

BEFORE THE NATIONAL GREEN TRIBUNAL SITTING AT

PUNE

ORIGINAL APPLICATION NO. 218 OF 2024

Dr (Mrs) Snehal Donde)...Applicant

VERSUS

Union of India and Ors)...Respondents

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AFFIDAVIT IN REJOINDER ON BEHALF OF THE APPLICANT

I, Dr Snehal Donde, Indian Adult residing at 19C/603, New Dindoshi Garden Hill Society, New MHADA Colony, Film City Road, Dindoshi Goregaon (East) Mumbai, the Applicant No. 1 herein do hereby solemnly affirm and declare as under:

1. I say that I am the Applicant in the above captioned Original Application and have read the Application and am familiar with its contents. I say that I have also read and understood the contents of the Affidavit of the Respondent No. 5 MPCB dated 7th January 2025. I therefore say that I am competent to depose in the present Affidavit in Rejoinder in response to the Affidavit of the Respondent No. 5.



2. I say that para 1 and 2 of the Affidavit of the Respondent No. 5 only put forth matters of record and do not warrant a specific response.

3. I say that a bulk of the Affidavit of the Respondent No. 5 is recorded in para 3 and 4. At para 3 of its Affidavit, the Respondent No. 5 has claimed that there is a complaint pending before the Maharashtra State Human Rights Commission filed by an Advocate, and has also referenced a meeting dated 19th June 2024 with the Respondent Ambernath Municipal Council and the Irrigation Department. It is submitted that the Irrigation Department has allegedly stated that the Waldhuni River is not a notified River. It is further recorded that NoC had been issued for “repair work” in the Prohibited Area and for construction work in the “regular area” as per the proposal of the Respondent No. 4 of the Ambernath Municipal Corporation. I say that in the minutes of the meeting dated 19th June 2024 which has been annexed at Annexure A-1 of the Affidavit, the submission of the Minor Irrigation Department has clearly noted that, “*the Irrigation Department does not give any NoC for the project and it is the discretion of the local body.*”. I therefore say before addressing the other averments



in the Affidavit, I wish to address the statement of the Irrigation Department that Waldhuni River is not a river.

STATUS OF THE WALDHUNI RIVER

4. I say that the factum of the status of the Waldhuni River as a river cannot be disputed by the Respondent Authorities, including the Respondent No. 2 Water Resources Department (which is the same as the Irrigation Department), when the status of the River and its pollution has been an admitted fact by these Respondent Authorities in various documents, including those submitted in Original Application No. 37/2013 and Execution Application No 8/2019 [*Vanshakti v Maharashtra Pollution Control Board and Ors.*] filed before this Hon'ble Tribunal. OA No 37/2013, inter alia, dealt with the pollution in Ulhas and Waldhuni Rivers. Later, an Execution Application No 8/2019 was filed seeking execution of the order of this Hon'ble Tribunal dated 02.07.2015. In both proceedings, the status of the Waldhuni River as a river was not disputed by the Respondent Authorities, as is evident from the orders of the Hon'ble Tribunal in the said matters. It is therefore submitted that it is not



legally tenable for the Respondent to claim now that Waldhuni River is not a river. A copy of the order of the Hon'ble NGT dated 02.07.2015 in Original Application No. 37/2013 has been annexed hereto and marked as **Annexure A-1**. A copy of the order dated Execution Application No 8/2019 in the Execution Proceedings dated 18.04.2022 has been annexed hereto and marked as **Annexure A-2**. It is pertinent to note that in the order order of 02.07.2015, the Hon'ble NGT, inter alia, was pleased to constitute a Committee comprising of, inter alia, both the Chief Engineer of the Irrigation Department and the officers of the MPCB to take measures to utilise funds allocated by the Hon'ble Tribunal for the maintenance of the Waldhuni and Ulhas rivers.

5. In affidavit filed by the Ulhasnagar Municipal Corporation in the Hon'ble Supreme Court in relation to proceedings arising from appeals against the order of this Hon'ble NGT in in Original Application No. 37/2013, it is evident that it is an admitted position of the Central Pollution Control Board, which had annexed a detailed report prepared by CPCB and NEERI, that the Waldhuni River was in fact, a river, with various nallahs leading to it. A copy of the affidavit of the CPCB filed before the Hon'ble Supreme Court has been annexed hereto and marked as **Annexure A-3**.



6. Vide a letter dated 10.10.2024, the Executive Engineer of the Irrigation Department had written to various Respondent Authorities along with the Applicant to discuss various measures that would be undertaken for the protection and preservation of rivers, including the Waldhuni River. A copy of the letter dated 10.10.2024 of the Executive Engineer of the Irrigation Department has been annexed hereto and marked as **Annexure A-4**.

7. In a meeting convened by the Commissioner of the Thane Municipal Corporation dated 07th August 2024, where, inter alia, the Applicant and officers of the Irrigation Department were present, detailed discussions were held about Waldhuni River. A copy of the 7th August 2024 minutes has been annexed hereto and marked as **Annexure A -5**.

8. Therefore it is unacceptable for the Irrigation Department to now claim that the river is not really a river, or that it should not be involved in the issuance of clearances for projects on the river bank and floodplains of the river.



RELEVANT PROVISIONS OF THE MAHARASHTRA REGIONAL TOWN AND COUNTRY PLANNING ACT

9. Section 22 of the Maharashtra Regional and Town Planning Act, 1966 stipulates the contents of a Development Plan, under which, sub-section 22(j) specifically directs the Planning Authority to incorporate, *“proposals for flood control and river pollution within the Development plan.”*

10. Similarly, Section 14 of the Maharashtra Regional and Town Planning Act, 1966 provides that the Regional Plan of an area may provide for, *“prevention of erosion, provision of afforestation or, reforestation, improvement and redevelopment of water front areas, rivers and lakes”*

11. It is submitted therefore that rivers are meant to be demarcated in Development Plan and Regional Plan as the case maybe under the provisions of the Maharashtra Regional and Town Planning Act, 1966. is pertinent to note that the Applicant, vide an RTI Application submitted to



the Respondent No. 1 dated 13.01.2025 asked for, inter alia, the hydrology and flood plain maps of Waldhuni river but has not received a copy of the same. A copy of the RTI Application dated 13.01.2025 submitted by the Applicant has been annexed hereto and marked as **Annexure A-6.**

12.I say that the Irrigation Department is vested with the responsibility of maintaining and preserving rivers within the State. Accordingly, the Respondent Irrigation Department issued a circular dated 21.09.1989 containing a slew of directions as to how “flood lines” are to be demarcated. Flood lines are lines that demarcate the extent to which water levels could rise in the event of flood. According to the circular dated 21.09.1989, there are two types of flood lines, demarcated in Blue and Red. Blue flood lines show the level of the flood that occurs at the frequency of 25 years. Red flood lines show the level of the flood that occurs at the frequency of 100 years. No development is permissible between two Blue Lines and this portion is called “Prohibitive Zone”. Between Blue Line and Red Line, development is permissible under certain restrictions and therefore this portion is termed as the “Restrictive



Zone”. Thus, demarcation of Flood Lines is crucial to preserve rivers by delineating their natural course as well as to demarcate the land which is safe to develop without being affected by potential floods. A copy of the circular of the Irrigation Department dated 02.09.1989 has been annexed hereto and marked as **Annexure A-7**.

13.I say that circular for the demarcation of floodlines have been further amended vide Government Resolutions dated 03.05.2018, has been annexed hereto and marked as **Annexure A-8**.

RELEVANT PROVISIONS OF THE MAHARASHTRA IRRIGATION ACT, 1976

14.Section 7 of the Maharashtra Irrigation Act, 1976 (“**Irrigation Act**”) provides that the Additional Chief Engineer shall be the chief controlling authority and shall be responsible for all matters connected with the construction, maintenance and managements of canal and matters incidental or supplemental thereto. The term “canal” is defined under Section 2(3) of the Irrigation Act as follows:



“(3) “canal” includes— (a) all canals, channels, pipes, tube-wells, domestic water-supply works and reservoirs constructed, maintained or controlled by the Appropriate Authority for the supply or storage of water ; (b) all works, embankments, structures and supply and escape channels connected with such canals, channels, pipes, tube-wells, domestic water-supply works and reservoirs, and all roads constructed for the purpose of facilitating the construction or maintenance of such canals, channels, pipes, tube-wells domestic water-supply works and reservoirs ; (c) all fields-channels, water courses, drainage-works and flood embankments as hereinafter respectively defined or explained in this Act; (d) any part of a river (including its tributaries), stream, lake, natural collection of water or natural drainage-channel, to which the State Government may apply the provisions of section 11, or of which the water has been applied or used before the commencement of this Act for the purpose of any existing canal;

(e) all land belonging to, or held by, or entrusted to, the Appropriate Authority which is situate on a bank of any canal as hereinbefore defined, and which has been appropriated under the



orders of such Appropriate Authority for the purposes of such canal ; (f) all lift irrigation works constructed, maintained or controlled by the Appropriate Authority...”

15. Assuming without admitting that it is the position of the Irrigation Department that the Waldhuni River does not constitute a “notified river” presumably under Section 11 of the Irrigation Act, it cannot deny that at the very least, the Waldhuni River meets the definition of a “canal” under the Irrigation Act, thereby rendering the Additional Chief Engineer of the Irrigation Department as being the controlling officer under Section 7 of the Act and is therefore responsible for responsible for all matters connected with the construction, maintenance and managements of canal and matters incidental or supplemental thereto.

16. It is therefore submitted that even in the understanding the Waldhuni river is a canal and not a River, which is not the position of the Applicant, the Respondent no. 2 cannot claim at all that it has no role or say in relation to construction works in and around the Waldhuni River. I say that the Respondent No. 2 is required to file a detailed affidavit on this issue and must be put to strict proof on this issue.



17.I therefore categorically reject and deny the position of the Respondent No. 5 that the concretisation works of the Waldhuni river is being done with requisite permissions, since it is evident that it is only being done with the approval of the Respondent Ambernath Municipal Council and not the Irrigation Department.

18.I say that it is pertinent to note that Section 93 of the Irrigation Act then provides the punishment/ penalty for contravention of provisions of the Irrigation Act and acts/ omissions that destroy canals. Similarly, under Section 92, whoever voluntarily and without proper authority *inter alia* damages, alters, enlarges, obstructs, interferes with, increases, diminishes the water supply of water in, or the flow of water from, through, over or under any canal, is a punishable offence.

19.I say that a perusal of the Affidavit of the Respondent No. 5, particularly at para 3 seems to indicate that the Waldhuni River is not notified as a river under Section 11 of the Irrigation Act.



20. It is pertinent to note that Section 11 of the Irrigation Act provides as follows,

“(1) Whenever it appears expedient to the Appropriate Authority that the water of any river (including its tributaries) or stream flowing in a natural channel or of any lake or any other natural collection of still water or water flowing in a channel where such water or part thereof, is received from any canal constructed by the Appropriate Authority or by any person who has been duly authorised by the State Government, whether by percolation, regeneration, release or otherwise should be applied or used by the Appropriate Authority for the purpose of any existing or projected canal, or for the regulation, supply or storage of water, the State Government may, by notification in the Official Gazette, declare that the said water will be so applied or used after a day to be named in the said notification, not being earlier than three months from the date thereof ; and thereupon the Collector shall cause notice to be given as provided in section 80.

(2) The application or use of the said water or the application or use of water of any canal under the management or control of any Appropriate Authority shall be regulated according to the provisions of this Act.



(3) Save as provided by sub-sections (1) and (2), no person (other than the State Government) shall apply or use the water of any river (including its tributaries) or stream flowing in a natural channel or of any lake or any other natural collection of still water or water flowing in a channel for any projected canal to be constructed by him, except with the previous permission in writing of the State Government and it shall be lawful for the State Government to grant such permission subject to such terms and conditions as it may deem fit in the circumstances of each case”

21. It is further submitted that vide a Government Resolution dated 01.02.2005 the criteria for the notification of a river under Section 11 of the Act is laid out in greater detail. A copy of the Government Resolution dated 01.02.2005 has been annexed hereto and marked as **Annexure A -9**.

22. It is submitted that the Waldhuni River clearly meets the criterion specified in the Government Resolution read with the provisions of the Irrigation Act and accordingly the river should be notified under the said Government Resolution and the Irrigation Act. A copy of the Irrigation Act has been annexed hereto and marked as **Annexure A-10**,



PROVISIONS OF THE UNIFIED DEVELOPMENT CONTROL AND PROMOTION REGULATIONS “UDCPR”

23.I say that at para 3 of its Affidavit, the Respondent MPCB has made a statement that the Ambernath Municipal Council has issued an NoC for “repair work” in the Prohibited Area and for construction work in the “regular area” . The use of these terms seem to indicate the acceptance of the Prohibited and Restricted Zones demarcated by the floodlines of a river.

24.It is submitted that as per Regulation 3.1.3 of the UDCPR, no development is permissible between two Blue Lines and this portion is called “Prohibitive Zone”.

Regulation 3.1.3 of the UDCPR accordingly provides that,

“3.1.3 Construction within Blue and Red Flood Line i) Where Blue and Red flood line are marked on the Development Plan / Regional Plan or received from the Irrigation Department.

