastewater from industries to Common Effluent Treatment Plant (CETP). Further, discharge pipeline of 30 KM with 1290 chambers to dispose treated wastewater in to the saline zone of Ulhas River. There are two CETPs in the MIDC Dombivali namely Phase - I CETP called Dombivali Better Environment System Association (DBESA) having capacity of 16 MLD whereas another CETP in Phase - II called DCETP of 1.5 MLD capacity.

**Types of Industries in Dombivali area and their waste water management**

Sl. No.	Size of the industry		Category of industry			
			Red	Orange	Green	White
1.	Large Scale Industry (LSI)		07	01	01	00
2.	Medium Scale Industry (MSI)		10	03	01	00
3.	Small Scale Industry (SSI)		162	23	166	00
4.	<b>Total</b>		<b>179</b>	<b>27</b>	<b>168</b>	<b>90</b>
5.	Units generating waste water (as per Consent conditions)	Zero Liquid Discharge	14	01	NA	00
		Discharging to CETP	165	09	NA	00
		Discharging to Waldhuni river/ creeks/saline zone	Nil	Nil	NA	00

- (a) Red category industries in Dombivali mainly comprises of Textile, API, Dyes & Dye intermediate, organic chemical and inorganic chemical.
- (b) Orange category industries in Dombivali mainly engineering units.
- (c) Green category industries in Dombivali mainly comprises of Engineering & Plastic.
- (d) White category industries in Dombivali mainly comprises of - Fabrication & Assembling.

278

**Observations about Units causing Pollution in Dombivali MIDC:**

The details of the observations made in 07 randomly inspected units are given at Annexure. The observations made during these visits reveals that;

- Among these 07 units, one unit viz M/s. Shanti Synthetics & Processors Pvt., Ltd was found closed and not operation.
- In M/s. Alpik India Agarwal Dyeing unit, an illegal jeans washing activity was being carried out and untreated wastewater was being directly discharged into the underground wastewater collection drainage pipeline which directly goes to collection tank of CETP.
- The remaining five units visited were found operational state, however, the production activities were not in operation closed on visiting day due to weekly off and power staggering.
- All these five units were having valid consent to operate issued by MPCB and they have installed ETP.
- Among these five working units, three units were operating their ETP properly whereas two units namely M/s. Tirupati Textile located at plot number A-187/1 and M/s. Tirupati Textile located at plot number A-187/3 having common ETP but were found not being properly operated.
- All these five industries are member of CHWTSDP and are sending their ETP sludge CHWTSDP.
- All these five industries are member of CETP having meter on raw water consumption as well as to treated effluent discharged to CETP through wastewater collection drainage.
- The analysis results of three samples of treated wastewater collected from three different industries monitored reveals that all are within the norms of MPCB. However, colour was observed in the treated wastewater for which standard has not been prescribed by MPCB in the consent to operate.
- The storm water drain passing through Dombivali MIDC was having wastewater (Sewage or Industrial effluent or both).

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Annexure

Sr.	Name and address of Industry	Type of Industry / Scale of Operation (LSI / MSI / SSI)	Status of Consent	Product	Key observation w.r.t. wastewater management	Remarks
1.	M/s. Swastik Plastic Gala no. 02, Murlidhar Compound O.T. Section, Ulhasnagar Camp 3, Ulhasnagar.	Green - SSI	No Consent	Plastic Bags	<ul style="list-style-type: none"> <li>MPCB has issued proposed directions to this industry, as it does not have valid consent to operate.</li> <li>However, industry was found in operation at the time of visit.</li> </ul>	Operating without consent
2.	M/s. Hindustan Dyeing Works, MSEDCL Consumer Number 021514002484, Opp. BK-581, Near Ram Malishwala, O.T. Section, Ulhasnagar-2, Dist. Thane	Red - SSI	No Consent	Threads Dyeing	<ul style="list-style-type: none"> <li>The industrial unit has consent to establish and not for to operate.</li> <li>The industry has been asked to achieve zero liquid discharge by total utilization of liquid effluent in the process itself.</li> <li>Hence, MPCB has issued closure directions to this industry, as it was operating without valid consent to operate.</li> <li>Also, during visit, the unit was found in operation and thread dyeing activity was going on.</li> </ul>	Operating without consent
3.	M/s. S. T. Thread Works, MSEDCL Consumer Number 021510636080, Mr. Ravi Punjwani, Near Fakkad Mandall Chowk, Ulhasnagar-1, Dist. Thane	Red - SSI	No consent	Threads Dyeing	<ul style="list-style-type: none"> <li>The industrial unit was found closed at the time of visit.</li> </ul>	Unit was closed.
4.	M/s. Khemee Dyeing & Bleaching Works, "Khatree Bhavan", O.T. Section Road, Ulhasnagar, Tal. Ulhasnagar.	Red - LSI	Consent valid up to 31.01.2022	Bleaching, dyeing, Printing and Finishing of	<ul style="list-style-type: none"> <li>The industrial unit was in operation during visit and cloth finishing work was in progress. The representative of industrial unit informed that the unit has started before</li> </ul>	Unit was in operation and have valid consent, valid up to 31.01.2022. This industry is complying with all the


  
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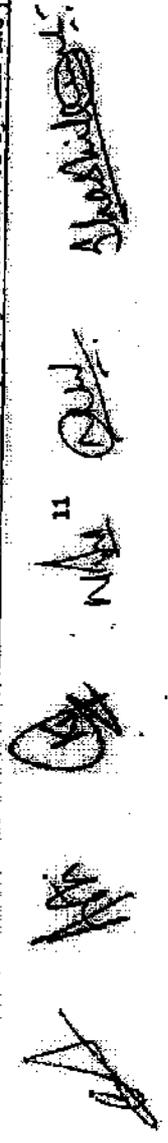
280

District Thane		Cloth.		Zero Liquid Discharge (ZLD) norms of MPCB.
5. M/s. Asandus Sons Dyeing Works, MSEDCCL Consumer Number 021510455239, Khatri Compound, Uthaswagar-3, Dist. Thane	Red - SSI	Jeans Washing	<ul style="list-style-type: none"> <li>&gt; 7 days after lockdown period.</li> <li>&gt; The unit has installed all required units for Zero liquid discharge (ZLD) as per the issued consent by MPCB.</li> <li>&gt; The unit is ZLD and the Effluent treatment plant stabilization work was in progress, as it has started just before 7 days after lockdown period with cloth finishing work. So the effluent generation was very less.</li> <li>&gt; The unit has consent valid up to 31.01.2022.</li> <li>&gt; There was no ETP sludge found, as informed sludge was sent to CHITSDI before lockdown (Manifest copy provided indicates sent date is 14/03/2022). Hence there was no ETP sludge.</li> </ul>	Unit was closed.
6. M/s. Gurukrupa Textiles, MSEDCCL Consumer Number 021510465927, Khatri Compound, Uthaswagar-3, Dist. Thane	Red - SSI	Jeans Washing	<ul style="list-style-type: none"> <li>&gt; The industrial unit was found closed at the time of visit.</li> </ul>	Unit was closed.
7. M/s. Phambar Kalyaldas Khatri, MSEDCCL Consumer Number 021518882667, Khatri Compound, Uthaswagar-3, Dist. Thane	Red - SSI	Jeans Washing	<ul style="list-style-type: none"> <li>&gt; The industrial unit was found closed at the time of visit.</li> </ul>	Unit was closed.
8. M/s. Tulsil Textile Dyeing, MSEDCCL Consumer Number 021510774032	Red - SSI	Jeans Washing	<ul style="list-style-type: none"> <li>&gt; The industrial unit was found closed at the time of visit.</li> </ul>	Unit was closed.

9

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S.N	Name and address of industry	Category & size of industry	Product	Specific observation w.r.t wastewater management	Remarks
11.	M/s Preme Nutrition, B-39, Additional Ambermath MIDC, Thane	Green / SSI	Food Processing (Manufacturing of chocolate and candy)	<ul style="list-style-type: none"> <li>The unit is having CCA from MPCB which is valid till 30.06.2025.</li> <li>As per CCA, daily quantity of trade effluent from the unit is NIL.</li> <li>It was observed during the visit that wastewater is generated from the unit and collected in a collection pit.</li> <li>Wastewater sample was collected from the collection pit to assess the quality and the analysis results of monitored parameters shows that it contains high organic load (BOD-290 mg/l, COD-1312 mg/l &amp; Sulphide-44 mg/l) and acidic pH of 4.9.</li> </ul>	<ul style="list-style-type: none"> <li>The unit is not having treatment facility for generated wastewater and hence discharge of untreated effluent in surrounding environment cannot be ruled out.</li> <li>MPCB needs to relook in the prescribed CCA condition for effluent and amend it appropriately.</li> </ul>
12.	M/s Namau Chem Pvt. Ltd., N-26 & 27, Additional Ambermath MIDC, Thane	Red / SSI / Recycler	Recycler (Distillation of Solvents)	<ul style="list-style-type: none"> <li>The unit is having CCA from MPCB which is valid till 30.08.2023.</li> <li>As per CCA condition, the unit needs to provide adequate effluent treatment system and subsequent disposal to CETP for further treatment.</li> <li>The unit has provided only a collection pit for wastewater generated from the plant.</li> <li>It is worth mentioning that CETP has been non-functional in Additional Ambermath MIDC for last 4-5 years.</li> </ul>	<ul style="list-style-type: none"> <li>The unit is not complying with the prescribed CCA condition. Also the unit has not provided the ZLD system as required in absence of CETP and hence discharge of untreated effluent in the surrounding environment cannot be ruled out.</li> </ul>
13.	M/s Kamsons Polymers Pvt. Ltd., K-307, Additional Ambermath MIDC, Thane	Red / SSI	Water based Acrylic Emulsion	<ul style="list-style-type: none"> <li>The unit is having CCA from MPCB which is valid till 31.05.2022.</li> <li>As per CCA condition, unit needs to provide ETP comprising primary, secondary and tertiary treatment followed by RO and MEE.</li> <li>The unit has provided primary ETP followed by sand and</li> </ul>	<ul style="list-style-type: none"> <li>MPCB needs to amend the CCA condition for disposal of treated effluent.</li> <li>The unit is not operating the ZLD system properly and also not maintaining the record of reuse / recycle after primary treatment and hence</li> </ul>