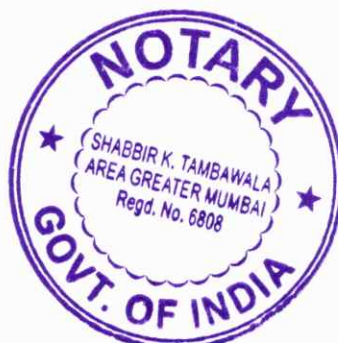


- a) *The Red Flood Line and Blue Flood Line shall be considered as per the plan prepared by the Irrigation Department. The area between the river bank and blue flood line (Flood line near the river bank) shall be prohibited zone for any construction except parking, open vegetable market, garden, lawns, open space, cremation and burial ground, sewage treatment plant, water / gas / drainage pipe lines, public toilet or like uses, provided the land is feasible for such utilization. Provided that, redevelopment of the existing authorised properties, within river bank and blue flood line, may be permitted at a plinth height of 0.45 m. above red flood line level.*
- b) *Area between blue flood line and red flood line shall be restrictive zone for the purposes of construction. The construction within this area may be permitted at a height of 0.45 m. above the red flood line level.*
- c) *If the area between the river bank and blue flood line forms part of the entire plot in Development Zone, then, FSI of such part of land may be allowed to be utilised on the remaining land.*
- d) *The red and blue flood line, if shown on the Development/Regional Plan / Planning Proposal shall stand modified as and when it is modified by the Irrigation Department."*



A copy of the relevant extracts of the UDCPR have been annexed hereto and marked as **Annexure A -11.**

25. The demarcation of Flood Lines, which is done as per the instructions of the Irrigation Department, is crucial to preserve rivers by delineating their natural course as well as to demarcate the land which is safe to develop without being affected by potential floods. It is submitted that concretisation of the river bed of the river, whether or not it is being done for the purpose of the refurbishment of the Shiv temple, would fall within the restrictive zone which is impermissible under the UDCPR. In fact, concretising the river bed with RCC slabs will exacerbate the propensity of the region to flood and be inundated. I say that the Hon'ble Bombay High Court, vide its order dated 26.06.2024 in PIL 36/2021 has strongly emphasised on the need to preserve and maintain accurate floodlines in Development Plans to reduce the incidence of floodlings and leave the earth "habitable". A copy of the order of the Hon'ble High Court in PIL 36/2021 dated 26.06.2024 has been annexed hereto and marked as **Annexure A-12.**



**BURDEN OF PROOF ON APPLICANTS BEFORE THIS HON'BLE
TRIBUNAL**

26. It is pertinent to note that as per environmental jurisprudence it is evident that the burden of proving that any proposed project will not cause disruption to the environment lies on the proponent of the project and/or the party seeking to change the status quo in the region by executing a project.

27. In the matter of *Vellore Citizens' Welfare Forum v. Union of India* [(1996) 5 SCC 647] Kuldip Singh J observed (see p 658)(para 11) as follows:

"(iii) the 'onus of proof' is on the actor or the developer/industrialist to show that his action is environmentally benign."

28. In the A.P. Pollution Control Board case: 1999 (2) SCC 718 (at p 734) the Hon'ble Supreme Court held that the 'precautionary principle' has led to the new 'burden of proof' principle. In environmental cases where proof of absence of injurious effect of the action is in question, the burden lies on those who want to change the status quo. This is often termed as a reversal of the burden of proof, because otherwise, in environmental



cases, those opposing the change could be compelled to shoulder the evidentiary burden, a procedure which is not fair. Therefore, it is necessary that the party attempting to preserve the status quo by maintaining a less polluted state should not carry the burden and the party who wants to alter it, must bear this burden.

29. I therefore say that the Respondent Authorities are required to bring on record through affidavits filed in the present Application

- a. The NoCs and Clearances issued for the concretisation of the Waldhuni river
- b. The proof, if any, that Waldhuni river is not really a river.

MAHARASHTRA STATE WATER POLICY

30. Similarly, the need to preserve water bodies within the State is also noted in the Water Policy of 2019 of the Maharashtra State Government which applies to, *“all the line departments, semi-government agencies of the State Government related to water, local bodies, bulk water users (domestic, industrial/commercial and others) and the citizens of the State.”*



31. At para 6.11 of the State Water Policy it is noted that, "*Natural water bodies and drainage channels are being encroached upon and diverted for other purposes. Ground Water recharge zones are often blocked.*"

32. Para 7.1 of the Policy, which notes the Objectives of the Policy records at sub-paragraph 7.1(v) that the "Protection of ecosystems" is one of the defined objectives of the State Water Policy. Similarly, sub-clause .vi. further enunciates an objective of the policy to "*To protect and enhance water quality of surface as well as groundwater.*"

33. Under the heading of Flood Management, at para 13 it is recorded that, "*Frequency based flood inundation maps will be prepared to evolve flood management strategies and an emergency plan for mitigation of floods and management for each flood prone area. Habitation and economic activities shall be strictly prohibited in the flood plain zones (prohibitive zones –with 25 years return period flood) by the local authorities. The phase wise program can be implemented by concerned local authorities to remove existing encroachments.*" A copy of the Water Policy of the State of Maharashtra has been annexed hereto and marked as **Annexure A - 13.**



34. Therefore it is evident that the manner in which the Respondent Authorities have completely ignored the destruction of the Waldhuni River and has allowed for its concretisation is a dereliction of their respective duties under the Maharashtra State Water Policy.

35. With regards to the averments at para 4 of the Affidavit of the Respondent No. 5, I deny that the concretisation work in and around the Waldhuni river stated in 2010-2011. I say at para 4(vii) its is admitted that a small portion of the work was allegedly done in 2010, and 80% of the “ghat” work was done in the past one year. However it is pertinent to note that at para 4 (i) it is admitted that the stretch of the Waldhuni river near Shiv Mandir was found concretised at the time of the site inspection done by the Respondent No. 5 on 2.01.2025 and at para 4(vi) it is noted that *“during visit no river flow observed in river bed concreted area of Waldhuni river at the said location”* clearly showing that the natural flow of water of the river has been obstructed by the concretisation works.

36. I say that I have written various emails and representations to the Respondent Authorities regarding the concretisation of the Waldhuni river from 2022 onwards. Copies of the emails of the Applicant dated April





19th 2022, 18th May 2023, 14th August 2024 have been annexed hereto and marked as **Annexure A -14**.

37.I further say that it is pertinent to note that River Rejuvenation Projects being proposed by Pune Municipal Corporation has been subject to clearances issued under the EIA Notification of 2006 under the category of Area Development listed at 8(b) of the Schedule to the EIA Notification of 2006. However, the present task of concretising the ghats next to the Shiv Mandir appear to be being constructed without an Environmental Clearance, and evidently no analysis of the condition of the Waldhuni river and what the hydrological impact of concretising the banks of the river will be. There has been no application of mind or study conducted on whether the flow of the river will be obstructed and what the impact of the same will be.

38.In relation to the contents of para 5 of the Affidavit of the Respondent No. 5 I say that the Respondent No. 5 is responsible from preventing obstruction to the flow of the river and the pollution of the Waldhuni River under the provisions of the Water (Prevention and Control of Pollution) Act as specified in the Original Application.

39. For the abovesaid reasons, I say that the prayers in the present Original Application deserve to be made absolute

Solemnly affirmed at Mumbai)

On this 21st day of February 2025)

APPLICANT NO.1

(Dr Snehal Donde)



Donde



Identified by me

RB

RONITA BHATTACHARYA BECTOR

Advocates for the Applicant

Before Me

BEFORE ME

S. K. TAMBAWALLA
ADVOCATE, HIGH COURT
B-23, Taheri Manzil
Nesbit Road, Mazgaon
Mumbai - 400 010

21.2.25



NOTARY & REGISTERED
Sr. No. *21748* dt. *21/2/25*



BEFORE THE NATIONAL GREEN TRIBUNAL
(WESTERN ZONE) BENCH, PUNE
APPLICATION No. 37/2013 (WZ)

CORAM:

Hon'ble Mr. Justice V.R. Kingaonkar
(Judicial Member)
Hon'ble Dr. Ajay A. Deshpande
(Expert Member)

B E T W E E N:

- 1. Vanashakti Public Trust,**
Unique Industrial Estate,
Twin Tower Lane, Prabhadevi,
Mumbai-400 025
- 2. Stalin Dayanand,**
Aged 48 yrs. Director of
Vanashakti, Having its office at
Unique Industrial Estate,
Twin Tower Lane, Prabhadevi,
Mumbai 400 025

....Applicants

A N D

- 1. Maharashtra Pollution Control Board,**
Through Its Member Secretary,
Kalpataru Building, Sion,
Mumbai - 22
- 2. The Maharashtra State Environment
Department,**
Through Its Principal Secretary,
Having its office at Mantralaya,
Churchgate, Mumbai 400 032



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3. Union of India,

Through Secretary, Ministry of
Environment & Forests, Paryavaran
Bhavan, Lodi Road,
New Delhi.

4. Central Pollution Control Board,

Parivesh Bhawan, CBD-cum-
Office Complex, East Arjun Nagar,
Delhi 110 032.

5. The Municipal Commissioner,

Kalyan Dombivili Municipal Corporation,
Having its office at Shankarrao Chowk,
Kalyan (West), Distt : Thane

6. The Municipal Commissioner,

Ulhasnagar Municipal Corporation,
Having its office of UMC Headquarters,
Ulhasnagar, Distt : Thane.

7. The President,

Ambarnath Municipal Council,
Having its office at Gandhi Chowk,
Ambarnath, Distt : Thane

**8. Maharashtra Industrial Development
Corporation (MIDC),**

Office at Mahakali Caves road,
Andheri East, Mumbai 400 003.

...Respondents

Counsel for Appellant :

Mrs. Gayatri Singh, Adv. a/w.
Mr. Stalin D.

Counsel for Respondent No. 1 & 2 :

Mr. Rajendra Raghuwanshi, Adv.



Mr. D.M. Gupte, Adv.

Mrs. Supriya Dangare, Advs.

Counsel for Respondent No.4 :

Mrs. Manda Gaikwad, Adv.

Counsel for Respondent No.5 :

Mr. A.S. Rao, Adv.

Counsel for Respondent No.6 :

Mr. N.V. Chavan, Adv.

Mr. A.S. Mulchandani, AGP

Counsel for Respondent No.7 :

Dr. S. Mahashabde, Adv.

Counsel for Respondent No.8 :

Ms. Shyamali Gadre, Adv. a/w.

Mr. Deepak Pawar i/by Little & Co.

DATE : July 2nd, 2015

J U D G M E N T

1. Applicant No.1, which is a public trust registered under the Bombay Public Trust Act, 1950, has filed present Application through its Director i.e. Applicant No.2 under Section 14 read with 15, 17 and 18 of the National Green Tribunal Act, 2010, being aggrieved by the allegedly callous attitude of the Respondent-authorities in not protecting Rivers and other water bodies, in particular, Ulhas River in the Mumbai Metropolitan Region. Applicants claim that these rivers and other water bodies are undergoing severe environmental and ecological damage due to illegal discharge of dangerous untreated effluents, sewage and pollutants in violation of environmental Laws. The Ulhas River is an important river



and supplies drinking water to urban areas of Badlapur, Navi Mumbai, Ambernath, and Ulhasnagar, besides several villages in rural areas of District Thane. The Applicants state that the pollution of Ulhas River and its various tributaries has been studied extensively over the years and several research papers and reports are available in public domain which clearly indicate that the river is excessively polluted. The Applicants submit that there are several contributors to such pollution like the Urban Municipal bodies of Kalyan-Dombivili, Ulhasnagar, Ambernath, Badlapur which discharge large quantity of untreated sewage in the riverine zone. Further, the Ulhas river basin has major industrial areas which accommodate highly polluting industries including the chemical and textile industries. As per version of the Applicants, though MIDC has provided Common Effluent Treatment Plant (CETP), the CETPs in major MIDC areas like Ambernath, Dombivili, Badlapur etc., are either inadequate or not operated efficiently resulting in discharge of large quantity of highly polluting effluents in the water environment. The Applicants plead that though the quantity of effluent from industries is less than the domestic sewage quantity, the environmental impacts and sensitivity of the industrial effluent is far more serious due to various polluting constituents, heavy metals, colour and organics. The Applicants submit that two regulatory agencies namely;



Maharashtra Pollution Control Board (MPCB)-Respondent No.1 and Central Pollution Control Board (CPCB)-Respondent No.4, time and again issued notices to various offenders. However, no deterrent and effective action was initiated in order to ensure that the water pollution problem is pruned or eliminated. It is the case of the Applicants, therefore that in spite of having sufficient legal powers under the Environmental Laws, Respondent Nos.1 and 4 have not taken sufficient steps to mitigate the problems of water pollution of Ulhas River and other water bodies.

2. The Applicants submit that they conducted monitoring of the River and its tributaries themselves and observed that the water quality of the River is highly deteriorated. They claim that the industries are discharging the industrial effluent by-passing the CETP route which would be evident from the acidic fumes observed along the River course. The Applicants have complained about such alarming water pollution to the higher authorities of MPCB and even, MoEF-Respondent No.3 directed MPCB to conduct joint sampling. Such joint sampling was conducted between March 2013 to July 2013 which also indicated that CETPs are not operating to the desired standards. The Applicants further submit that such water pollution can cause serious health problem in the area besides the problem of the air emissions.



Discharge of such untreated industrial effluent carrying obnoxious and toxic pollutants is causing ground water pollution and further affecting the marine life in the Ulhas creek. It is the grievance of the Applicants that in spite of regular complaints to the MPCB Regional Office at Kalyan, no concrete actions were taken. The Applicants have quoted several communications made with MPCB Regional Office as well as Member Secretary regarding non-compliance, specific incidences of pollution and need of urgent intervention by the MPCB. The Applicants have, therefore prayed for following relief's :

- a. Pass an order issuing directions to the MPCB to close all the polluting industries on all locations that are discharging untreated effluents into the River Ulhas,
- b. Pass an order directing the Respondents to take immediate remedial and effective measures to restore the entire ecology of the area including marine life;
- c. Pass an Order directing the Respondents to undertake the following steps with regard to the cleaning and preservation and restoration of Ulhas River to its pristine state :
 - (i) To direct 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.
 - (ii) To direct that joint site visits and samplings be carried out with the Applicants and the Respondents to check functioning of the Effluent Treatment Plants at individual industrial units for a period of 6 months and the



said visits to be videotaped and the record submitted to this Tribunal along with the sampling reports.

d. To pass an order directing the Respondent-state to set up Monitoring Stations in several areas along the banks of the River and within the industrial areas at all locations from where untreated effluents are discharged in Ulhas River and submit monthly reports regarding the same GPS locations of such monitoring stations should be submitted and put out in public domain.

e. To pass an order directing the Respondent-state to conduct regular Health Camps and Medical Treatment to all residents residing in and around the Ulhas River bank;

f. To pass appropriate order directing stringent action to be taken against officers of MPCB for dereliction of duty;

g. To pass appropriate orders imposing fine on polluting industries as exemplary punishment;

h. To pass appropriate order to set up a committee comprising various academic institutions, MPCB officials, local residents and Applicants to monitor polluting industries in the area as well as to ascertain the costs for the damage caused and for restoring the river to its original position.

i. Pass an order for costs for restoration and restitution of the river to its original positive state under section 15(1)(a) and (e) read with Schedule II clause (g).

j. To pass an order directing the Respondents to undertake the following steps with regard to the cleaning and preservation of Ulhas River to its pristine state.

3. Respondent No.1 i.e. Maharashtra Pollution Control Board (MPCB), filed several affidavits indicating



compliance reports of various interim orders. The first affidavit was filed is on 13.12.2013, and describes environmental status of Ulhas River basin. The MPCB, states that there are six (6) Common Effluent Treatment Plants (CETPs), which have been provided by the MIDC – Respondent No.8. The MPCB further states that the Hon'ble High Court of Judicature at Bombay in PIL No.17 of 2011, is monitoring overall compliances of CETPs in the State. The MPCB has further submitted details of six CETPs and brief summary thereof is as under:

- a) Dombivali Better Environment System Association and phase-I, has a capacity of 16 MLD and actual effluent received is about 12 MLD. There are 86 industries in the CETP area and treated effluent is discharged through local Khadakpada Nullah into Ulhas creek. However, disposal is not scientific as disposal system is yet not provided by the MIDC. The analysis results are enclosed which indicate BOD and COD levels are higher than prescribed standards in the year 2013.
- b) Dombivali Common Effluent Treatment Plant (DCETP) phase-II, has a capacity of 1.5 MLD and actual effluent received is about 1.5 MLD. There are 100 industries discharging industrial effluent and CETP treated effluent is discharged through local Bhopar Nullah into Ulhas creek. Disposal arrangements are yet not provided by the MIDC. The analysis results indicate that BOD and COD values are fluctuating and many times exceeding standards.
- c) Badlapur Common Effluent Treatment Plants Association MIDC Badlapur, has a capacity of 8 MLD and actual effluent received is about 6 to 7 MLD. There are 123 industries and CETP treated effluent is discharged in Waldhuni River, which further meets Ulhas creek. The analysis results indicate that



BOD and COD values are fluctuating and are generally exceeding standards.

- d) Chikhaloli-Morivali Common Effluent Treatment Plant (CM-CETP) has a capacity of 0.8 MLD and actual effluent received is about 0.45 MLD. CETP treated effluent is discharged in Waldhuni River through local Nullah before meeting Ulhas creek. The treated effluent is generally meeting the standards.
 - e) ACMA Common Effluent Treatment Plant Ambernath: CETP, has a capacity of 0.25 MLD and actual effluent received is about 0.15 MLD. The treated effluent is discharged in Waldhuni River and analysis results indicate that effluent quality is generally meeting the standards.
 - f) Ambernath MIDC CETP, has a capacity of 7.5 MLD and actual effluent received is about 3 MLD. The treated effluent is discharged into Waldhuni River. The disposal arrangements are yet to be provided by the MIDC. CETP treated effluent quality is regularly found to be substantially exceeding the standards for the year 2013.
4. The MPCB submits that there are other sources of water pollution in Ulhas River basin, which mainly include untreated domestic sewage from various urban areas like Ulhasnagar Municipal Corporation, Kulgaon Badlapur Municipal Council, Ambernath Municipal Council, because of such directly untreated sewage being discharged into Ulhas River or in Waldhuni River. The MPCB has also placed on record that there are several illegal industrial units like Jean Washing units in Ulhasnagar, which generate significant quantity of industrial effluents.

5. The MPCB further submits that they are conducting regular inspection of effluent treatment systems of individual units as well as CETPs and in case of non-

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compliance, legal action as per prevailing practice in terms of Show-cause Notice, proposed directions, taking B.G for improvements and in case of regular non-compliance and/or release of toxic effluent, closure directions are issued. The MPCB also submits that CETP results are regularly put on its Website, as per directions of Hon'ble High Court. Another contention of the MPCB is that the MIDC has not provided adequate effluent collection system in some parts of these chemical industrial areas and also, there are various incidents of leakage/overflows at existing effluent collection system in MIDC area. Further, as there are several CETPs which are generating significant quantity of chemical effluents, the MPCB has already directed MIDC to provide scientifically designed effluent disposal system, including properly designed outfall and diffusers to ensure proper and effective dispersion and dilution of pollutants. However, in spite of such directions, the MIDC has failed to provide such system even after lapse of substantial time which is incidentally of many years.

6. The MPCB filed additional affidavit dated 13.1.2014, and submitted details of Ulhasnagar survey and follow-up action taken by the MPCB, which includes proposed directions, voluntary closure directions and closure directions issued to some of the industries.



7. Another affidavit was filed on 13.2.2014, in compliance of orders of this Tribunal dated 15.1.2014. The water quality details of river Waldhuni were presented. Waldhuni water quality analytical data as presented shows abnormally high concentration of various pollutants, including BOD, COD, and solids etc. which indicate serious nature of pollution. It is also submitted by that river Waldhuni is also abused by dumping of wastes in the river stretches and the quantity of such dumped waste is not quantified.

8. Another affidavit was filed by the MPCB dated 10-5-2014, in response to the affidavit filed by Kalyan-Dombivali Municipal Corporation i.e. - Respondent No.5. The MPCB submits that presently, there is only one STP of 30 MLD capacity which also, is not operational due to maintenance. A new STP of 40 MLD, is just started and is under stabilization process. The MPCB therefore submits that though there is sewage generation of about 200 MLD, from Kalyan- Dombivali Municipal Corporation area, only 40 MLD is partially treated and disposed of in the creek. The balance 160 MLD is discharged into the creek without any treatment. Similarly, MSW generated in the Municipal area, is about 550 MT/D which is being disposed of unscientifically in the CRZ area, resulting in leachate finding its way to flow/drift in the creek. The MPCB also submitted abstract of various important sources of water



pollution, including CETP and urban local bodies. Another affidavit was filed dated 10th May, 2014, mentioning status of Ulhasnagar Municipal Corporation. It is submitted that entire quality of 90 MLD sewage generated is presently discharged without any treatment. A part of this sewage, @ 10 MLD sewage is discharged through Khemani Nalla into Drinking Water Zone of Ulhas River. The balance 80 MLD discharged in Waldhuni River. In other words, the MPCB has identified such 10 MLD discharge of untreated sewage in drinking water zone as one of the top priority intervention required to safeguard drinking water source. Another affidavit is filed on 10th May, 2014, replying the affidavit filed by Ambarnath Municipal Council. It is submitted that though sewage shown is about 43 MD and STP of 28 MD capacity is provided, only 12 MLD sewage is collected and treated. The balance 31 MLD sewage is discharged without any treatment in Waldhuni River.

9. The MPCB filed counter affidavit to MIDC's affidavit on 10th May, 2014. The MPCB submits that MIDC has failed to discharge its obligations to lay down effluent collection network as well as disposal system which has aggravated the problem of pollution. Therefore, MIDC is responsible to provide necessary environmental infrastructure in the industrial areas and as per the MPCB, "MIDC should not shirk its responsibility by just pointing out the MPCB's powers and duties."



10. The MPCB in its counter affidavit to Kulgaon Badlapur Municipal Council's affidavit, submitted that entire 18 MLD sewage generated in the urban area, is discharged into Ulhas River, without any treatment. The MPCB has also submitted that sewage collection system is also not provided and further pleads that the Tribunal should issue necessary directions in this regard.

11. Another voluminous affidavit is filed by the MPCB dated 12-02-2015, which mainly includes Action Taken Report (ATR), including directions issued to the industries along with survey and analysis report of individual units. The MPCB has internally adopted criteria for initiating action which is reproduced below :

I. Industries generating effluent < 25 CMD and exceeding consented parameter:

Sr.No	Industrial Effluent quantity (CMD)	Actions Recommended on the basis of COD (mg/lt.)		
		CD	PD	SCN
1	0 to 5	1. COD (mg/lt.) > 2000	1. COD (mg/lt.) > Between 1000-2000	1. COD (mg/lt) > 500-1000
2	5 to 15	2. pH<5.5 & >9.0	2. pH<5.5 & >9.0	2. pH<5.5 & >9.0
3	15 to 20	3. SS<100mg/lt.	3. SS<100mg/lt.	3. SS<100mg/lt

- CETP inlet COD design standard for DBESA (2000 mg/lt), DCETP (2200 mg/lt), Badlapur CETP (2200 mg/lt), CMET CETP (3500 mg/lt), Additional CETP (4000 mg/lt) & ACMA (2000 mg/lt).



II. Industries generating effluent > 25 CMD and exceeding consented parameter:

Sr. No	Industrial Effluent quantity (CMD)	Actions Recommended on the basis of COD (mg/l)		
		CD	PD	SCN
1	25 to 50	>2000	Between 1000-2000	Above consented to 500
2	60 to 100	Between 1000-2000	> 500 to 1000	Above consented to 500
3	Above 100		>250	--

- CETP inlet COD design standard for DBESA (2000 mg/lt), DCETP (2200 mg/lt), Badlapur CETP (2200 mg/lt), CMET CETP (3500 mg/lt), Additional CETP (4000 mg/lt) & ACMA (2000 mg/lt).

The status of sets in Ulhas and Waldhuni river catchment is also presented and is as under:

Proposals/Status of STP's in Ulhas & Waldhuni Rive Catchment and Catchment of KDMC area :

Sr. No.	Urban Local Body	Total Sewage (MLD)	Sewage Collection (MLD & Coverage of sewer line)	STP capacity (MLD) Treatment and Disposal	Future plans for providing STP	Present Status of STPs
1	Kulgaon Badlapur Municipal Council	18	30% drainage work completed however individually Septik tan/s & soak pit/s have been provided	Presently untreated effluent disposal to Ulhas river because no STP & only 30% Sewage system have been provided	22 MLD under JNNURM Scheme	No STP Provided, but proposed STP for 22 MLD
	Ambernath Municipal Council	43	28 MLD i.e. 90% sewage collection system provided)	28 MLD Consisting of Screen Chamber, Grit Chamber, Clarifier. Disposal to Ulhas creek	Proposed 54 MLD STPs under JNNURM scheme taking into consideration population at	28 MLD STP in operation, disposal to Ulhas creek through Waldhuni

				through Waldhuni	2042	
3	Ulhasnagar Municipal Corporation	90	Existing STP capacity 28 MLD	28 MLD Screen Chamber, Grit Chamber, Clarifier. Disposal of 80 MLD into Ulhas creek through Waldhuni and about 10 MLD through Khemani Nalla to Ulhas river	Proposed 180 MLD STP taking into consideration population at 2041 as per information given by Mr Ali, Executive Engg UMC	Existing STP in operation about 9-10 MLD
4	Kalyan Dombivali Municipal Corporation	200	30MLD	30 MLD inlet Chamber, screen grit Chamber, Clarifier. & digester Disposal to Ulhas creek through local Nalla	Proposed 6 STPs of 130 MLD capacity. At various places, most of the work is completed however 6 STPs yet to be commissioned.	16 MLD at Adharwadi at Kalyan and 14 MLD AT Motagaon Dombivli in operation.

12. It will be pertinent to note here that the MPCB in its various affidavits have only enclosed analysis results of CETP outlets of river or industries. Still, however, no interpretation or statistical analysis of those results have been culled out and presented in the affidavit, which was rather expected from technical organization like the MPCB in order to assist this Tribunal by providing findings and observations of voluminous data, which is generally annexed to the affidavits. Rather, the MPCB has conveniently avoided to do exercise of such interpretation and left it to the Tribunal to go through voluminous data and annexures to have its own analysis and interpretation for deriving the findings. We are constrained to note that similar observations have been made in the past and in spite of such observations, the competent authorities of the MPCB have not taken up the matter in right



perspective and therefore, while deprecating such practices, we would like to deal with this aspect in more affirmative manner in the final directions in view of non-compliances of orders of the Tribunal.

13. The Tribunal in its interim order dated January 15, 2014, directed the MPCB to appoint IIT to conduct a specific study for preparation of action plan in the present matter. However, even up to final arguments, the MPCB could not finalize such arrangements and work could not be initiated by IIT. The affidavit only refers to certain exchange of communications with IIT without citing formalities like TOR, methodologies, estimation of cost involved in the study and other necessary details.

14. Respondent No.2, State Environment Department filed affidavit on 12-2-2014, and submitted that environment department vide letter dated 18th April, 2011, issued directions under Section 5 of the Environment (Protection) Act, 1986, to the Member Secretary, MPCB to:

- a) Prepare a comprehensive plan involving reputed scientific institutions for identification and treatment of sewage generated from coastal local bodies, industries located on or near to coastal areas, house-boats, Hotels, Oil and Gas Exploration Units, Ports, Jetties etc. The plan shall include treatment facilities and disposal mechanism of the treated effluents.
- b) Prepare a comprehensive plan involving reputed scientific institution for identification of site and treatment of solid waste/fly ash/hazardous waste etc. generated from industries, house-boats located in or near areas. The plan shall include identification of



sites and treatment facilities and disposal mechanism of the treated waste etc.

- c) To submit a comprehensive plan for both Sewage Treatment and Municipal solid waste, discharge of untreated waste and effluents from industries, cities or towns etc. in compliance of the provisions as stipulated in the para 3(IV), para 3 (VI) and para 3(vii) of CRZ Notification, 2011.

15. Respondent No.2 also submits that the Chief Secretary of Govt. of Maharashtra vide his letter dated 8th April, 2011, directed the Member Secretary, MPCB to formulate and submit action plan for phasing out existing discharge of untreated waste and effluents from city/town or industries in the notified CRZ areas. The Respondent No.2 further submits that the Principal Secretary, Environment Department in pursuance to the orders of the Tribunal directed MPCB to take following steps immediately vide letter dated 6th December, 2013:

- a) Maharashtra Pollution Control Board to conduct a survey of Industries in MIDC and Non MIDC areas of Ulhas River Basin and submit Water pollution monitoring report to the Government.
- b) Initiate credible legal action under Water and Air Act, on non-compliant industries and submit a report.
- c) Constitute independent third party Committee incorporating expert Institute for regular monitoring of these areas and submit the report of such committee constitute to the department.
- d) MPCB to constitute joint committee of NEERI, IIT Powai and Applicant to visit to these areas under reference in the application.