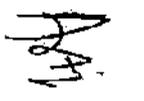
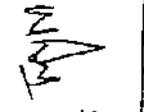

  
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<p>9. Khatri Compound, Uhasnagar-3, Dist. Thane M/s. Prashant Tekchand Khatri, MSEDCCL, Consumer Number 021513063287, Khatri Compound, Uhasnagar-3, Dist. Thane</p>	<p>Red - SSI</p>	<p>No Consent</p>	<p>Jeans Washing</p>	<p>&gt; The industrial unit was found closed at the time of visit.</p>	<p>Unit was closed.</p>
<p>10. &gt; The team visited the area behind Shantiprakash School called as Dharmaji Parit area of Uhasnagar-5 where many (about 100 nos.) jeans washing units were in operation before December 2017. However, after closer direction of MPCB in December 2017 all the jeans washing activity in this area have been stopped since Dec 2017. During visit to this area all these Shops / Gala have been converted to stitching/ embroidery activities. There are no jeans dyeing and washing activities in this area as observed by team.</p>					

  
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17.	M/s Sai Fertilizers and Phosphates Pvt. Ltd., Additional MIDC, Anand Nagar, Ambernath (E), Thane	Rod / MSI	Inorganic Chemicals	<p>30.04.2021.</p> <ul style="list-style-type: none"> <li>&gt; As per CCA condition, unit needs to provide adequate ETP as is warranted with reference to influent quality to meet the prescribed standards and the treated effluent shall be recycled to the maximum and remaining shall be discharged to MIDC sewerage for further treatment in CETP.</li> <li>&gt; It is worth mentioning that CETP has been non-functional in Additional Ambernath MIDC from last 4-5 years.</li> <li>&gt; The unit has provided ETP system comprising of Collection cum neutralization pit followed by Primary settling tank, Aeration Tank and Sand &amp; Carbon filter. One evaporation vessel which is provided in the process area is reportedly used for distillation of treated effluent and condensate is used in cooling tower and concentrate is disposed to CHWTSDF.</li> <li>&gt; The ETP was not operational during visit.</li> <li>&gt; No flow measurement device is provided in ETP.</li> <li>&gt; As per record submitted in MPCB, the unit has disposed 2.025 MT ETP sludge during April 2019 to August 2019.</li> <li>&gt; The unit is having CCA from MPCB which is valid till 30.04.2021.</li> <li>&gt; As per CCA condition the effluent shall be treated in ETP and recycle in the process for various purposes.</li> <li>&gt; The unit has provided ETP consisting of tertiary treatment followed by RO and MEE.</li> <li>&gt; The unit is maintaining the record of effluent treated in the ETP but not maintaining the record of treated effluent being recycled in the process.</li> <li>&gt; As per record provided, the unit has disposed 5.92 MT ETP sludge to CHWTSDF at Taleja during April 2019 to August 2019.</li> </ul>	Laboratories (Bombay) Pvt. Ltd., K-48, Additional Ambernath MIDC, Thane	Chemicals	<p>on activated sludge process was found non-operational during visit.</p> <ul style="list-style-type: none"> <li>&gt; The unit is not maintaining the record of wastewater generation and reuse of treated wastewater and hence probability of discharge of effluent in surrounding environment cannot be ruled out.</li> <li>&gt; MPCB needs to amend the CCA condition for disposal of treated effluent.</li> </ul> <p>The unit needs to measure quantity of treated wastewater recycled and maintain the record of same.</p> <ul style="list-style-type: none"> <li>&gt; MPCB needs to verify the same on time to time.</li> </ul>
18.	M/s Prasadshani Microtech, N-74, Additional MIDC, Anand Nagar,	Rod/SSI	Various laboratory reagents and culture media,	<ul style="list-style-type: none"> <li>&gt; The unit is having CCA from MPCB which is valid till 31.01.2024.</li> <li>&gt; As per CCA condition, unit shall provide ETP consisting of primary, secondary and tertiary treatment system as is</li> </ul>	M/s Prasadshani Microtech, N-74, Additional MIDC, Anand Nagar,	<p>The unit has not provided record of ETP waste disposal, effluent generation and treated</p>	

  
  
  
  
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19.	Ambernath, Thane	Repacking of activity various solid chemicals	<p>warranted with reference to influent quality and the unit shall achieve ZLD by total utilization of treated effluent in the process itself.</p> <p>The unit has provided ETP consisting of one collection tank followed by chemical mixing tank, Settling tank, Polishing tank, Sand &amp; Carbon filter and one single effect evaporator. Reportedly, the condensate is used for cooling tower make-up and concentrate is disposed to CHWTSDf at Talaja.</p> <p>The ETP was not operational during visit as the effluent generation depends on process and it is informed by the unit representative that presently due to COVID pandemic, the unit is operating in single shift only.</p> <p>The unit has not provided record of ETP waste disposal, effluent generation and treated effluent re-used.</p> <p>The unit is not having valid CCA from MPCB. The CCA expired on 30.11.2018.</p> <p>As per CCA condition, unit shall provide adequate ETP as is warranted with reference to influent quality to meet the prescribed standards and the treated effluent shall be recycled to the maximum and remaining shall be disposed on land for gardening till the commissioning of CETP</p> <p>The unit has provided ETP consisting of Collection tank followed by Flash Mixer, Primary settling tank, Aeration tank, Secondary settling tank, Sand and carbon filter. Treated effluent is stored in an open tank and reportedly re-used for wash rooms.</p> <p>The ETP was not operational during visit.</p> <p>The inspection team has collected effluent sample from inlet collection tank and treated effluent collection tank to assess the treatment capacity of ETP. The analysis results of monitored parameters shows TSS (300 mg/l) is exceeding the prescribed CCA standard and BOD (36 mg/l) and COD (119 mg/l) values are within the prescribed standard. However lower values of BOD and COD may be attributed to dilution from rain water as TDS has been</p>	<p>effluent re-used and hence it can be inferred that the unit is not operating the ETP properly and discharging the effluent in the surrounding environment.</p> <p>The unit is operating without valid CCA.</p> <p>The unit is not operating the ETP properly.</p> <p>It can be inferred that the unit is disposing untreated effluent on land or surrounding environment.</p>
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20.	M/s Minerals Chemicals Ltd, C/6 MIDC Zone	Paramount & Chemical	Red /LSI	Optical Whiteming Agent, Di- amino Stilbene Disulphonic Acid	<p>reduced from 2333 mg/l to 1035 mg/l from inlet to outlet. It is worth mentioning that it was raining heavily on the day of visit and hence dilution has more impact than treatment.</p> <p>The unit has disposed 34 Kg of ETP sludge on 04.05.2019, 30 Kg on 22.08.2019 and 35 Kg on 19.11.2019 to CHWTSDF at Talaja.</p> <p>There was no ETP sludge found stored at the unit premises during visit.</p> <p>It can be concluded that the unit has not disposed any ETP sludge to CHWTSDF during last 10 months and thus not operating the ETP properly.</p> <p>The unit is having CCA from MPCB which is valid till 31.08.2022.</p> <p>As per the CCA, the unit has provided ETP comprising Primary, Secondary and Tertiary treatment followed by UV, RO and MEE. The entire treated effluent shall be recycled into the process for various purposes.</p> <p>The unit has provided tertiary treatment system followed by RO, MEE and ATFD.</p> <p>It was observed during visit that the unit is disposing huge quantity of wet sludge (probably process residue and tank bottom sludge) in open near the boundary premises. It is worth to mention that river Waldhuni is flowing at about 10 meter distance from the boundary wall. Further, it was observed that some other solid hazardous waste was stored in very poor condition in a shed.</p> <p>As per the record provided, the unit has disposed 47.67 MT of ETP sludge to CHWTSDF at Mahape, Navi Mumbai during April 2019 to September 12, 2020.</p>	<p>The unit is disposing the hazardous waste against the condition prescribed in CCA and causing direct pollution in river Waldhuni.</p>
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	<p><i>Hazardous waste being disposed in open near boundary wall</i></p>		<p><i>Hazardous waste being disposed in open near boundary wall</i></p>
<p>21. M/s Pacific Organics Pvt. Ltd., Additional Ambarnath Thane</p> <p>Inorganic and organic chemicals</p> <p>Red / SSI</p>	<p><i>A view of River Wadhani from Boundary wall</i></p>	<p><i>Condition of hazardous waste storage</i></p>	<p>The unit is having CCA from MPCB which is valid till 31.08.2023.</p> <p>As per CCA condition, unit shall provide ETP consisting of primary, secondary and tertiary treatment system as is warranted with reference to influent quality and the unit shall achieve ZLD by total utilization of treated effluent in the process itself.</p> <p>The unit has provided ETP consisting of Collection cum neutralization tank followed by Flash Mixer, Primary settling tank, Aeration tank, Secondary settling tank. Treated effluent is stored in a clarified tank and reportedly re-cycled in cooling tower make up.</p> <p>The unit has provided RO and MEE but not yet</p>