16. It is also submitted that the Principal Secretary, Environment Department held review meetings on 30-1-



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2014 and 1-2-2014, with all stakeholders, including industries department, urban development department, MIDC, MPCB and urban local bodies in Ulhasnagar basin. It is observed that the Principal Secretary has taken detail review and issued specific directions to MIDC, MPCB, MCZMA and urban local bodies for time bound actions. The Principal Secretary also directed MPCB to specifically release payment to IIT, Powai for carrying out survey and study as ordered by the Tribunal. We need not go into details of such directions, but it will be suffice to say that the Principal Secretary, Environment has gone into details of various issues and gave elaborate directions. However, in spite of such specific time bound directions, the Environment Department has not submitted any follow up of such directions issued to various stakeholders and it seems that these directions are left as 'directions on paper' only.

17. Respondent No.3- MoEF, Govt. of India, has not filed any reply affidavit.

18. Respondent No.4, is CPCB and filed affidavit on 18-2-2015. The CPCB submits the action taken by CPCB is as stated below:

- 1)** Dombivali was declared a Critically Polluted Area (CPA) during 2009-10 based on the concept of Comprehensive Environmental Pollution Index (CEPI) and accordingly, temporary moratorium was



imposed on establishment of new projects and expansion of the existing projects.

2) An Action Plan was formulated by Maharashtra SPCB in consultation with CPCB and a Technical Review Committee during 2010-11.

3) Based on the initiation of ground work towards implementation of the said Action Plan, the moratorium was lifted by MoEF & CC's OM dated 15.02.2011.

4) Maharashtra SPCB was required to submit point-wise progress report on the Action Plan on regular basis to CPCB but the same was not submitted as required. Recently during the meeting of the TRC held on 22.01.2015, Maharashtra SPCB has submitted a progress report in respect of implementation of action points which is lagging behind the time targets in respect of important action points like.

- a) Compliance of the standards by CETPs.
- b) Laying of treated effluent disposal pipe line from CETP to creek.
- c) Installation of continuous ambient air quality monitoring stations.
- d) Underground drainage for collection of sewage from Gram Panchayats.
- e) Construction/commissioning of STPs proposed at different locations in Dombivali CPA
- f) Scientific treatment and disposal of MSW of Gram Panchayats
- g) Introduction of cleaner fuel (CNG/LNG) in the area

5) For periodic review of the implementation of the action plans for CPAs, SPCBs were directed to constitute the Local Stake Holders Committee under the chairmanship of District Magistrate at local level and State Level Committee under the chairmanship of Chief Secretary of the State. However, no such review system has been reported by Maharashtra SPCB.



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19. CPCB further submits that performance of two (2) CETPs in Dombivali, MIDC as per inspection carried out by CPCB shows non-compliance. The CETP (Textile) results of the outlet of CETP of 2013-14, indicate highly exceeding BOD, COD values, whereas, the CETP chemicals also has high BOD and COD values. CPCB further submits that State Pollution Control Boards have sufficient powers under provisions of the Water and Air Acts to take necessary measures for control of water pollution. CPCB further claims that it had issued directions under Section 18 (1) (b) of the Water Act to MPCB vide directions dated 2nd December, 2008 to the effect that:

- 1) Initiate monitoring programme for all CETPs at least every quarter and take follow up action against industries/CETPs not complying with the prescribed standards.
- 2) 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.
- 3) Submit action report every quarter on (1) and (2) above within one month of every quarter to CPCB.

20. Respondent No.5 Kalyan Dombivali Municipal Corporation (KDMC), filed an affidavit on 12-2-2014, and submits that total water supply to KDMC is about 212 MLD and considering 80% sewage generation, the total sewage generation is 170 MLD. KDMC submits that total



sewage treatment capacity of the S.T.P. installed is 70 MLD and another 153 MLD sewage treatment capacity would be provided by December, 2014. The Respondent No.5 will be treating 153 MLD of sewage out of 170 MLD generated and remaining sewage treatment capacity will be developed by providing additional STP. The main contention of KMDC is that untreated sewage is released into Ulhas creek and therefore, is not affecting drinking water use of river Ulhas. The Respondent No.5, therefore opposed the Application.

21. Respondent No.5, further submitted affidavit on 30th March, 2015, and submitted that based on revised calculations, out of total water supply of 300 MLD, the actual generation of sewage is about 188 MLD and earlier committed time frame of December, 2014, could not be achieved due to various reasons. KDMC has further submitted a time bound programme for sewage treatment, which indicates that there is neither fixed time nor any specific date mentioned for new proposed projects. It is only mentioned that "DPR is submitted to the Govt. and after approval etc." which do not have any relevance as far as time bound programme is concerned.

22. Respondent No.6, Ulhasnagar Municipal Corporation (UMC) filed affidavit in reply on 12-2-2014, and submitted that as far as illegal industrial units of Jean



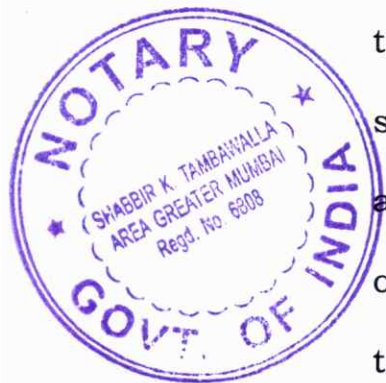
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washing etc. are concerned, the MPCB has already initiated necessary action as per the Law and Corporation does not have any specific role in such proceedings, except disconnection of water supply, if it is so provided by the Corporation. The affidavit is silent on sewage generation, treatment and disposal facilities and therefore, another affidavit was filed by UMC on 21-7-2014 and submitted that DPR of Rs.257 crore for underground sewage scheme is submitted to the State Govt. which has been further recommended to the Central Govt. for approval. The Respondent No.6, further submitted that even though revised underground sewage scheme includes whole Ulhasnagar city, considering importance of stopping the discharge of untreated sewage and effluent into drinking water zone of river Ulhas, a proposal for interception and diversion of Khemani Nullah, by creating a sump and lifting sewage to Khadegolwali STP, has been undertaken on priority basis by the Respondent No.6. Another affidavit was filed on 1-09-2014, by the Commissioner of KDMC which submits that considering urgency involved in lifting the untreated effluent from Khemani Nullah for treatment, the proposal was considered by the General Body of the Corporation and project of approximately Rs 20 crores is sanctioned of which Rs.10 crore will be for developing sump and rising main equipment and balance of Rs 10 crores for treatment of polluted water. Though, this project



was originally a part of overall sewage scheme, the Corporation has decided to segregate this project from the main project and undertake it on priority for implementation. Necessary funds have been made available in order to prevent entry of untreated effluents into drinking water zone of river Ulhas. The further affidavits of the Respondent No.6, are relating to compliances of orders of the Tribunal and also stating programme of the project. Commissioner UMC personally attended the Tribunal and gave an assurance on affidavit that the work will be expediated in order to control pollution, and corporation will spend the entire amount from its budget even if no funds are received from government or there is some escalation of costs. We appreciate such statement and assurance of the Commissioner, U.M.C. and we are of the opinion that the Tribunal will not be required to issue any specific directions in this regard, and expect the Commissioner to fulfill his assurance.

23. Respondent No.7, Ambernath Municipal Council (AMC), filed an affidavit on 12-2-2014. It is submitted that total length of sewage network is about 44.39km and sewage treatment plant capacity is 28 MLD. An augmentation of this scheme by construction of STP capacity of 54 MLD has been approved and work has been awarded to the contractor on 22-12-2013 to complete the work in



24 months. AMC is therefore on record that once the project is completed, the Council will be in a position to treat complete sewage generated in the area of Municipal Council.

24. Respondent No.8 MIDC has filed two (2) separate affidavits on 17-11-2014. The first affidavit dealt with effluent disposal arrangements and it is submitted that MIDC has awarded the work of comprehensive marine EIA study for selection of revised final disposal point of treated effluent in Ulhas estuary from MIDC Dombivali. The interim report of NIO was placed on record, which includes detail water quality of Ulhas estuary at various locations. The report also mentions that based on detail environmental study in 1994, CSIR -NIO had suggested discharge of treated effluent near Thakurli. However, due to several technical and other difficulties, MIDC could not lay pipeline to the recommended location. The report is categorical in its findings that based on environmental monitoring of May 2014 and earlier results, it is concluded that upper and middle zones of Ulhas estuary have been degraded due to release of domestic and industrial effluent from different source and conditions are not conducive for diverse aquatic fauna. The report also indicates that Dombivali CETP phase-I and II, release treated effluent which is highly exceeding standards (BOD 253-554 mg/l., COD 880 mg/l.) besides presence of toxicants like Al, Cr,



Mn, Fe, Co, Ni, Cu, Zn, Hg, Pb, Cd and PHc. The other affidavit also submits the NIO report related to discharge point for effluent generated in MIDC, Ambernath. This report also deals with water quality data and further records that CETP at Morivali, Additional Ambernath and Badlapur are discharging effluents which are exceeding prescribed norms for parameter of BOD and COD, besides presence of heavy metals referred above.

25. Respondent No.8, filed another affidavit on 19-2-2015 and submits that MIDC has issued necessary instructions to all the industries and CETP to ensure that the industries shall not consume water more than the quantity specified in MPCB consent, in order to ensure that hydraulic load at CETP is maintained and also, there is no use of borewell/tanker water. The MIDC has submitted that they will provide necessary information to MPCB, who are statutorily authorized to take action against the industries which are consuming water, more than consented volume. MIDC is also on record that various other works including effluent collection system and also, the effluent disposal systems are developed as a part of environmental infrastructure in MIDC industrial areas. MIDC also submits that they have outsourced maintenance of collection system in order to ensure that existing effluent collection systems are operated efficiently and without any leakage or overflow of effluents. The MIDC



further submits that substantial amounts have been spent on developing collection network as well as maintenance of the same. The MIDC is, therefore, avers that it has taken necessary steps to provide environmental infrastructure in the form of effluent collection systems, besides providing land as well as capital subsidy to CETPs. The MIDC further gave details of water used by various industries vis-à-vis MPCB consent data and further submits that this information will be shared with the MPCB on regular basis, preferably on quarterly basis, so that MPCB can identify the defaulting industries for taking necessary action at their end.

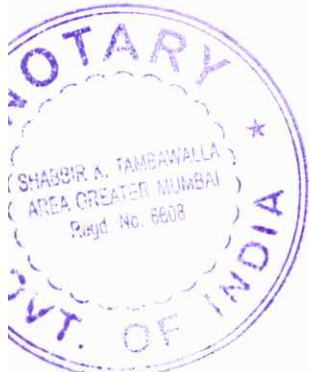
26. Considering the record of the Application and Affidavits filed by the contesting parties, we are of the opinion that following issues are required to be decided for the final adjudication of the matter :

1. Whether discharge of untreated sewage and industrial effluent has caused pollution and environmental degradation of river Ulhas?
2. If yes, which are the pollution sources that can be held accountable for contributing to such pollution and environmental degradation in qualitative and quantitative manner?
3. Whether CETPs are being operated and managed efficiently to achieve prescribed standards and whether they can be held accountable for pollution and environmental degradation of river Ulhas, if so in what manner?
4. Whether urban local bodies have taken necessary steps for control of water pollution either by taking



- adequate and proper preventive drifting of untreated sewage in the Rivers or unscientific disposal of MSW?
- 5. Whether any immediate remedial and effective measures are required to be taken to restore entire ecology of Ulhas River, including marine life?
- 6. Whether any costs for restoration and restitution of river can be assessed and attributed to one or many of such identified water pollution sources?
- 7. Whether the regulatory authorities of MPCB and MIDC have taken adequate efforts to control and mitigate water pollution in this area and whether any specific directions are required to be issued to these authorities for effective implementation of environmental regulations?
- 8. Whether any specific directions are required to be given in this regard?

27. River Ulhas originates from Sahyadri hills and descend through more than 122 kms uptill its outfall into the Arabian sea. The River has important tributaries like Barvi, Bhivapuri, Murbadi, Kalu, Bhatsa, Poshir etc. Beyond Kalyan, the River, nearly flowing at the sea level merges with the creek waters and forms estuary. The main creek extends upto Ghodbundar, commonly known as Bassain creek and other branch known as Thane creek, in the south, meeting Bombay harbour. Before entering into the realm of adjudicating on the above issues, it would be pertinent to define the setting of the scope of the "Ulhas River" as agitated in the petition and also, in view of the argument advanced by learned counsel for MPCB. It was contended by MPCB that Ulhas River extends upto NRC Bandhara which is a sweet water zone and thereafter, the



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downstream part including Dombivali and other places is a part of creek having saline zone and a question was raised whether Ulhas River is restricted in sweet water zone or upto meeting the sea, including the saline zone. It would be apt to reproduce the definition of River from Oxford dictionary which is as under :

River : "A large natural stream of water flowing in a channel to the sea, lake or another river".

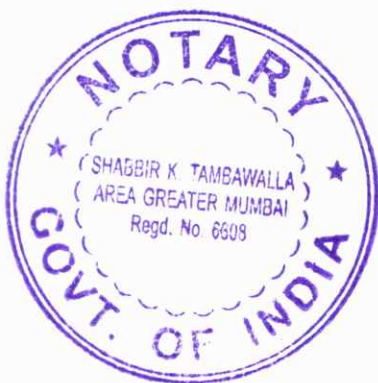
Though the Water (Prevention and Control of Pollution) Act 1974 do not define expression 'River', but the Forest Act of 1927 defines 'River' in Section 2(5) :

"River includes any stream, canal, creek or other channels natural or artificial".

The law of *Lexicon* also defines--

"River as a large stream of water flowing in a channel, and land towards the ocean, lake or other Rivers".

The MPCB itself has produced a plan showing the Water Pollution Prevention Area of Ulhas River Basin which was notified in the Maharashtra Government Gazette dated 4-8-1973 marking the water pollution prevention area under Ulhas River Basin in different classes as A-I, A-II and estuarine water. This particular document also indicates that the area downstream of Kalyan is shown as estuarine water of Ulhas River Basin. Furthermore, the affidavit filed by Irrigation Department on 19-2-2015 clearly mentions that there are four (4) outlets for the disposal of waste/effluents which are flowing in Ulhas River in District

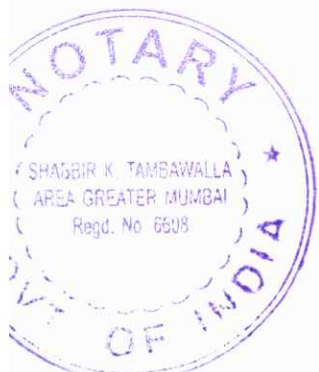


Thane, out of which, three outlets are in saline water. The Affidavit also includes a copy showing Ulhas River and the four outlets through which the industrial and documented effluents meet the River.

28. From the above discussion, it is amply clear that Ulhas River Basin extends right up to meeting of the River to the Sea/ocean and has two distinct stretches, sweet water zone and saline water zone, though, they jointly and severely form the River Basin as claimed in the Application. Indisputably, they are practically confluent in one sense though run separately.

Issue Nos.1 & 2 :

29. Ulhas River Basin experienced large scale urbanization and industrial development which comprise mainly of chemical and textile industries, which are generally polluting in nature. The domestic sewage from ever growing urban areas of Badlapur, Ambarnath, Ulhasnagar and Kalyan-Dombivili are being released into the River, though a very small fraction of such sewage generated is treated as per the norms. In this context, it is necessary to consider some of the provisions of the Water (Prevention and Control of Pollution) Act 1974, which impose certain restrictions on discharge of effluents in the water bodies. Section 25 of the Act puts restrictions on new outlets and new discharges without the previous consent of the State Boards, whereas Section 26 of the Act



has provision regarding existing discharge of sewage or trade effluent. Section 30 of the Act empowers the State Board to carry out certain work, particularly, when pollution control works, to be carried out under Sections 25 and 26 of the Water (Prevention and Control of Pollution) Act, are not executed by the concerned person. The State Board can execute such work at the risk and cost of the said person. Besides that Section 32 of the Act empowers the State Board to take emergency measures in case of pollution of stream or well. The Board can approach to the designated Court with an Application for restraining apprehended pollution of water in streams or wells. Much has already been discussed about the powers of the State Boards under Section 33-A of the Act to give directions which may include closure, prohibition and regulation of any industry, operation or process. The violation of the Board's directions can be penalized under Section 41, 42, 43, 44 and 45 of the Water (Prevention and Control of Pollution) Act. Considering this array of legal provisions, it cannot be said that the State Boards do not have sufficient regulatory powers to accomplish the mandate prescribed under Water (Prevention and Control of Pollution) Act. The title of the Act i.e. Prevention and Control of Pollution is significant as more emphasis is laid by the legislature on prevention of the Pollution. The main purpose of the legislation is to maintain the



wholesomeness of such water courses. The Water Act also entrust responsibility on the State Boards as laid down under Section 17 wherein the functions of the Board have been enumerated which are as under :

Functions of State Board :

- 1) Subject to the provisions of this Act, the functions of a State Board shall be –
 - (a) To plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof;
 - (b) To advise the State Government on any matter concerning the prevention, control or abatement of water pollution;
 - (c) To collect and disseminate information relating to water pollution and the prevention, control or abatement thereof;
 - (d) To encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
 - (e) To collaborate with the Central Board in organising the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of water pollution and to organise mass education programmes relating thereto;
 - (f) To inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by this Act;



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- (g) To lay down, modify or annual effluent standards for the sewage and trade effluents and for the quality of receiving waters (not being water in an inter-State stream) resulting from the discharge of effluents and to classify waters of the State;
- (h) To evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions and more especially the prevailing flow characteristics of water in streams and wells which render it impossible to attain even the minimum degree of dilution;
- (i) To evolve methods of utilisation of sewage and suitable trade effluents in agriculture;
- (j) To evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution;
- (k) To lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents;
- (l) To make, vary or revoke any order—
- (i) For the prevention, control or abatement of discharges of waste into streams or wells;
 - (ii) Requiring any person concerned to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such existing system or adopt such remedial measures as are necessary to prevent, control or abate water pollution;
- (m) to lay down effluent standards to be complied with by persons while causing discharge of sewage or sludge or both and to lay down, modify or annul effluent standards for the sewage and trade effluents;



- (n) to advise the State Government with respect to the location of any industry the carrying on of which is likely to pollute a stream or well;
- (o) to perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government.

(2) - - - - -

We would like to record that the functions contemplated clearly indicate broad spectrum of MPCB's role as a scientific and technical organisation, besides having emphasis on scientific research; technology application and evaluation; development of action plans and information dissemination in public domain. We have already dealt with need of having a dedicated R & D division of in MPCB in "Dilip Bhojar Vrs. State in Application No.35(THC)/2014(WZ)". However, MPCB, for reasons best known to them, have not taken a decision on that issue, so far.

30. There are several major industrial areas developed by M.I.D.C. which accommodate numerous water polluting industries, including textile, chemical, and engineering etc. M.I.D.C. has provided CETPs in some of the industrial areas and the treated effluent is finally released into nearby water bodies. Broadly, the domestic and industrial effluent is discharged in the Ulhas estuary in three (3) ways :



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- (a) Badlapur sewage and part of the Ulhasnagar sewage in sweet water zone of water Ulhas River.
- (b) Major part of the Ulhasnagar sewage, domestic and industrial effluent from Ambarnath and sewage from Kalyan is disposed in Waldhuni River meeting Ulhas creek.
- (c) Domestic and industrial effluent from Dombivili meeting Ulhas creek through local nallas.

31. It is an admitted fact that the Waldhuni River quality is highly polluted one and therefore, the District Collector had prepared an action plan for control of pollution in year 2011 which was submitted to the Urban Development Department, Government of Maharashtra. Another area of agreement is the discharge of untreated sewage from Ulhasnagar in the sweet water zone of River Ulhas through Khemani nullah. During the pendency of this Application, Ulhasnagar Corporation has taken initiative for interception and diversion of such effluent in order to protect the sweet water zone. It is also brought on record that the river has been abused by various agencies like industries, developers etc. who have dumped large quantity of solid waste and sludge in the river bed, causing environmental damages to river banks and also river water quality.

32. MPCB has brought on record that total 351 MLD of sewage is generated from Kalyan-Dombivili Municipal Corporation (KDMC), Kulgaon-Badlapur Municipal Council



(KBMC), Ulhasnagar Municipal Corporation (UMC) and Ambarnath Municipal Council (AMC). Similarly, about 34.05 MLD of industrial effluent is released from various industrial areas into the Waldhuni River/Ulhas creek. Undisputedly, about 300 MLD sewage is discharged without any treatment in the water environment, besides the CETP discharges which are also exceeding the standard. It was, therefore, necessary to examine the allegations of the Applicants whether the Water Quality of River Ulhas has been degraded by such pollution thereby affecting the ecology and marine line of the river. Though MPCB has submitted some Analysis Report of Ulhas creek water quality, but it failed to describe whether such allegations are correct or wrong by scientific and statistical interpretation of their own data. The Tribunal will have to, therefore, to rely on the reports of National Institute of Oceanography (NIO) which is one of the pioneer research institutes and engaged by MIDC to carry out marine EIA studies. The interim EIA report of NIO concludes that the prevailing water quality of the estuary indicate that the BOD released in the estuary exceeds its natural assimilation capacity. Inefficient oxidation of organic matter leads to high tide dependent BOD in the upper estuarine zone though its levels are near about to the expected baseline at the estuarine mouth/ingress 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. The high effluent loading-mainly sewage and effluent has resulted in built up of nutrients like phosphates, nitrate, nitrite and ammonia that in combination with DO (dissolved oxygen) have modified the ecology of Ulhas estuary with eutrophic conditions in the middle and upper zones. The accumulation of toxic heavy metal such as Al, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hg, Pb, Cd as well as organic carbon, PHc, though has occurred particularly in upper segment is not alarming. The report finally concludes that based on the monitoring of May 2014 and earlier results, it is concluded that the upper and middle zones of the Ulhas estuary have been degraded due to release of domestic and industrial effluent from different sources and conditions are not conducive for diverse aquatic fauna.

33. In other words, the above scientific report of NIO has put an alarming picture of the present state of environment of Ulhas estuary besides emphasising the need of urgent interventions. In absence of any contradictory material available on record, the Tribunal is inclined to accept the findings of the NIO and thereby in our considered opinion, the discharge of untreated sewage and industrial effluent have caused pollution and



environmental degradation of River Ulhas. Issue No.1 is, therefore, answered in the AFFIRMATIVE.

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34. In view of this finding, the next logical step is to identify the causes for such pollution and environmental degradation. MPCB has already submitted on record an abstract of quantities of domestic sewage released by different municipal bodies as well as CETPs which have been already referred above. At present, considering the environmental sensitivity of the Ulhas River and estuary, we are not inclined to a proposition of deciding the exact contribution of individual sources of pollution, but considering the long period, over which all these polluting sources are merrily discharging the untreated effluents into the river Basin, we are inclined to deal all the pollution sources, with equal importance and equal seriousness. Obviously, it is also an admitted fact that the industrial pollution is generally given a precedence over the domestic sewage pollution in view of its obnoxious nature, presence of toxic and non-biodegradable matter and the fact that there are reports of many incidences of environmentally unfriendly practices of disposing untreated industrial effluents and sludges for profit making, the industrial sector needs to be enforced severely on priority for pollution control and environmental protection. The Issue No.2 is accordingly answered.



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Issue No.3 :

35. The concept of Common Effluent Treatment Plant (CETP) was evolved in 1980s to support the small scale industries to effectively address the problem of water pollution control by providing common facilities which would treat the composite effluent from these small scale industries in cost effective manner, adhering to the specified norms. This concept was further expanded to include the large and medium scale industries which would have their own effluent treatment facility and would discharge the treated effluent in the CETP as a hydraulic load. Such an arrangement has distinct advantage of single point of control and also, compatibility of effluents by homogenisation and neutralization. This would also facilitate better enforcement of water pollution regulations in its totality viz-a-viz impact on the environment (receiving water bodies) by having a single or fixed number of effluent outlets. Thus, the CETPs over the years, have become essential part of environmental infrastructure in the industrial areas. Needless to say, the CETP cannot be considered in isolation without the effluent collection treatment i.e. input to CETP and effluent disposal system i.e. output of CETP. In the present case, there are six (6) CETPs in the industrial area of Dombivili, Badlapur, Ambarnath, Additional Ambarnath and Morivali. It is the stand of MPCB that in the MIDC industrial estates, there



are several issues related to the effluent collection and disposal arrangements which can be briefly summarised as under :-

- (a) Some of the areas of the industrial estates do not have effluent collection system attached to CETP and therefore a part of the industrial effluent does not reach CETP for the final treatment.
- (b) The collection system provided by MIDC is found to be leaking, resulting into discharge of effluent into the local water bodies, thereby bypassing the CETP.
- (c) The effluent collection system is found to be overflowing at some locations due to improper maintenance and also, may be due to excessive water use by the industries in that area.
- (d) The scientific designed effluent disposal arrangement i.e. outfall is not provided by MIDC resulting into discharge of CETP effluent into the water bodies the causing localised pollution.

36. Countering these allegations, MIDC alleged and the counsel for MIDC would submit that MIDC has spent substantial amount on provision of effluent collection systems and maintenance thereof, in MIDC areas. She would submit that it is true that in some small areas of MIDC, the effluent collection system is not provided but quantitatively that quantity of uncollected effluent is not significant and the industries are already directed to send their effluent to CETP by tankers. She would further submit that MIDC has outsourced the maintenance of effluent collection system and the agency details have already been provided to industrial areas as well as MPCB, to contact MIDC in case of any incidence of overflow



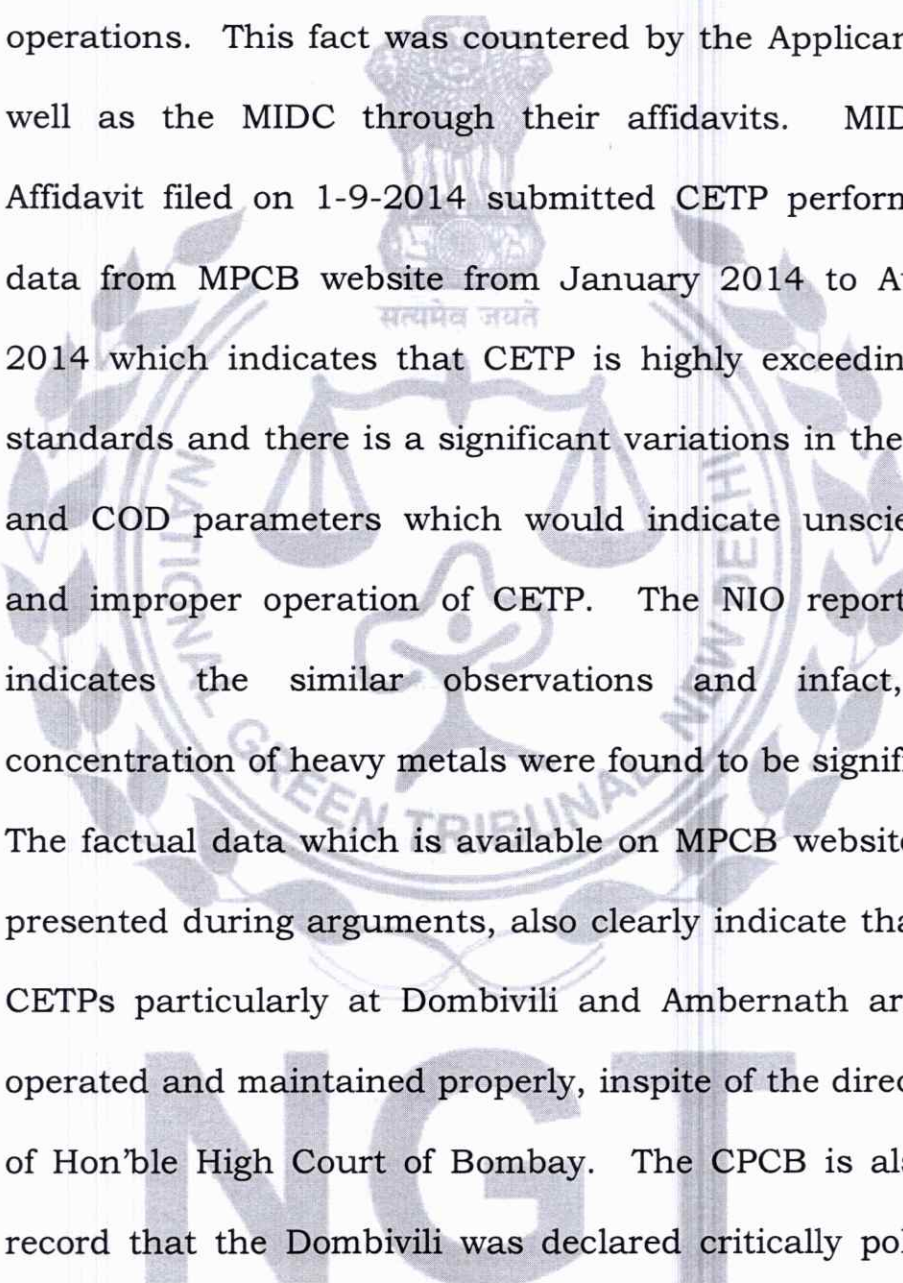
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and/or leakage. It is her contention that in case of additional use of the water, it is the MPCB who is competent under the Environmental Laws, to take action against such industries. She would further submit that such water consumption data can be provided to MPCB electronically once in three months to facilitate MPCB to identify such units for suitable legal action. In other words, it is her contention that MPCB is the statutory authority under the Water (Prevention and Control of Pollution) Act, 1974 that should check and verify the industrial effluent outlet systems to ensure all the compliances. As regards to the effluent disposal system, counsel of MIDC would submit that though earlier there was proposal to provide effluent outfall system, the same could not be executed due to public resistance. MIDC has now engaged National Institute of Oceanography to conduct marine EIA for two outfall systems, one from MIDC, Dombivili and other from MIDC Ambernath. She would submit that once the reports are available, they would approach the competent authorities for necessary permissions. However, MIDC could not assure and give certain fixed time frame for completion of such studies, approval by competent authorities and project execution/commissioning schedule.