  
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22.	M/s Just Textile, K-5, Additional MIDC, Aurang, Ambernath	Red/LSI	Textile (Dyed Knitted Yarn, Fabrics)	<p>commissioned.</p> <p>The unit is not maintaining the record of treated effluent recycled in the plant process.</p> <p>No sludge is disposed to TSDF during last one year.</p> <p>The unit is having CCA from MPCB which is valid till 31.01.2025.</p> <p>As per the CCA, the unit has provided ETP with UF, RO and MEE. Treated effluent shall be reused / recycle to achieve ZLD. The ETP sludge should be disposed to CHWTSDF.</p> <p>The unit has provided Collection sump followed by Rotating filter unit, Oil skimmer, pH correction tank, collection tank, Primary Clarifier, Aeration tank, Secondary clarifier, Holding tank, Decolouring dosing tank, Settling tank, Sand &amp; Carbon filter, UF, RO-1, RO-2 and MEE. ATFD unit is under installation.</p> <p>RO permeate and MEE condensate is reused in the process and it is informed by the unit representative that MEE concentrate is re-used in the fabric dyeing process. The unit has not obtained permission from MPCB for the same.</p> <p>As per the record provided, the unit has disposed 7950 Kg of ETP sludge to CHWTSDF at Talaja.</p>	<p>The unit is not disposing the MEE concentrate as per CCA condition and hence MPCB needs to verify the same.</p>
23.	M/s Chemicals Corporations, Shed No. 17, MIDC Chemical Zone, Ambernath	Red/SSI	Organic and Inorganic chemicals	<p>The unit is having CCA from MPCB which is valid till 31.12.2021.</p> <p>As per CCA condition, unit shall provide ETP consisting of primary, secondary and tertiary treatment system as is warranted with reference to influent quality and the treated effluent shall be recycled to the maximum extent and remaining shall be discharged to CETP for further treatment.</p> <p>The unit has provided ETP consisting of Collection cum neutralization sump followed by settling tank. The unit discharges the primary treated effluent to ACMA CETP for further treatment.</p> <p>As per record provided, the unit has disposed 143 M<sup>3</sup> of effluent to CETP and 0.04 MT of sludge to CHWTSDF at Talaja during April 2019 to August 2020.</p>	
24.	M/s Padmaravi Pulp and Paper Mills, N-	Red/LSI	Kraft Paper	<p>The unit is having CCA from MPCB which is valid till 31.01.2024</p>	

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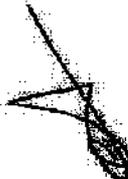
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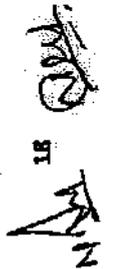
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55, Additional Ambemath MIDC, Thane			<p>As per CCA, trade effluent generation from the unit is NIL and also industry shall not generate any kind of hazardous waste.</p> <p>During visit, the inspection team did not observed any discharge of trade effluent and no hazardous waste was found stored in the unit premises.</p>	The industry is complied w.r.t. provisions of H&OW (M&TM) Rules, 2016.
25. M/s Melog Speciality Chemicals Pvt. Ltd., Plot No. N-5, MIDC Adil. Ambemath-East, Thane, Maharashtra	Red / LSI	Specialty chemicals	<p>The industry has obtained valid Consolidated Consent &amp; Authorization (CC&amp;A) from MPCB and is valid up to 30.09.2020.</p> <p>Total water consumption during August, 2019 to August, 2020 is 54,666 KL and the average water consumption is 4,556 KL/Month i.e. 152 KLD.</p> <p>The total effluent generation is less than the consented quantity.</p> <p>As per CC&amp;A, the treatment scheme to be provided is; ETP consisting of primary, secondary &amp; tertiary level treatment followed by two stage RO &amp; four stage MEE. The entire treated effluent shall be recycled in the process so as to achieve ZLD.</p> <p>Low COD/TDS stream: Oil &amp; Grease trap → Equalization tank (proportionating with MEE condensate) → Neutralization tank (addition of lime) → Drum screen filter → Flash mixer (addition of poly electrolyte) → Primary clarifier-1 → Flash mixer (addition of flocculants) → Primary clarifier-2 → Bio-reactor-1 → Bio-reactor-2 → Secondary clarifier → Treated effluent collection tank → RO-1 &amp; 2 (parallel operation) → RO permeate tank → Reuse in process &amp; utility/auxiliary activities.</p> <p>High COD/TDS stream: Oil &amp; Grease trap (proportionating of High COD/TDS stream &amp; RO reject) → Collection tank → Neutralization tank (addition of caustic, HCl) → MEE feed tank → Four stage MEE.</p> <p>Concentrate → Filter/press → Centrifuge → Residue → Disposal to CHWTSDF. Whereas MEE condensate is proportionated &amp; treated along with low COD/TDS stream.</p> <p>During inspection, it is observed that low COD/TDS stream and high COD/TDS stream of ETP was operational.</p> <p>The industry has provided electromagnetic flow meter at inlet and final outlet of ETP.</p> <p>The industry has provided separate energy meter for Low</p>	






290

26.	M/s Anil Bioscience Ltd., Plot No. N-37, MIDC, Ambernath, Thane, Maharashtra	Red / LSI	API	<p>COD/TDS and High COD/TDS streams of ETP and is found operational during inspection.</p> <p>➤ During inspection, following types of hazardous wastes were stored inside the hazardous waste storage shed; ETP sludge &amp; MEE solids (low COD &amp; high COD stream), process residue, spent carbon etc. App. 15 -17 MT of hazardous waste was stored inside the hazardous waste storage shed.</p> <p>➤ The industry has submitted annual return for the FY 2019-20 to MPCB on 09.06.2020. The details and quantity of hazardous wastes disposed to CHWTSDF are; Process Residue and wastes 49 &lt; 80.7 MTA; Spent carbon: 3.97 &lt; 8 MTA; ETP sludge: 45.31 &lt; 173 MTA; MEE solids: 0.54 &lt; 3 MTD; Used oil: 0.87 &lt; 1 MTA.</p> <p>➤ As per manifest record, the unit has disposed 27.15 MT MEE solids in September 2020. About 15 - 17 MT of ETP sludge was still stockpiled inside the hazardous waste storage shed, which is yet to be disposed.</p> <p>➤ The industry has obtained valid Consolidated Consent &amp; Authorization (CC&amp;A) from MPCB and is valid up to 31.12.2020.</p> <p>➤ Desired information w.r.t. monthly water consumption and effluent generation was not made available to the inspecting team.</p> <p>➤ As per CC&amp;A, the treatment scheme to be provided is; ETP consisting of primary, secondary &amp; tertiary level treatment followed by two stage RO &amp; four stage MEE. The entire treated effluent shall be recycled in the process so as to achieve ZLD.</p> <p>➤ The various unit operations &amp; processes of ETP are; Screen chamber followed by Oil skimmer, Equalization tank, Flash mixer (addition of poly electrolyte &amp; alum), Primary clarifier, Activated sludge process-1, Secondary clarifier-1, Activated sludge process-2, Secondary clarifier-2, Pressure sand filter, Advanced oxidation process, Activated carbon filter, Distillation. Distillate reuse in utility.</p> <p>➤ The various unit operations &amp; processes of ETP are; Screen chamber followed by, Oil skimmer, Equalization tank, DAF, Activated sludge process, MBR, Pressure sand filter, Activated</p>	<p>➤ The industry is w.r.t. complied provisions of H&amp;OW (M&amp;TM) Rules, 2016.</p> <p>➤ During January, 2019 M/s Anil Bioscience Ltd., has taken over M/s Polyding Laboratories Pvt. Ltd., the present industry and had obtained CC&amp;A for change in product mix i.e. for manufacturing 10 types of API and consented effluent generation is 110 KLD, the commissioning of 110 KLD is in progress. Presently the industry is</p>
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<p>manufacturing only 3 products and treating effluent in existing ETP.</p> <p>&gt; The generator of hazardous waste i.e. new name is not updated in the list of CHWTSDF i.e. M/s MWML, Talaja.</p>	<p>carbon filter, UF, RO, MEE, ATFD → Sell → Disposal to CHWTSDF.</p> <p>&gt; RO permeate &amp; MEE condensate → Reuse in process &amp; utility.</p> <p>&gt; During inspection, it is observed that ETP was operational.</p> <p>&gt; The industry has provided electromagnetic flow meter at inlet and final outlet of ETP. However, it was under maintenance.</p> <p>&gt; The industry has provided separate energy meter for Low COD/TDS and High COD/TDS streams of ETP and is found operational during inspection.</p> <p>&gt; As per manifest vide even dated 08.06.2029 &amp; 12.10.2019 the unit has disposed 0.188 MT of ETP sludge 0.092 MT process residue respectively.</p>	<p>Pharmaceuticals</p>	<p>Red / SSI</p>	<p>M/s V &amp; V Pharma Industries, Plot No. N-48, MIDC Addl. Ambarnath, Tal: Ambarnath, Dist: Thane, Maharashtra</p>
<p>&gt; The industry is non-complied w.r.t treated effluent discharge standards prescribed by MPCB i.e. SS: (102 &gt; 100 mg/L); BOD: (140 &gt; 100 mg/L) and COD: (509 &gt; 250 mg/L).</p> <p>&gt; The industry is generating mother liquor, spent methanol and process residue as hazardous wastes, which is being sent to unauthorised recyclers without permission from MPCB. Also, not reflected in the CC&amp;A.</p> <p>&gt; It is gathered from manifest document made available to inspecting team that the industry has not disposed</p>	<p>&gt; The industry has obtained valid Consolidated Consent &amp; Authorization (CC&amp;A) from MPCB and is valid up to 30.11.2020.</p> <p>&gt; Desired information w.r.t. monthly water consumption and effluent generation was not made available to the inspecting team.</p> <p>&gt; Consented effluent quantity is 18 KLD; As per CC&amp;A, the treatment scheme to be provided is; comprehensive treatment system consisting of primary/secondary/tertiary treatment. The treated effluent shall be recycled to the maximum extent and remaining shall be discharged into CETP for further treatment</p> <p>&gt; The various unit operations &amp; processes of ETP are: Screen chamber, O&amp;G trap, Equalization tank, Flash mixer (addition of poly electrolyte &amp; alum), Primary clarifier, Activated sludge process, Secondary clarifier, Dual media filter, Activated carbon filter, Evaporator cum distillation reactor, Distillate to reuse in utility &amp; fire-fighting.</p> <p>&gt; Distillation residue → Disposal to CHWTSDF.</p> <p>&gt; During inspection it was observed that tertiary treatment units were not in operation.</p> <p>&gt; Grab effluent sample was collected from outlet of secondary clarifier, as the distillation reactor was non-operational and analyzed for consented discharge parameters. The analysis of treated effluent sample reveals that the concentration of SS: (102 &gt; 100 mg/L); BOD: (140 &gt; 100 mg/L) and COD: (509 &gt; 250 mg/L).</p>	<p>Pharmaceuticals</p>	<p>Red / SSI</p>	<p>M/s V &amp; V Pharma Industries, Plot No. N-48, MIDC Addl. Ambarnath, Tal: Ambarnath, Dist: Thane, Maharashtra</p>


  
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292

28.	M/s. Printex Enterprises, Plot no. 38, MIDC, Morivai, Tal Ambernath, Dist. Thane	Red - SSI	Printing of Cloths and Jeans Washing	<p>are exceeding the standards prescribed by MPCB.</p> <ul style="list-style-type: none"> <li>&gt; The industry has provided mechanical flow meter at final outlet of ETP.</li> <li>&gt; As per manifest dated 20.03.2020, the unit disposed ETP sludge @ 1570 KL and production sludge @ 150 KL.</li> <li>&gt; The industry had a stock of app. 30-50 HDPE drums, reportedly consist of mother liquor, spent methanol and other process residues, which are haphazardly stockpiled on previous ground.</li> <li>&gt; The mother liquor generated from production of Furmidicarboxylate &amp; Indanone is being sent to unauthorised recycler, without permission from MPCB.</li> <li>&gt; Similarly, spent methanol generated during process is also being sent to unauthorised recycler, without permission from MPCB.</li> <li>&gt; Earlier, the unit was carrying out jeans washing / dyeing activity along with printing. It has valid consent for printing and not for jeans washing / dyeing, so MPCB had served closer order to this unit. As per the MPCB closer order, unit has stopped all the dyeing and jeans washing activities.</li> <li>&gt; During visit, it was observed that unit was carrying only printing activity.</li> <li>&gt; The machines / facility required for jeans washing / dyeing activities was observed to be removed and only printing was observed.</li> <li>&gt; The ETP condition of this unit was not satisfactory.</li> <li>&gt; As per the ETP condition it looks like that unit is not treating effluent properly. As there was no effluent so sample was not taken.</li> <li>&gt; The unit is a member of Chikoli - Morivai CETP.</li> <li>&gt; The unit has valid consent to operate.</li> <li>&gt; MPCB has issued a show cause notice to this unit to upgrade and comply with the effluent treatment facility.</li> <li>&gt; The unit has complied with the MPCB show cause notice and developed small scale effluent treatment plant.</li> <li>&gt; The unit was in operation and jeans washing activity was observed.</li> </ul>	<p>hazardous waste after April, 2020.</p> <ul style="list-style-type: none"> <li>&gt; Only few HDPE bags app. 5 bags were found filled with hazardous wastes. Sludge drying beds were found empty.</li> </ul>
29.	M/s. Savetam Chemical, Plot No. 49, MIDC Morivai, Tal. Ambernath.	Red - SSI	Jeans washing	<ul style="list-style-type: none"> <li>&gt; The unit has valid consent to operate.</li> <li>&gt; MPCB has issued a show cause notice to this unit to upgrade and comply with the effluent treatment facility.</li> <li>&gt; The unit has complied with the MPCB show cause notice and developed small scale effluent treatment plant.</li> <li>&gt; The unit was in operation and jeans washing activity was observed.</li> </ul>	<p>Unit has valid consent, unit has complied to MPCB show cause notice and upgraded its ETP.</p>

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30.	M/s. Ankit Wash, Plot No. 52, MIDC Morivali, Ambernathi.	Red - SSI Jeans Washing	<ul style="list-style-type: none"> <li>&gt; The unit is a member of Chikoli - Morivali CEIP.</li> <li>&gt; The unit has valid consent to operate.</li> <li>&gt; MPCB has issued a show cause notice to this unit to upgrade and comply with the effluent treatment facility.</li> <li>&gt; It has not complied with the MPCB show cause notice and effluent treatment plant was under upgradation.</li> <li>&gt; The unit was in operation and jeans washing activity was observed without proper treatment facility as upgradation of ETP was going on so there was no effluent.</li> <li>&gt; The unit is a member of Chikoli - Morivali CEIP.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; MPCB issued show cause notice to upgrade ETP.</li> <li>&gt; No proper treatment for generated effluent indicators that untreated effluents may be sending to CETP or may be disposing in the environment.</li> </ul>
31.	M/s. Sambho Interling, 31A, MIDC, Ludhiyana Silk Mills Compound, Ambarnath (W)	Jeans Washing Closed		


  
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294

Sr.	Name and address of industry	Type of Industry / Scale of Operation (LST / MST / SSI)	Status of Consent	Product	Key observation w.r.t. wastewater management	Remarks
1	M/s. Ulleagal Brothers Textile Pvt. Ltd., Plot no. B-6, MIDC Phase - I, Dombivalli, Tal. Kalyan, Dist. Thane.	Red - SSI Unit	Consent valid till 31/12/2022	Processing of Fabrics	<ul style="list-style-type: none"> <li>➤ The unit has valid consent from MPCB, which is valid till 31/12/2022 and it is member of Dombivalli Better Environment System Association (DBESA) CETP located at Plot no. OA-8, Phase -I, MIDC Dombivalli (East) Dist. Thane.</li> <li>➤ As per the consent, unit has provided primary / secondary and tertiary treatment to effluent.</li> <li>➤ The unit operation was closed due to weekly off and power staggering on the visiting day.</li> <li>➤ Even though, unit was closed due to weekly off, ETP of unit was in operation the ETP outlet sample was collected and it shows that pH of sample was 8.0, COD of sample was 264 mg/l whereas BOD was 24 mg/l. These results indicates that the ETP was functioning. However colour of the sample was light yellow.</li> <li>➤ The ETP sludge of the unit was sent to CHWTSDF on 21/07/2020 and very negligible ETP sludge was found kept on impervious surface area.</li> <li>➤ The outlet sample of the ETP was taken which was clear in appearance, without any odour.</li> <li>➤ The house/keeping in unit was satisfactory.</li> <li>➤ The unit has valid consent from MPCB, which is valid till 31/12/2022 and it is member of DBESA CETP located at Plot no. OA-8, Phase -I, MIDC</li> </ul>	Consent is valid till 31/12/2022 and ETP was in operation. Very negligible ETP sludge (about 50 kg) was found kept on impervious surface area.
2	M/s. Bisben Dyeing Printing & Weaving Mills	Red - SSI unit	Consent is till 31/12/2022	Textile Processing of Cotton		Consent is valid till 31/12/2022 and ETP was not in operation.