37. The counsel for Applicants raised an issue of non performance of the CETP. MPCB would submit that



Hon'ble High Court of Bombay directed MPCB to monitor all the CETPs and published the data in public domain. MPCB would submit that due to various initiatives taken by the MPCB., the CETPs are performing much better than what they were and there is an improvement in the operations. This fact was countered by the Applicants as well as the MIDC through their affidavits. MIDC in Affidavit filed on 1-9-2014 submitted CETP performance data from MPCB website from January 2014 to August 2014 which indicates that CETP is highly exceeding the standards and there is a significant variations in the BOD and COD parameters which would indicate unscientific and improper operation of CETP. The NIO report also indicates the similar observations and infact, the concentration of heavy metals were found to be significant. The factual data which is available on MPCB website and presented during arguments, also clearly indicate that the CETPs particularly at Dombivili and Ambernath are not operated and maintained properly, inspite of the directions of Hon'ble High Court of Bombay. The CPCB is also on record that the Dombivili was declared critically polluted area during the year 2009-2010 based on concept of comprehensive environment pollution index and the Maharashtra State Pollution Control Board (MSPCB) had submitted an action plan which incorporated important actions like compliance of standards by CETP and



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provision of effluent disposal arrangements. Infact, CPCB had issued directions under Section 18(1)(b) of Water (Prevention and Control of Pollution) Act 1974 on 2-9-2008 which are as under :

1. Initiate monitoring programme for all CETPs at least every quarter and take follow up action against industries/CETPs not complying with the prescribed standards.
2. Not to permit expansion/establishment of the industrial units in the areas where the associated CETPs do not have adequate hydraulic load capacities.
3. Submit action taken report every quarter on (1) and (2) above within one month of every quarter to CPCB.

38. Considering the simple arithmetic based on volumetric flow and also, the average CETP outlet characteristic for the CETP at Dombivili, the following facts would emerge:

1. The CETP hydraulic capacity -- 16500 M³/day.
2. Average COD as reported by MPCB: in mg/lt.
Year 2013: 475
Year 2014: 457
Jan-May 2015: 672
3. Standard for COD – 250 mg. ltr.
4. Average Excessive COD load released in the water environment on yearly basis @ 1550T.

The cost of scientific disposal of this COD load, through hazardous waste incineration, would come around Rs.7.75 crores/annum by even considering modest cost of Rs.25,000/- tone and equal amount of penalty for such



discharges. Similar calculation can be done for other CETP's like Ambernath CETP, which is exceeding the standards regularly.

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39. It is obvious from the above that the CETPs at Dombivili as well as the other places, like Ambernath, released the effluents which are not meeting the prescribed norms in the environment, in spite of directions of the Hon'ble High Court, Bombay, and also the CPCB. The MPCB seems to have taken some cosmetic action against some of the industries by issuing closure notices or other directions. However, the final effluent which is being released into the water environment is still polluting the Rivers. In spite of such knowledge, we fail to understand and appreciate the affidavits submitted by MPCB which would indicate the compliances. The above illustration, just for one CETP shows severity of the problem. It is also pertinent to note that this excessive COD which is observed after the treatment at CETP, is most likely to comprise of recalcitrant COD or represented by low biodegradable complex organic matter, which can comprise both organic or inorganic compounds, causing water pollution. It is also relevant to note here that certain computational errors are noticed in MPCB website data which shows incorrect average values. We, therefore, direct that the MS, MPCB shall ensure that the factual data is hosted on its website, as the averages indicated in



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the data as submitted do not arithmetically match the data presented.

40. Another interesting aspect of the litigation is that the Dombivili area was declared as critically polluted and certain action plan was submitted by MPCB to the CPCB which facilitated the lifting of moratorium on the industrial development in MIDC, Dombivili. We also noticed that the CPCB had issued specific direction in 2008 to MPCB in view of the non-compliance by the CETP. In spite of such action plan and directions, the CPCB which had issued such directions did not ensure that the directions were complied with. It seems that such action plan and directions are only the paper work, without any implementation and enforcement. Therefore, the issue No.3 is answered in the AFFIRMATIVE as the CPCB failed to achieve the prescribed standards and such untreated effluent is released into the water bodies/environment causing pollution.

Issue No.4 :

41. Ulhas River has experienced large scale urbanisation and there are two (2) Municipal Corporations i.e. Kalyan-Dombivili Municipal Council (KDMC) and Ulhasnagar Municipal Corporation (UMC) discharging 200 MLD and 90 MLD sewage on daily basis in the area. Further, Kalyan- Badlapur Municipal Council and Ambarnath Municipal Council generate 18 and 43 MLD



sewage respectively. As per the information submitted by MPCB, out of this 357 MLD sewage, nearly 304 MLD sewage is released in the water environment without treatment. Needless to say, these Municipal bodies are required to treat sewage to the prescribed standards, as specified by MPCB. MPCB is on record that besides this sewage, leachate from solid waste dumping grounds is also found to be polluting the water bodies. MPCB is on record stating that it has issued several notices/directions to these urban bodies; however, there is no improvement in the sewage treatment carried out by these urban bodies. The Kalyan Dombivili Municipal Council is on record with time bound programme for sewage treatment which indicates that by December 2015 about 80 MLD effluents out of 200 MLD effluents would be treated through its STP. We are not satisfied any of the time frame and program given by either of these four (4) Corporations for the simple reason that neither there is any fix time frame for provision of STP nor there is any commitment to reserve the required funds for such provision of STP. It is true that urban local bodies would find it difficult to spare or generate the funds for the provision of such STPs and also, operations of the same. But the sewage treatment and solid waste management are statutory functions of these local bodies and they cannot abduct such responsibility under the disguise of financial constraints. It is high time that the



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Urban Development Department of the State Government should intervene in such matters to provide technical and financial support to these local bodies to develop low cost, cost effective and sustainable sewage management program. We would deal with these aspects in the final directions. Accordingly, the issue No.4 is answered in the NEGATIVE as none of these urban local bodies have submitted a complete time bound program for prevention of water pollution.

Issue No.5:

42. Admittedly, the untreated/treated industrial effluent from CETP or industrial areas along with untreated sewage from the urban local bodies is released in the Ulhas river basin in large quantity. In order to assess the status of ecology and pollution of Ulhas River, we would like to refer to the comprehensive marine EIA study conducted by National Institute of Oceanography (NIO) and the findings presented in their report of September 2014. The NIO has conducted detail field investigations in the Ulhas estuary and the summary of the study would indicate the following important points :

1. The BOD release in the estuary exceeds its natural assimilation capacity. The high organic loading leads to hypoxic conditions, particularly around low tide in the middle upper estuarine segments.
2. The high effluent loading mainly sewage has resulted in buildup of nutrients like, phosphate, nitrate, nitrite and ammonia that in-



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combination with frequent low DO have modified the ecology of Ulhas estuary with eutropic conditions in the middle and upper zones.

3. The pathogens population is high in the water and sediments.
4. There is a decrease in diversity of phytoplankton, zooplankton and microbentic biomass, suggesting that environment is not conducive for sensitive species.

The report finally concludes that the upper and middle zones on Ulhas estuary have been degraded due to release of domestic and industrial effluent from different sources and conditions are not conducive for diverse aquatic fauna.

43. The another important water body of River Waldhuni is found to be severely polluted, may be irreversible, due to heavy discharge of effluents and sewage over the years. The MPCB analysis reports indicate the very high BOD/COD values (max. 1800 and 3200 respectively) as observed in May 2011. This River has a typical topography which originates in Matheran hill and as a major dam constructed on its upstream of Badlapur. The River has been encroached upon and is being abused by indiscriminate discharge of toxic, coloured effluent including sewage. It was also noticed that lot of sludge is accumulated in the river bed. This fact/situation is fairly admitted by all the counsel. This River could be one of the most polluted River in the country which is quite evident from Analysis Report

available on record. It is to be noted that the natural water flow is limited to the monsoon period and thereafter, the river flows only with the indiscriminate discharge of effluents. The Waldhuni River cannot speak about its own suffering and the regulatory agencies like CPCB and MPCB besides all the local bodies located along River are not only silent spectators but may be contributors to the deterioration of the River Waldhuni.

44. We also noted that besides issuance of notices, MPCB has not taken any stringent action including prosecution or enforcement of provisions of sections 30, 31 and 32 of the Water (Prevention and Control of Pollution) Act, which allows MPCB to take emergency measures and also seek injunctions from the Courts. Neither, we could see any prosecutions against habitual defaulting industries, and regime of directions and BG is only followed. We are not satisfied with such actions taken by MPCB in this regard as they have not yielded the desired results and improvement in water quality.

45. Though significant quantity of the sewage and industrial effluent is either discharged in River Waldhuni or saline area of River Ulhas, a small part of the sewage from Ulhasnagar i.e. about 10 MLD is discharged in the sweet water zone of River Ulhas. During the proceedings of the matter, the Tribunal had directed the Ulhasnagar Municipal Corporation to take urgent measures and after



some coercive actions, the Commissioner, Ulhasnagar Municipal Corporation has personally assured the Tribunal on affidavit that the work of preparation of the scheme is finalized and sufficient funds have been reserved for execution of interception and diversion of sewage from Khenani Nullah to the treatment plant. We are hopeful that such assurance will be honoured in the interest of environment.

46. We may take brief survey of settled legal position in the context of pollution of water bodies. The Apex Court in “Tirupur Dyeing Factory Owners Vrs. Noyyal River A. Protection Association & Others, 2009 (9) S.C.C. 739” took survey of the relevant case law viz. :

- (i) Indian Council for Enviro Legal Action and Ors. Vrs. Union of India (UOI) and Ors. (1996) 3 S.C.C. 212.
- (ii) Vellore Citizens’ Welfare Forum Vrs. Union of India (1996) 5 S.C.C. 647
- (iii) People’s Union for Civil Liberties Vrs. Union of India, (1997) 3 S.C.C. 433 : (1997) SCC (Cri) 434.
- (iv) A.P. Pollution Control Board Vrs. Prof. M.V. Nayudu, (1999) 2 SCC 212.
- (v) M.C. Mehta Vrs. Union of India, (2009) 12 SCC 118.

47. The Hon’ble Supreme Court in the case of “Sterlite Industries (India) Ltd. v. Union of India & Ors. (2013) 4 SCC 575”, enunciated the principle that a company which has caused the damage to the environment and for operating the plant without valid renewal of consent for a



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fairly long period would obviously be liable to compensate by paying damages. While relying upon the judgment of the Constitution Bench of the Supreme Court in the case of *M.C. Mehta v. Union of India* (1987) 1 SCC 395, the Court further stated that the plea of reasonable care and that the damage to environment occurred without specific negligence on the part of the unit is not a sustainable defence to a direction for payment of compensation for causing environmental damage. The court further held that magnitude, capacity and prosperity of the unit are the relevant considerations for determining the extent of the liability in such case. Right to carry on business cannot be permitted to be misused or to pollute the environment so as to reduce the quality of life of others.

48. The Apex Court held that the Members of "Tirupur Dyeing Factory Owners Association" caused unabated pollution on account of discharging the Industrial effluents into Noyyal river to the extent, that the water of the river was neither fit for irrigation nor potable. It is observed : "They cannot escape the responsibility to meet out the expenses of reversing the ecology. They are bound to meet the expenses of removing the sludge of the river and also for cleaning the dam. The principles of "polluter pays" and "precautionary principle" have to be read with the doctrine of "sustainable development". It becomes the responsibility of the members of the appellant Association



that they have to carry out their industrial activities without polluting the water”.

49. The facts of the present case would show that legal position considered and made applicable in case of “Tirupur Dying Factory Owners Association” (supra) is squarely applicable herein. There is no escape from conclusion that the Industries are liable to pay damages caused due to the water pollution, restore the environment and ensure that there shall be no further pollution in the river “Ulhas” due to discharging of industrial effluent of the units run by the Industries. Needless to say that all the aspects discussed above indicate that there is an immediate need for taking control and remedial measures to restore the ecology of Ulhas River basin and accordingly, the issue No.5 is answered in the AFFIRMATIVE.