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296

4	M/s. Timpadi Textile Mills, Plot No. A - 187, A - 187/1, MIDC Phase - I, Dombivli, Tal. Kalyan, Dist. Thane.	Rod - SSI	Consent is valid till 31/10/2021	Textile Processing Optical Whitening	<p>                     ▶ The outlet sample of the ETP was taken which was in dark grey colour in appearance, without any odour. The analysis results of the samples shows that pH of sample was 6.6, COD of sample was 769 mg/l whereas BOD was 175 mg/l. These results indicates that the ETP was functioning, wastewater as per MPCB consent are COD -1600 mg/l and BOD - 800 mg/l. So it indicates that ETP is performing as per the norms of MPCB.                 </p> <p>                     ▶ The ETP sludge was sent to CHWTSDF on 18/08/2020 and decantation of ETP sludge was going on.                 </p> <p>                     ▶ The outlet sample of the ETP was taken which was black in appearance, without any odour.                 </p> <p>                     ▶ The housekeeping of the unit was satisfactory.                 </p> <p>                     ▶ The unit has valid consent (up to 31/10/2021) from MPCB, and it is member of DBESA CETP located at Plot no. OA-8, Phase -I, MIDC Dombivli (East) Dist. Thane.                 </p> <p>                     ▶ The ETP has primary / secondary and tertiary treatment to treat effluent.                 </p> <p>                     ▶ The unit operation was closed due to weekly off and power staggering on the visiting day.                 </p> <p>                     ▶ The ETP of unit was not in operation. The secondary treatment in ETP is biological continuously (continuous aeration) to maintain MLSS (biological system). Due to non-operation of ETP, there was no effluent discharge so sample was not collected.                 </p> <p>                     ▶ The ETP sludge was sent to CHWTSDF on 05/09/2020 and no sludge was observed bying in the premises indicates that operation of ETP is doubtful.                 </p>	<p>                     Consent is valid till 31/10/2021 and ETP was not in operation. Non operation of ETP and no ETP sludge found raise the doubt of ETP operation.                 </p>
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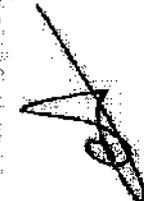
25

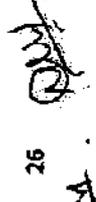
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	M/s.	Red - SSI Unit	Consent is valid till		The housekeeping of the unit was not satisfactory.	Consent is valid till
5	M/s. Tirupati Textile Mills, Plot No. A - 187/3, MIDC Phase - I, Dombivli, Tal. Kalyan, Dist. Thane.	Red - SSI Unit	31/05/2024	Textile Processing - Bleaching & Stentering of cloths	<ul style="list-style-type: none"> <li>&gt; The unit has valid consent (up to 31/05/2024) from MPCB, and it is member of DBESA CETP located at Plot no. OA-8, Phase -I, MIDC Dombivli (East) Dist. Thane.</li> <li>&gt; This industry is a sister concern industry of M/s. Tirupati Textile Mills, Plot No. A -187, A-187/1, located on the adjacent plot and the effluents from this unit is also treated in the ETP of above mentioned industry. The ETP has primary / secondary and tertiary treatment to treat effluent.</li> <li>&gt; The unit operation was closed due to weekly off and power staggering on the visiting day.</li> <li>&gt; The ETP of unit was not in operation. The secondary treatment in ETP is biological treatment which needs to be operated continuously (continuous aeration) to maintain MLSS (biological system). Due to non-operation of ETP, there was no effluent discharge so sample was not collected.</li> <li>&gt; The ETP sludge was sent to CHWTSDF on 05/09/2020 and no sludge was observed lying in the premises indicates that operation of ETP is doubtful.</li> <li>&gt; The housekeeping of the unit was not satisfactory.</li> </ul>	31/05/2024 and ETP was not in operation.
6	M/s. Shanli Synthetics Processors Pvt. Ltd.	-	-	-	<ul style="list-style-type: none"> <li>&gt; The industrial unit is closed and there is no any kind of activity observed.</li> </ul>	The unit building is totally closed.
7	M/s. Alpic India Agarwal Dyeing	-	-	-	<ul style="list-style-type: none"> <li>&gt; The industrial unit is closed and there is no any kind of industrial machinery or production activity observed.</li> <li>&gt; However, there was an illegal jeans washing.</li> </ul>	An illegal jeans washing activity was observed.


				<p>activity was going on and the untreated jeans washing wastewater was disposing into the wastewater carrying drain of MIDC meeting to CETP.</p> <p>➤ The outlet sample of the ETP was taken which was in dark blue colour in appearance, without any odour. The analysis results of the samples shows that pH of sample was 6.9, COD of sample was 170 mg/l whereas BOD was 49 mg/l.</p> <p>➤ However, the jeans washing activity was illegal.</p>	
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*Shashikant Lokhande*

(Shashikant Lokhande)  
CPCB - RD, Pune

*Amrith*

(Dr. Kumar Amrith)  
NEERI - Mumbai

*Nishchal C.*

(Nishchal C.)  
CPCB - RD (W), Vadodara

*Arati Soni*

(Arati Soni)  
NEERI - Mumbai

*Nirpendra Senwal*

(Dr. Nirpendra Senwal)  
CPCB - RD (W), Vadodara

*Komal Kalawepudi*

(Komal Kalawepudi)  
NEERI - Mumbai

\*\*\*\*\*

### Inspection Reports of industrial units randomly inspected on 18/9/2020 in Ambernath MIDC

05 industrial units were randomly inspected on 18/9/2020 by Regional Director, CPCB, Regional Directorate Pune. Regional Officer, Regional Office Thane, MPCB, was also present during the inspection. The random inspection was mainly focussed on waste water management in the inspected units and specific observations along with remarks are given in Table below.

Sl. No. (1)	Name & Address of the unit (2)	Details as per the CCA Category & Size of industry (3)	Specific observations w.r.t. waste water management (4)	Remarks (5)
1	M/s Brilliant Polymers Private Limited Plot No. 15, 16, 21/4, MIDC, Morivalli, Ambernath ( West) Dist- Thane -421 505	Category - Red Size - LSI  Type of industry- Synthetic Chemical (Polymers)  Effluent generation (in KLD) - 4.92 (100% recycled in the process so as to achieve ZLD) Effluent Discharge- ZLD  CCA valid till: 30.4.2025	1) During the inspection industry was found in operation. 2) Effluent is distilled in distillation column and recovered glycol is reused in process & distillate water is reused for cooling tower make up. 3) No flow meter provided	No specific non-compliance was observed at the time of visit.
2.	M/s Solar Chemferts Pvt Ltd Plot No. 15, 16 & 21/10, Chikholi M.I.D.C., Ambernath, Dist- Thane -421 505	Category - Red Size - MSI  Type of industry- Fertilizers.  Effluent generation -1.0 KLD. Effluent Discharge- Treated effluent the recycling in the process. ( ZLD )  CCA valid till: 30.11.2022	1) During the visit industry was not in operation due to weekly shutdown. 2) Industry has provided primary treatment viz. collection cum neutralization tank, settling tank and SDB. Treated effluent the recycling in the process. 3) However, during inspection seepages of colour effluent observed in the premises and O&M of ETP was poor. 4) Coal handling and storage was not proper. 5) Housekeeping in and around is very poor.	The unit is not handling industrial wastewater management properly and ETP is also not maintained properly thereby violating the ZLD norms. Therefore, discharge of untreated / partially treated on land / drain or water body cannot be ruled out.
3	M/s Universal Chemical & Industries Pvt Ltd	Category - Red Size - LSI	1. During the inspection industry was not in operation due to weekly shutdown.	Needs verification by MPCB if By-product generated has been

Plot No. C-1, C-2 & C-3, Chemical Zone, M.I.D.C., Ambarnath, Dist- Thane	Type of industry- In Organic Chemical Effluent generation - Qty- 11.0 KLD. Effluent Discharge- ZLD CCA valid till: 31.12.2020. By-Products - Manganese Sulphate Solution; Sodium Sulphate Solution; Ortho Phosphoric Acid Solution; Weak Mono Methyl Amine Solution; Precipitated Manganese Dioxide (Reclaimed MnO <sub>2</sub> ); HBr Solution 10%.	2. Industry has provided equalization and neutralization tank, bioreactor, settling, filter feed tank, sand and carbon filter, treated effluent holding tank. Treated effluent reused. 3. Flow meter provided at Inlet. 4. Form No. 4 Submitted on 30.6.2020.	utilised at end use by authorised users.
4 M/s G. Amphray Pharmaceuticals Pvt Ltd. Plot No. 107, MIDC, Chikholi, Ambarnath, Dist- Thane :-421 505	Category - Red Size - SSI Type of industry- Bulk Drugs Effluent generation in 2.0 KLD. Effluent Discharge- In to CETP. CCA valid till: 31.1.2022	1. During the visit industry was not in operation due to weekly shutdown. 2. Industry has provided ETP Collection cum Neutralization, Settling tank; SDB, Carbon filter & Sand filter. 3. Treated effluent sending to CETP. 4. Flow meter provided at Out let.	No specific non-compliance was observed at the time of visit.
5 M/s Trochem Products Ltd. Plot No. 10/2, MIDC, Chikholi, Ambarnath, Dist- Thane :-421 505	Category - Red Size - SSI Type of industry- Pharmaceutical Effluent generation in 11 KLD. Effluent Discharge- In to CETP. CCA valid till: 31.03.2022	1. During the visit industry found not in operation. 2. Industry has provided collection tank, neutralization tank, flash mixer, primary clarifier, settling tank.	Unit was found closed and non-operational.