Issue Nos.6, 7 and 8 :

50. Having observed that there is ongoing, indiscriminate and continuous discharge of untreated industrial effluent and domestic sewage in the Ulhas River Basin and further, there are significant environmental impact in terms of deteriorated water quality and disturbance to the estuarine ecology, the only question remains as how to address this peculiar problem of pollution and environmental degradation. Broadly, the sources of pollution can be divided in two (2) categories



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namely; Industrial Waste Waters and Domestic sewage. The total industrial effluent quantity is about 34.05 MLD, as per the data furnished by MPCB, whereas the domestic sewage is about 357 MLD. Though, both these sources of pollution are significant and required to be controlled for effective abatement of pollution, the prioritization of intervention is necessary in terms of impacts of environment, funds required and also, ease of enforcement in a 'practicable' manner.

51. MPCB has tried to canvass an argument that it has taken sufficient and effective steps to control the industrial effluents, but their efforts as regards to domestic sewage have not yielded the reasons. Further, even looking at the contributing volumes, the domestic sewage treatment needs to be given priority. The counsel for Applicants had a different view of point and argued that the industrial effluents, particularly from chemical industrial areas have heterogeneous composition having several toxic and hazardous constituents. She also contended that these industries are operating on commercial basis and even though, Effluent Treatment Plan (ETP) and CETP, is provided in many cases, the same is not operated efficiently thereby willfully releasing the effluent without required treatment. The counsel for Applicants further contended that even as per MIDC data, the effluent generation is more than the MPCB approved quantity, and



besides that many industries are using ground water from the outsourced tankers. She attributed such practices towards cutting the cost of the treatment, in utter disregard to environmental Laws and public health. She cited the example of illegal discharge of industrial effluents in Waldhuni River which caused severe air pollution resulting in public health concern leading to hospitalization of many residents. We are inclined to accept such arguments, particularly in view of fact that the industrial area of Dombivili has already been identified as critically polluted area in the year 2009-10 and CPCB had issued certain directions and even, MPCB has envisaged certain pollution control action plan. Further, the industrial sources are point sources containing various toxic and hazardous organic/inorganic substances which may not be the naturally found constituents of the local water environment. The higher COD of CETP treated effluent indicates presence of recalcitrant organics which are difficult to biodegrade, and also, may comprise of inorganics. Therefore, such industrial discharges are likely to cause more significant impacts on the overall environmental quality of the water bodies. Nonetheless, the domestic waste water is also required to be regulated effectively on urgent basis in view of the report of NIO.

52. Another contention put forth by MPCB is that now they have directed all major industries to install online



pollution monitoring system whereby real time pollution data can be monitored and informed to public. We are not inclined to comment on this proposition at this stage in the absence of any information about data security, data sanctity, repeatability, besides computational and presentation aspects of such monitoring program. It will be suffice to say that such monitoring system will only relate to monitoring rather than focus on the actual treatment and scientific assessment of the various treatment unit processes involved in effluent treatment plant.

53. In the instant case, though the Dombivili area was declared as critically polluted area way back in 2009-10 and remains so even today, and both, MPCB and CPCB are aware that the CETPs are not functioning properly, we do not find any effective intervention by MPCB or even by CPCB to regulate such polluting discharges. This is more serious, in case of CPCB as, it had identified the area as 'critically' polluted and also issued certain directions to MPCB. However, we could not locate any efforts by CPCB to ensure the implementation of its own directions and also, the action plan of MPCB. The actions taken by MPCB are related to closure and opening directions to some industries which have not resulted into any substantial improvements in the CETP performance. Further, MPCB has also failed to ensure that the MIDC provides the



necessary effluent disposal system in a time bound manner. We could not locate any action plan for either Ulhas or Waldhuni river pollution control, prepared by MPCB, as mandated under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974. We are, therefore, at pains to note the action or rather inaction of CPCB as well as MPCB to prevent and control the water pollution in the industrial area, in spite of being notified as critically polluted area.

54. We have already dealt on the legal powers available with MPCB under the Water Act, 1974 in *Ashok Kajale and others Vs Godavari Bio-refineries and others in Application No. 68/2014*, which includes specific provisions to regulate the polluting sources and activities, besides actions required for prevention, control and abatement of water pollution including restitution of water bodies. The relevant sections are 25, 26, 30, 31, 32 and 33 besides the Section 17. The State Environment Department is on record that the Chief Secretary of Maharashtra and MCZA have issued direction to MPCB as well as the local bodies to stop discharge of untreated effluents in the coastal waters of the state, and these directions have not been complied so far. We are therefore, of the view that the MPCB and CPCB have not effectively utilized these provisions of the Water Act, to prevent, control and abate the water pollution of water bodies in Ulhas basin.

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55. The stand of the local body is also quite intriguing. It seems that none of these four (4) urban local bodies do not have any clear road map for the sewage treatment and are citing lack of funds and other reasons for their inactions. We feel that it is a high time that the State Government needs to intervene in this matter and take effective steps for provision of Sewage Treatment Plan (STP) and disposal arrangement.

56. In the present case, it may not be possible to assess exact environmental damage and the cost of restoration thereof in view of the long period of effluent discharges as well untreated waste water discharges involved in the present case and the fact that the statutory Boards empowered to prevent and control pollution have not performed their statutory duties in accordance with the spirit and object of the environmental Acts and jurisprudence. Still, however, industrial units are responsible for causing great environmental pollution of different water bodies including Ulhas river, the estuary and Waldhuni river, even the groundwater in and around the area of these industrial areas. The data produced by MPCB, NIO and Applicants besides the photographs, show the magnitude of such pollution. Considering such magnitude of the pollution caused by the industrial units, its capacity and prosperity, responsibility of the units to



pay compensation cannot be disputed on any plausible cause or ground.

57. Though, it may not be possible to determine with exactitude the exact amount of compensation payable on account of damage to environment because of the long period involved and also for the reason that even scientifically the extent of damage and amounts required for restoration and restitution thereof cannot be determined at this stage now. Cleaning and removal of sludge from Waldhuni River, abatement of other pollutants flowing in the said drains, preventing any discharge into the Ulhas river sweet water zone, and controlling pollution of Ulhas river basin free are the basic urgent steps which require attention of the Regulatory bodies particularly, in the facts and circumstances of this case. It is true that such measures require close co-ordination of various Government agencies and also, require substantial financial support. The Tribunal is, therefore, of the opinion that such a task need to be undertaken by Divisional Commissioner, who heads the entire revenue division, with the aid and assistance of all concerned agencies.

58. Considering the above, the Application is partly allowed with directions which are being issued under the powers conferred under the provisions of Section 19 and



20 of NGT Act, 2010, based on principles of Polluter Pays and Precautionary Principle:

- 1) The directions issued by CPCB vide letter dated 02-09-2008 shall be strictly enforced by MPCB in case of the CETPs at Dombivili and Ambarnath till the time these CETPs are effectively operational complying the standards and such report is submitted to the Tribunal by MPCB along with substantial time series data and observations. The directions issued by CPCB are reproduced for clarity :
 - a) Initiate monitoring program for all CETPs at least every quarter and take follow up action against industries/CETPs not complying with the prescribed standards.
 - b) 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.
 - c) Submit action report every quarter on (1) and (2) above within one month of every quarter to CPCB.
- 2) The CPCB shall ensure the effective implementation of its directions referred to above, and also ensure that the action plan submitted by MPCB is enforced in next six (6) months without fail. CPCB shall verify the compliance of CETPs and also, conduct random inspection of major industries for ensuring compliance on monthly basis till its above directions are complied with. CPCB shall independently submit the compliance report on monthly basis to Registry of Tribunal till the CETP performance is as per consent conditions for a period of 3 months and the action plan is implemented, which will result into reduction of CEPI index.
- 3) The Dombivili CETP (total 16.5 MLD capacity) is directed to pay the restitution and restoration



amount of Rs.30 crores (Rs. Thirty crores) based on the excessive COD load released into the water environment. The Ambernath CETP (total capacity of 7 MLD, and operated at 3 MLD) is directed to pay Rs.15 Crores (Rs. fifteen crores) as restoration and restitution costs. This amount shall be deposited with Divisional Commissioner, Konkan Revenue Division, CBD Belapur, within period of four (4) weeks, failing which the Divisional Commissioner shall submit the report to the Registry for further penal action against the CETP office bearers as permissible under the Law.

- 4) MPCB shall deposit the funds received from forfeiture of BG in the above industrial areas in last five (5) years with Divisional Commissioner, Konkan Region within four (4) weeks for the above restitution and restoration works.
- 5) MIDC shall commission both the effluent disposal systems in 24 (twenty four) months, and submit BG of Rs.10 crore (Rs. Ten crores) to MPCB to ensure compliance.
- 6) The Ulhasnagar Municipal Corporation and Kalyan-Dombivali Corporation shall deposit Rs.15 Crore (Rs. Fifteen Crores) each with Divisional Commissioner for above restoration and restitution measures. The Kulgaon-Badlapur Municipal Council and Ambernath Municipal Council shall pay Rs.5 crore (Rs. Five crore) each as restitution and restoration cost with Divisional Commissioner, Konkan Region. These amounts shall be paid within six (six) weeks.
- 7) The Divisional Commissioner shall deposit these funds in special escrow account and use this amount for implementation of scientific programme for cleaning of the River (Ulhas and Waldhuni) as per the plan submitted earlier and to ensure that no further Riverine pollution would occur hereafter and other kind of restoration and remedial measures like removal



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of sludge accumulated in the river/nullah, beautification of river banks in order to protect the river from any the unauthorized dumping of wastes and effluents in River Waldhuni and Ulhas estuary. Such works shall be completed in next 18 (eighteen) months. CPCB/MPCB shall provide necessary assistance for this purpose.

- 8) A committee under Chairmanship of Divisional Commissioner shall be constituted for this purpose comprising of Collector, Thane; Member Secretary MPCB; Municipal Commissioners of Kalyan-Dombivali Municipal Corporation; Chief Engineer Irrigation department, Chief Officer of Kulgaon Badlapur and Ambarnath Municipal Council; Deputy Commissioner of Police, and Deputy Chief Executive Officer Env't, MIDC. The Committee may adopt suitable experts or other government agencies for effective planning and implementation of such restitution and restoration works.
- 9) The above committees shall submit the action plan to complete above directions in next six (6) weeks including preventive, remedial and restoration measures.
- 10) Chief Secretary of Maharashtra shall ensure that all four (4) urban local bodies i.e. Kalyan-Dombivili Municipal Corporation, Kulgaon-Badlapur Municipal Council, Ulhasnagar Municipal Corporation, Ambarnath Municipal Council provide required STP capacity in phased manner within next twenty four (24) months and they shall submit a comprehensive action plan along with provision of funds for sewage treatment and disposal system to the Divisional Commissioner and Member Secretary MPCB in four (4) weeks. In case of non-submission of such plan in satisfactory manner, Member Secretary MPCB shall initiate urgent steps to provide such STPs as per provisions of Section 30 of Water (Prevention and Control of Pollution) Act, 1974 and initiate credible legal action

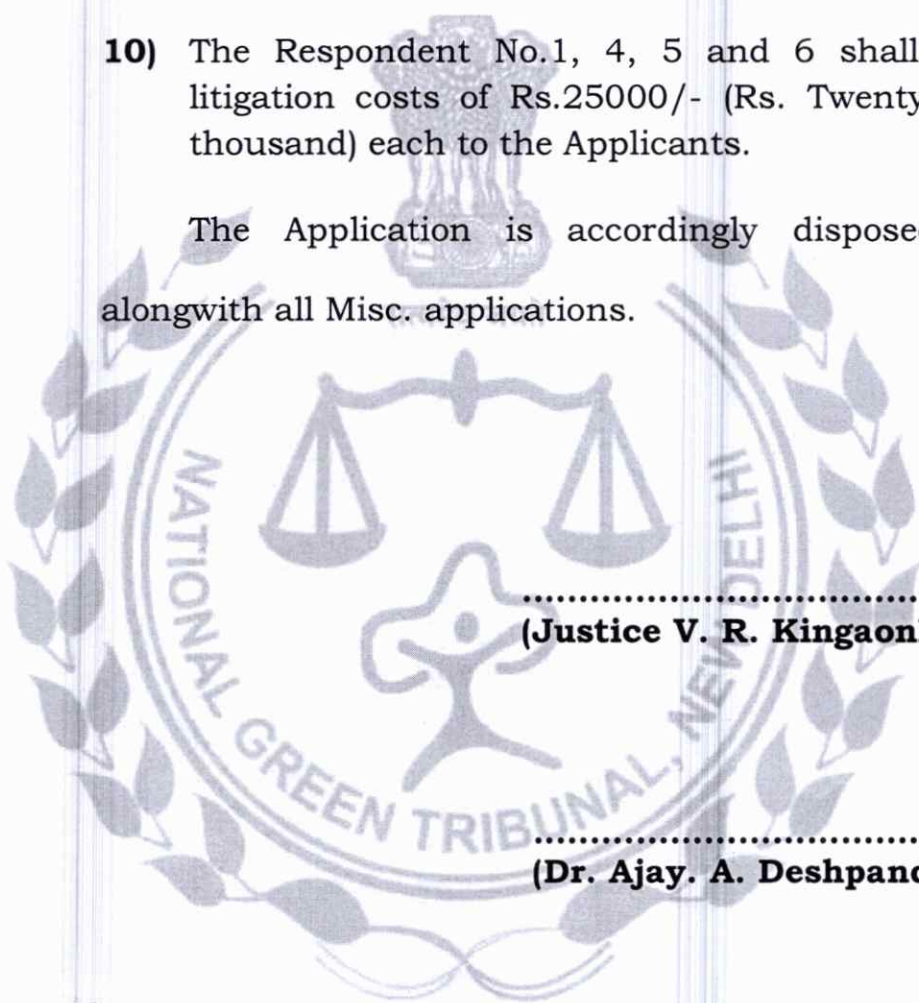


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against the municipal bodies, besides reporting the matter to MCZMA for suitable action at their end. The Divisional Commissioner may take suitable action against these Corporations and Councils under the provisions of Municipal Acts, including taking over the Corporation and/or disqualification of Members, etc. as deemed necessary.

- 10) The Respondent No.1, 4, 5 and 6 shall pay litigation costs of Rs.25000/- (Rs. Twenty five thousand) each to the Applicants.