(Bharat K Sharma)  
Regional Director, RD Pune, CPCB  
28/9/2020

**Annexure - VI**

**List of the 22 units operating illegally/ not having adequate equipment required to achieve Zero Liquid Discharge (ZLD)/ either not meeting the stipulated discharge standards or not operating the ETP properly/ illegally disposing hazardous waste in open land**

**A. Units found operating illegally**

- 1) M/s. Alpico India Agarwal Dyeing, Plot no. F-1, MIDC Phase - II, Dombivali (E), Dist. Thane
- 2) M/s. Swastik Plastic Gala no. 02, Murlidhar Compound O.T. Section, Ulhasnagar Camp 3, Ulhasnagar.
- 3) M/s. Hindustan Dyeing Works, MSEDCL Consumer Number 021514002484, Opp. BK-581, Near Ram Malishwala, O.T. Section, Ulhasnagar-2, Dist. Thane

**B. Units found not having adequate equipment required to achieve Zero Liquid Discharge (ZLD) conditions prescribed under the "consent to operate"**

- 1) M/s Preme Nutrion, B-39, Additional Ambemath MIDC, Thane
- 2) M/s Namau Chem Pvt. Ltd., N-26 & 27, Additional Ambemath MIDC, Thane
- 3) M/s Krishna Chemical, N-29, Anand Nagar, Additional Ambemath MIDC, Thane
- 4) M/s Turmalin Chemicals, N-30, Anand Nagar, Additional Ambemath MIDC, Thane

**C. Units found either not meeting the stipulated discharge standards prescribed under the "consent to operate" or not operating the ETP properly**

- 1) M/s Kamsons Polymers Pvt. Ltd., K-30/7, Additional Ambemath MIDC, Thane
- 2) M/s Trichem Laboratories (Bombay) Pvt. Ltd., K-48, Additional Ambemath MIDC, Thane
- 3) M/s Priyadarshani Microtech, N-74, Additional MIDC, Anand Nagar, Ambemath, Thane
- 4) M/s Enaltec Pharma Research Pvt. Ltd. (previously known as M/s Getz Pharma Pvt. Ltd.), PL-11, Additional Ambemath MIDC, Thane
- 5) M/s Pacific Organics Pvt. Ltd., N-4, Additional MIDC, Anand Nagar, Ambemath (E), Thane
- 6) M/s V & V Pharma Industries., Plot No. N-48, MIDC Addl. Ambemath, Tal: Ambemath, Dist: Thane
- 7) M/s. Printex Enterprises, Plot no. 38, MIDC Morivali, Tal Ambemath, Dist. Thane
- 8) M/s. Ankit Wash, Plot No. 52, MIDC Morivali, Tal. Ambemath.
- 9) M/s Ashu Organics (India) Pvt. Ltd., Plot No. A-64, MIDC SBI Bank, Badlapur, Tal- Ambemath, Dist: Thane
- 10) M/s Badlapur Textile Industries Pvt. Ltd., Plot No. B-39, Badlapur MIDC, Dist: Thane,
- 11) M/s Tulsi Cloth processors Pvt. Ltd., Plot No. B-42, MIDC Badlapur Industrial Area, Tal: Ambemath, Dist: Thane
- 12) M/s. Tirupati Textile Mills, Plot No. A - 187, A - 187/1, MIDC Phase - I, Dombivali, Tal. Kalyan, Dist. Thane.
- 13) M/s. Tirupati Textile Mills, Plot No. A - 187/3, MIDC Phase - I, Dombivali, Tal. Kalyan, Dist. Thane
- 14) M/s Solar Chemferts Pvt Ltd, Plot No. 15,16 & 21/10, Chikholi M.I.D.C., Ambemath, Dist- Thane

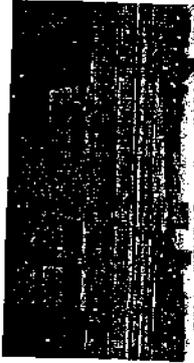
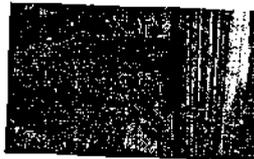
**D. Unit found illegally disposing hazardous waste in open land near boundary wall about 10 meters from Waldhuni river**

- 1) M/s Paramount Minerals & Chemicals Ltd., C/6 MIDC Chemical Zone, Ambemath MIDC, Thane

**Site Visit Photographs**

**Appendix**

Sampling point R1: Ulhas River (Mohane Road river bridge, Shahad)



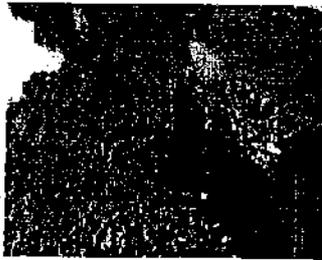
***Sampling was done on Ulhas river***

**Site Description:** The location is on Mohane Road which goes to Tikwala. Two-three sewer outfalls were observed. There is a Mohane dam before the railway bridge. Waldhuni river empties itself after the pipe bridge which can be seen in the fourth image.

**Colour of Sample: No colour**

302

Sampling point R2: Khemani nallah MIDC, Shahad



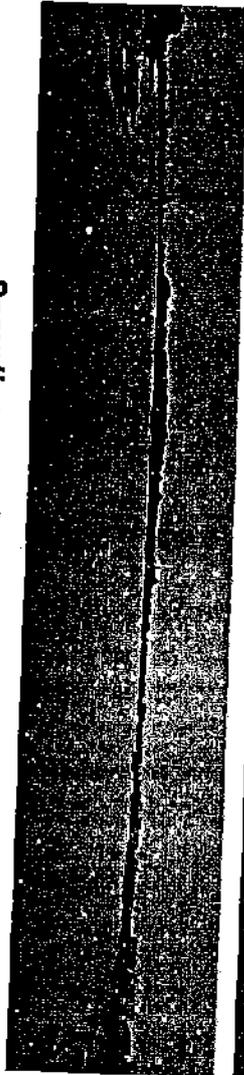
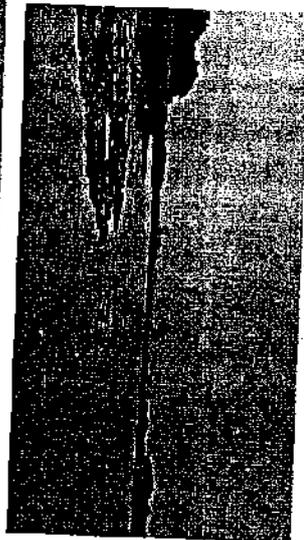
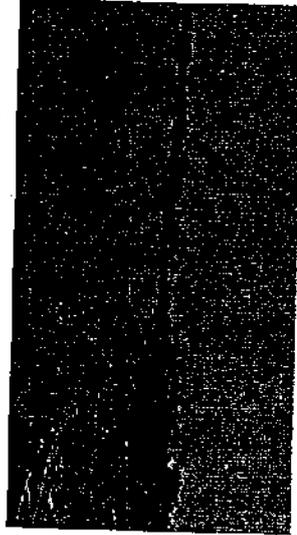
***Sampling was done on Nallah which empties in to Ulhas/Waldhuni river***

**Site Description:** The nallah was filled with solid waste debris. The Nallah is located next to Century Rayon club building with pumping station. The pumping station takes in water from nallah and diverts to Waldhuni River which eventually meets Ulhas River. A flood gate is also constructed on the nallah.

**Colour of Sample: Pale Yellow**

304

Sampling point R3: Ulhas River (Kachore Ganesh Ghat, Kalyan [E])

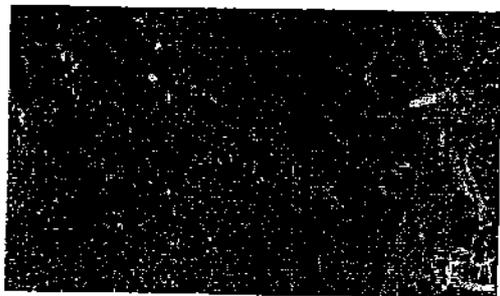


**Sampling was done on Ulhas river**

**Site Description:** Sampling was done on Ulhas river in Kalyan after KDMC dumping ground, Durgadi fort, and Kalyan Ship Building works. The location has littered solid waste

**Colour of Sample:** No colour

Sampling point R4: Khambal Pada nallah, Thakurli

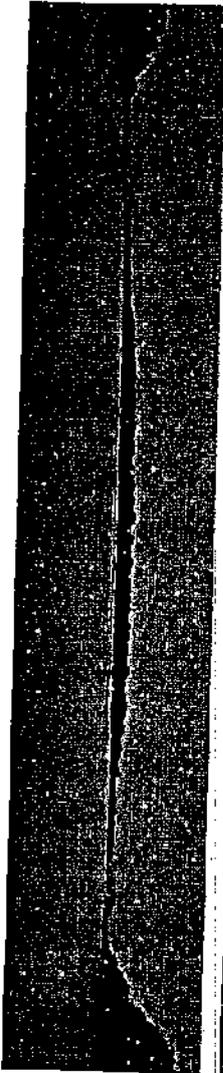
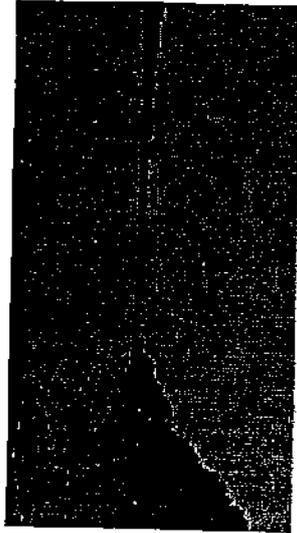


*Sampling was done on Nallah which empties in to Ulhas river*

**Site Description:** At the location one outfall was located discharging black water. The nallah was directly discharging the wastewater in Ulhas river

**Colour of Sample: Black**

Sampling point R5: Ulhas River (Ganesh Ghat, Dombivli (W))



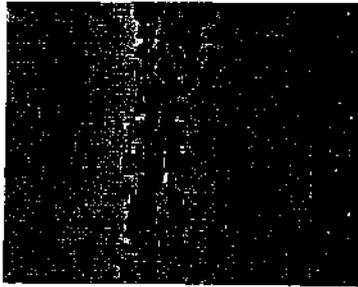
***Sampling was done on Ulhas river***

**Site Description:** At the location solid waste was found on the banks of the river. This location might have some tidal effect. One kilometer on the upstream side construction of road bridge (Dombivli Mankoli Naka Link Road) is being undertaken. Dredging equipment's were noticed at the location.

**Colour of Sample:** *Light Grey*

306

Sampling point R6 & R17: Waldhuni River (Vadol, Ulhasnagar)



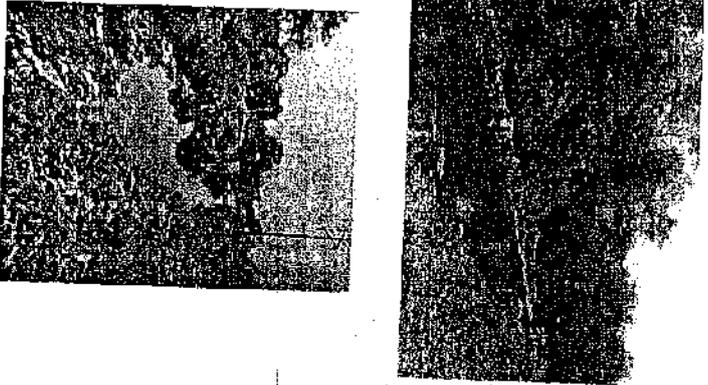
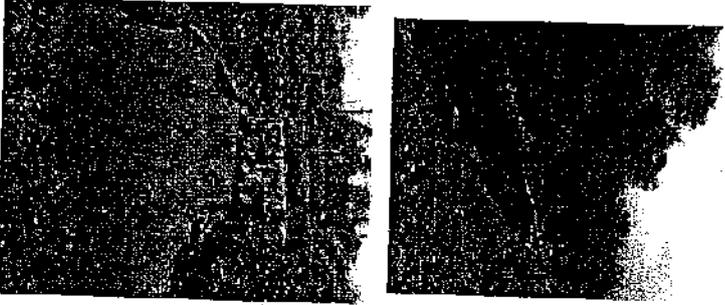
***Sampling was done on Waldhuni river***

**Site Description:** The site is located next to Ulhasnagar water treatment plant. The location is in the downstream of confluence point of Waldhuni river and the nallah coming from Morival MIDC area and Tehsiladar office. This site was clear of debris but blue effluent was noticed flowing directly in to the river.

**Colour of Sample: Light Grey**

**Sampling point R8: Random nallah 1, Morivali MIDC, Ambernath**

111



***Sampling was done on Nallah which empties in to to Waldhuni river***

**Site Description:** The Nallah is a tributary to River Waldhuni. It meets the river at Vadol and had grey colour water with sweet smell. Nallah was having C&D and solid wastes. Red colour industrial effluent was also observed flowing inside the nallah via a stream next to the CETP.

**Colour of Sample:** Dark Grey

308

Sampling point R9: Random nallah 2, Morivali MIDC, Ambernath

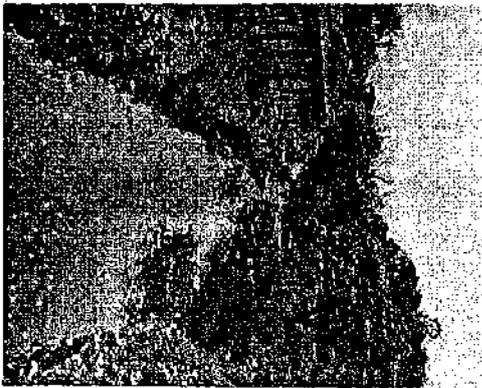


*Sampling was done on nallah which empties in to Waldhuni river*

**Site Description:** Location is next to Morivali CETP. Sample was taken of the effluent flowing directly in the nallah. The effluent had sweet smell.

**Colour of Sample: Orange**

**Sampling point R10: Govind Pull, Ambernath**



***Sampling was done on nallah which empties in to Waldhuni river***

**Colour of Sample: Dark Grey**

310

Sampling point R11: Waldhuni River (Shiv Mandir, Ambernath)



*Sampling was done on Waldhuni river*

**Site Description:** The site was littered with solid waste. Sewer outfall can be seen on the left image in the upstream.

**Colour of Sample: Pale Yellow**

Sampling point R12: Near Badlapur CETP, Badlapur



**Sampling was done on nallah which empties in to Ulhas river**

**Site Description:** The site was littered with solid waste. Sewer outfall can be seen, on the top side of left image. The

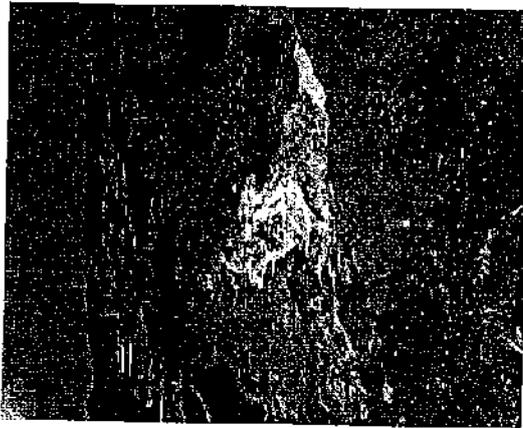
site was located next to Badlapur CETP.

**Colour of Sample: Light Green**

312

116

Sampling point R13: Ambernath railover bridge, Ambaranth

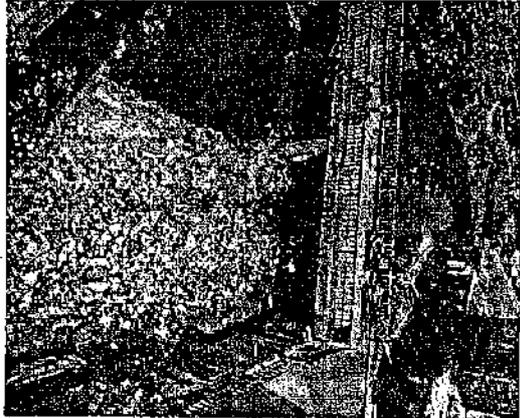


314

***Sampling was done on nallah which empties in to Waldhuni river***

**Site Description:** The site was littered with solid waste. Sewer outfall pipe was observed. Foam was noticed

**Colour of Sample:** Yellow



Sampling point R14: Anandnagar additional MIDC, Ambarnath



315



**Sampling was done inside Additional MIDC, Ambernath**

**Site Description:** Industrial effluent being discharged on the road was noticed inside the MIDC.

**Colour of Sample:** *Black*

Sampling point R15: Ulhas River (Gandhari Bridge, Kalyan)

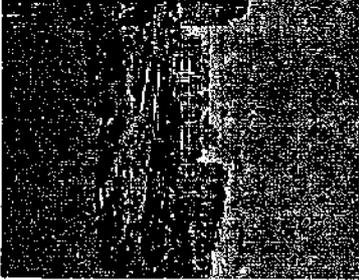


**Sampling was done on Ulhas river**

**Site Description:** The site was clear but two sewer outfalls were seen on Gamesh Ghat, Kalyan. Kalyan Bypass Road is under construction on the left bank in the left image. The site is after confluence of Bhatsa and Ulhas river which can be seen in the right image. Before the two rivers meet Waldhuni river empties in to Ulhas river after Mohane Road bridge.

**Colour of Sample: No colour**

Sampling point R16: Ganesh Ghat, Kalyan

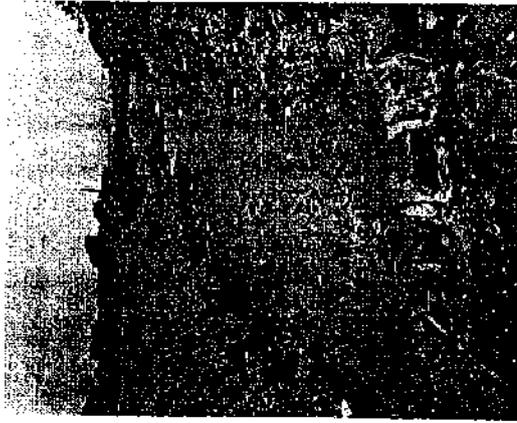


*Sampling was done on nallah which empties in to Ulhas river*

**Site Description:** Grey water from nallah with high flow rate was being released into the river. The site has two sewer outfalls. Foam was also observed. The site is after confluence of Bhatsa and Ulhas river which can be seen in the right image. Before the two rivers meet Waldhuni river empties in to Ulhas river after Mohane Road bridge. Next to Gandhari bridge  
**Colour of Sample: No colour**

318

Sampling point R17: opp. Tehsildar office, Ambernath

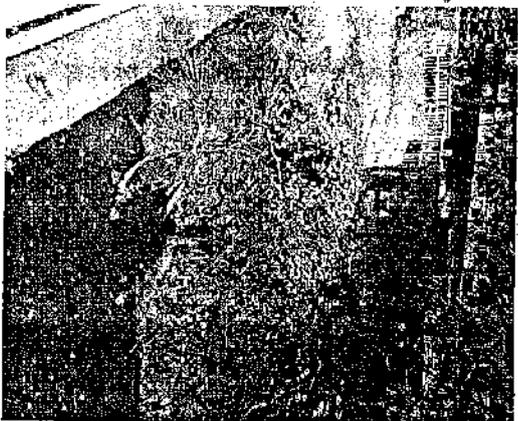


***Sampling was done on nallah which empties in to Waldhuni river***

**Site Description:** The site is right opposite Tehsildar Office, Ambernath. Solid waste was observed littered in the nallah. The nallah meets the Morivali Nallah at Ambaranath railway station

**Colour of Sample: No colour**

Sampling point R18: Random nallah 3, Vadol, Ulhasnagar



**Sampling was done on Waldhuni river**

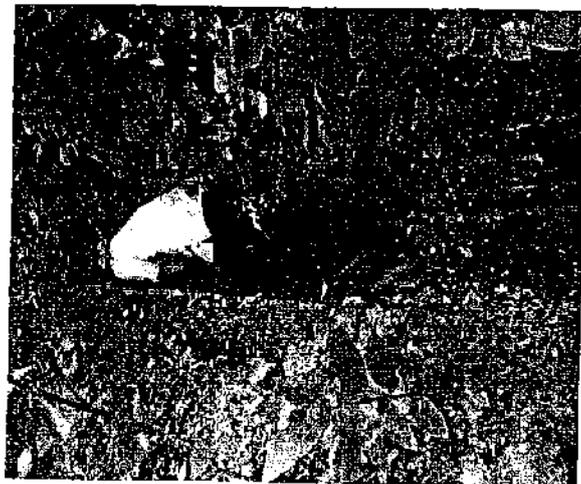
**Site Description:** The site is located on the opposite bank of Ulhasnagar water treatment plant. The location is in the downstream of confluence point of Waldhuni river and the nallah coming from Morivali MIDC area and Tehsiladar office.

Sample was taken of the effluent flowing directly in the Waldhuni river

**Colour of Sample: Blue**

320

Sampling point R20: Random nallah 4, Jeans wash area, Ambarnath

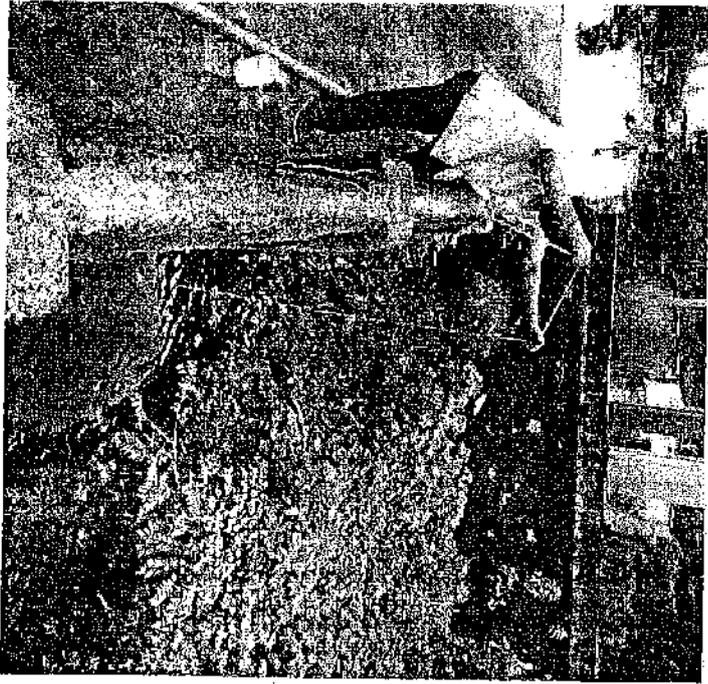


*Sampling was done on nallah which empties in to Waldhumi river*

**Site Description:** Red free flowing water was observed. This water was free of solid waste and had a strong smell.

**Colour of Sample: Pale Yellow**

Sampling point R21: MIDC Road, Amberrath



*Sampling was done on nallah which empties in to Waidhuni river*

**Site Description:** Black water flowing with no solid waste.

**Colour of Sample:** Grey

322

Sampling point R22 & R24: Waldhuni River (Shahad Bridge, Shahad)



324

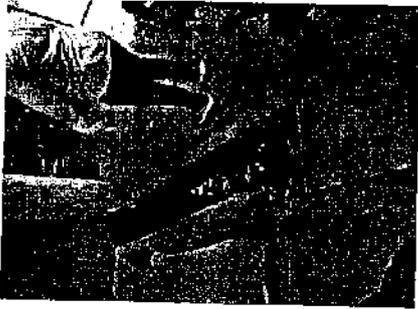


**Sampling was done on Maldhuni river**

**Site Description:** The location is next to KDMT bus depot. Under construction road bridge on site. Solid waste debris observed along with two waste water outfalls. Release of effluent into river was clearly seen.

**Colour of Sample: Greyish Green**

Sampling point IE10: Alipac Premises, MIDC Ph. 1, Dombivli



*Alipac Premises*

**Colour of Sample: Dark Blue**

Nallahs and areas visited during the site visit



Khemari nallah meeting Ambika nallah



Ambika nallah, Ulhasnagar



Nallah passing through Dharmaji Patil area, Ulhasnagar



Jeans stitching work inside Dharmaji Patil area, Ulhasnagar

326

"4"

"@"/



# Dombivli Better Environment System Association

Plot No. OS-8, M.I.D.C., Phase 1, Opp. Savitribai Phule Kala Mandir, Dombivli (E.) 421203.  
Tel. : (0251) 2425984. Email : dbesa.celp@gmail.com

**CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF THE BOARD OF DIRECTORS OF DOMBIVLI BETTER ENVIRONMENT SYSTEM ASSOCIATION HELD ON WEDNESDAY 08 July 2017 AT 3.P.M. AT PLOT NO OS 8, MIDC, PHASE I, OPP SAVITRIBAI PHULE NATYAGRUH, DOMBIVLI EAST - 421 203**

"RESOLVED THAT Mr. Rajesh Doshi, Authorized Signatory, be and is hereby authorized to appear, sign, verify, declare, affirm, make, present, submit and file all necessary notices, plaints, petitions, written statements, affidavits, undertakings, vakalatnamas, declarations, Appeals, Revisions, applications, statements, complaints, papers and documents and all proceedings and matters in connection with any suit(s) or proceeding(s) filed by or against the Company before any court of law or any tribunal or any quasi-judicial or statutory or administrative authority."

For Dombivli Better Environment System Association

Ashok Maheshwari  
(Chairman)  
Din No 00841462

BEFORE THE HON'BLE NATIONAL  
GREEN TRIBUNAL  
(WESTERN ZONE BENCH) PUNE  
APPLICATION NO. 37 OF 2013 (WZ)  
Vanashakti Public Trust & Anr.

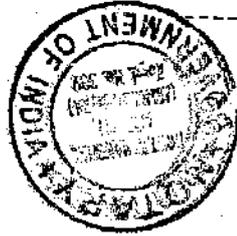
..Applicants

Versus

MPCB & Ors.

..Respondents

Affidavit-In-Reply On behalf of the  
newly added Respondent No.9 i.e.  
DBESA.



Dated this 18<sup>th</sup> day of April 2022

18 APR 2022

(Vijay Kumar Aggarwal)  
Advocate for Respondent No.9  
C-222, 2nd Floor, Big Splash  
Sector-17, Vashi, Plot No.78 & 79,  
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Enrolment No. MAH/1886/1998