The Application is accordingly disposed of alongwith all Misc. applications.



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

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

Date : July 2nd, 2015.

ajp

NGT

TRUE COPY
ADVOCATE



Item No. 05

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL
SPECIAL BENCH**

(By Video Conferencing)

Original Application No. 37/2013(WZ)

(for further consideration of Execution Application No. 8/2019(WZ) and other pending issues)

Vanashakti

Applicant

Versus

MPCB

Respondent

Date of hearing: 18.04.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE DR. VIJAY KULKARNI, EXPERT MEMBER**

Applicant: Mr. Zaman Ali, Advocate

Respondent: Mr. Rahul Garg, Advocate for MoEF & CC
Mr. Aniruddha S. Kulkarni, Advocate for CPCB
Mr. Saket Mone for DBESA
Mr. Saurabh Kulkarni, Advocate for DCETP
Ms. Supriya Dangre, Advocate

ORDER

Introductory – scope of EA

1. This EA seeks enforcement of order of the Tribunal dated 02.07.2015 in Original Application No. 37/2013(WZ) for preventing and mitigating pollution of 'Ulhas' and 'Walduni' rivers in Mumbai Metropolitan Region. The Tribunal found that sources of water pollution included discharge of untreated sewage from Urban Municipal bodies of Kalyan-Dombivili, Ulhasnagar, Ambernath, Badlapur and other effluents from industries including chemical and textile industries, Common Effluent Treatment



Plants (CETPs) in the major MIDC areas like Ambernath, Dombivali, Badlapur etc., which were neither adequate nor operative efficiently.

2. The Tribunal considered response of the statutory regulators about status of functioning of six CETPs as well as of STPs concerned. After giving due opportunity to all concerned parties, the Tribunal framed following issues for adjudication:

“1. Whether discharge of untreated sewage and industrial effluent has caused pollution and environmental degradation of river Ulhas?

2. If yes, which are the pollution sources that can be held accountable for contributing to such pollution and environmental degradation in qualitative and quantitative manner?

3. Whether CETPs are being operated and managed efficiently to achieve prescribed standards and whether they can be held accountable for pollution and environmental degradation of river Ulhas, if so in what manner?

4. Whether urban local bodies have taken necessary steps for control of water pollution either by taking adequate and proper preventive drifting of untreated sewage in the Rivers or unscientific disposal of MSW?

5. Whether any immediate remedial and effective measures are required to be taken to restore entire ecology of Ulhas River, including marine life?

6. Whether any costs for restoration and restitution of river can be assessed and attributed to one or many of such identified water pollution sources?

7. Whether the regulatory authorities of MPCB and MIDC have taken adequate efforts to control and mitigate water pollution in this area and whether any specific directions are required to be issued to these authorities for effective implementation of environmental regulations?

8. Whether any specific directions are required to be given in this regard?”

3. Findings recorded on the said issues are:

“Issue Nos. 1 and 2

31. It is an admitted fact that the Waldhuni River quality is highly polluted one and therefore, the District Collector had



prepared an action plan for control of pollution in year 2011 which was submitted to the Urban Development Department, Government of Maharashtra. Another area of agreement is the discharge of untreated sewage from Ulhasnagar in the sweet water zone of River Ulhas through Khemani nullah. During the pendency of this Application, Ulhasnagar Corporation has taken initiative for interception and diversion of such effluent in order to protect the sweet water zone. It is also brought on record that the river has been abused by various agencies like industries, developers etc. who have dumped large quantity of solid waste and sludge in the river bed, causing environmental damages to river banks and also river water quality.

32. MPCB has brought on record that total 351 MLD of sewage is generated from Kalyan-Dombivili Municipal Corporation (KDMC), Kulgaon-Badlapur Municipal Council (KBMC), Ulhasnagar Municipal Corporation (UMC) and Ambarnath Municipal Council (AMC). Similarly, about 34.05 MLD of industrial effluent is released from various industrial areas into the Waldhuni River/Ulhas creek. Undisputedly, about 300 MLD sewage is discharged without any treatment in the water environment, besides the CETP discharges which are also exceeding the standard. It was, therefore, necessary to examine the allegations of the Applicants whether the Water Quality of River Ulhas has been degraded by such pollution thereby affecting the ecology and marine line of the river. Though MPCB has submitted some Analysis Report of Ulhas creek water quality, but it failed to describe whether such allegations are correct or wrong by scientific and statistical interpretation of their own data. The Tribunal will have to, therefore, to rely on the reports of National Institute of Oceanography (NIO) which is one of the pioneer research institutes and engaged by MIDC to carry out marine EIA studies. The interim EIA report of NIO concludes that the prevailing water quality of the estuary indicate that the BOD released in the estuary exceeds its natural assimilation capacity. Inefficient oxidation of organic matter leads to high tide dependent BOD in the upper estuarine zone though its levels are near about to the expected baseline at the estuarine mouth/ingress 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. The high effluent loading-mainly sewage and effluent has resulted in built up of nutrients like phosphates, nitrate, nitrite and ammonia that in combination with DO (dissolved oxygen) have modified the ecology of Ulhas estuary with eutrophic conditions in the middle and upper zones. The accumulation of toxic heavy metal such as Al, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hg, Pb, Cd as well as organic carbon, PHc, though has occurred particularly in upper segment is not alarming. The report finally concludes that based on the monitoring of May 2014 and earlier results, it is concluded that the upper and middle zones of the Ulhas estuary have been degraded due to release of domestic and industrial



effluent from different sources and conditions are not conducive for diverse aquatic fauna.

33. In other words, the above scientific report of NIO has put an alarming picture of the present state of environment of Ulhas estuary besides emphasising the need of urgent interventions. In absence of any contradictory material available on record, the Tribunal is inclined to accept the findings of the NIO and thereby in our considered opinion, the discharge of untreated sewage and industrial effluent have caused pollution and environmental degradation of River Ulhas. Issue No.1 is, therefore, answered in the AFFIRMATIVE.

34. In view of this finding, the next logical step is to identify the causes for such pollution and environmental degradation. MPCB has already submitted on record an abstract of quantities of domestic sewage released by different municipal bodies as well as CETPs which have been already referred above. At present, considering the environmental sensitivity of the Ulhas River and estuary, we are not inclined to a proposition of deciding the exact contribution of individual sources of pollution, but considering the long period, over which all these polluting sources are merrily discharging the untreated effluents into the river Basin, we are inclined to deal all the pollution sources, with equal importance and equal seriousness. Obviously, it is also an admitted fact that the industrial pollution is generally given a precedence over the domestic sewage pollution in view of its obnoxious nature, presence of toxic and non-biodegradable matter and the fact that there are reports of many incidences of environmentally unfriendly practices of disposing untreated industrial effluents and sludges for profit making, the industrial sector needs to be enforced severely on priority for pollution control and environmental protection. The Issue No.2 is accordingly answered.

Issue No. 3

38. Considering the simple arithmetic based on volumetric flow and also, the average CETP outlet characteristic for the CETP at Dombivili, the following facts would emerge:

1. The CETP hydraulic capacity – 16500 M³/day.
2. Average COD as reported by MPCB: in mg/ltr. Year 2013: 475 Year 2014: 457 Jan-May 2015: 672
3. Standard for COD – 250 mg. ltr.
4. Average Excessive COD load released in the water environment on yearly basis @ 1550T.

The cost of scientific disposal of this COD load, through hazardous waste incineration, would come around Rs.7.75 crores/annum by even considering modest cost of Rs.25,000/- tone and equal amount of penalty for such discharges. Similar calculation can be done for other CETP's like Ambarnath CETP, which is exceeding the standards regularly.



39. It is obvious from the above that the CETPs at Dombivili as well as the other places, like Ambarnath, released the effluents which are not meeting the prescribed norms in the environment, in spite of directions of the Hon'ble High Court, Bombay, and also the CPCB. The MPCB seems to have taken some cosmetic action against some of the industries by issuing closure notices or other directions. However, the final effluent which is being released into the water environment is still polluting the Rivers. In spite of such knowledge, we fail to understand and appreciate the affidavits submitted by MPCB which would indicate the compliances. The above illustration, just for one CETP shows severity of the problem. It is also pertinent to note that this excessive COD which is observed after the treatment at CETP, is most likely to comprise of recalcitrant COD or represented by low biodegradable complex organic matter, which can comprise both organic or inorganic compounds, causing water pollution. It is also relevant to note here that certain computational errors are noticed in MPCB website data which shows incorrect average values. We, therefore, direct that the MS, MPCB shall ensure that the factual data is hosted on its website, as the averages indicated in the data as submitted do not arithmetically match the data presented.

40. Another interesting aspect of the litigation is that the Dombivili area was declared as critically polluted and certain action plan was submitted by MPCB to the CPCB which facilitated the lifting of moratorium on the industrial development in MIDC, Dombivili. We also noticed that the CPCB had issued specific direction in 2008 to MPCB in view of the non-compliance by the CETP. In spite of such action plan and directions, the CPCB which had issued such directions did not ensure that the directions were complied with. It seems that such action plan and directions are only the paper work, without any implementation and enforcement. Therefore, the issue No.3 is answered in the AFFIRMATIVE as the CPCB failed to achieve the prescribed standards and such untreated effluent is released into the water bodies/environment causing pollution.

Issue No. 4

41. Ulhas River has experienced large scale urbanisation and there are two (2) Municipal Corporations i.e. Kalyan-Dombivili Municipal Council (KDMC) and Ulhasnagar Municipal Corporation (UMC) discharging 200 MLD and 90 MLD sewage on daily basis in the area. Further, Kalyan-Badlapur Municipal Council and Ambarnath Municipal Council generate 18 and 43 MLD sewage respectively. As per the information submitted by MPCB, out of this 357 MLD sewage, nearly 304 MLD sewage is released in the water environment without treatment. Needless to say, these Municipal bodies are required to treat sewage to the prescribed standards, as specified by MPCB. MPCB is on record that besides this sewage, leachate from solid waste dumping grounds is also found to be polluting the water bodies. MPCB is on record



stating that it has issued several notices/directions to these urban bodies; however, there is no improvement in the sewage treatment carried out by these urban bodies. The Kalyan Dombivili Municipal Council is on record with time bound programme for sewage treatment which indicates that by December 2015 about 80 MLD effluents out of 200 MLD effluents would be treated through its STP. We are not satisfied any of the time frame and program given by either of these four (4) Corporations for the simple reason that neither there is any fix time frame for provision of STP nor there is any commitment to reserve the required funds for such provision of STP. It is true that urban local bodies would find it difficult to spare or generate the funds for the provision of such STPs and also, operations of the same. But the sewage treatment and solid waste management are statutory functions of these local bodies and they cannot abduct such responsibility under the disguise of financial constraints. It is high time that the Urban Development Department of the State Government should intervene in such matters to provide technical and financial support to these local bodies to develop low cost, cost effective and sustainable sewage management program. We would deal with these aspects in the final directions. Accordingly, the issue No.4 is answered in the NEGATIVE as none of these urban local bodies have submitted a complete time bound program for prevention of water pollution.

Issue No. 5

42. Admittedly, the untreated/treated industrial effluent from CETP or industrial areas along with untreated sewage from the urban local bodies is released in the Ulhas river basin in large quantity. In order to assess the status of ecology and pollution of Ulhas River, we would like to refer to the comprehensive marine EIA study conducted by National Institute of Oceanography (NIO) and the findings presented in their report of September 2014. The NIO has conducted detail field investigations in the Ulhas estuary and the summary of the study would indicate the following important points :

1. The BOD release in the estuary exceeds its natural assimilation capacity. The high organic loading leads to hypoxic conditions, particularly around low tide in the middle upper estuarine segments.
2. The high effluent loading mainly sewage has resulted in buildup of nutrients like, phosphate, nitrate, nitrite and ammonia that in combination with frequent low DO have modified the ecology of Ulhas estuary with eutropic conditions in the middle and upper zones.
3. The pathogens population is high in the water and sediments.



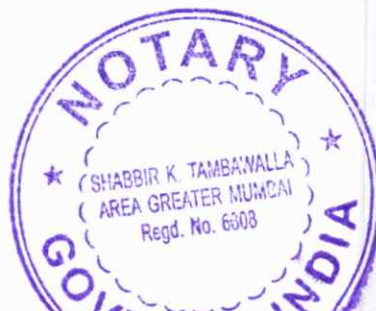
4. There is a decrease in diversity of phytoplankton, zooplankton and microbentic biomass, suggesting that environment is not conducive for sensitive species.

The report finally concludes that the upper and middle zones on Ulhas estuary have been degraded due to release of domestic and industrial effluent from different sources and conditions are not conducive for diverse aquatic fauna.

43. The another important water body of River Waldhuni is found to be severely polluted, may be irreversible, due to heavy discharge of effluents and sewage over the years. The MPCB analysis reports indicate the very high BOD/COD values (max. 1800 and 3200 respectively) as observed in May 2011. This River has a typical topography which originates in Matheran hill and as a major dam constructed on its upstream of Badlapur. The River has been encroached upon and is being abused by indiscriminate discharge of toxic, coloured effluent including sewage. It was also noticed that lot of sludge is accumulated in the river bed. This fact/situation is fairly admitted by all the counsel. This River could be one of the most polluted River in the country which is quite evident from Analysis Report available on record. It is to be noted that the natural water flow is limited to the monsoon period and thereafter, the river flows only with the indiscriminate discharge of effluents. The Waldhuni River cannot speak about its own suffering and the regulatory agencies like CPCB and MPCB besides all the local bodies located along River are not only silent spectators but may be contributors to the deterioration of the River Waldhuni.

44. We also noted that besides issuance of notices, MPCB has not taken any stringent action including prosecution or enforcement of provisions of sections 30, 31 and 32 of the Water (Prevention and Control of Pollution) Act, which allows MPCB to take emergency measures and also seek injunctions from the Courts. Neither, we could see any prosecutions against habitual defaulting industries, and regime of directions and BG is only followed. We are not satisfied with such actions taken by MPCB in this regard as they have not yielded the desired results and improvement in water quality.

45. Though significant quantity of the sewage and industrial effluent is either discharged in River Waldhuni or saline area of River Ulhas, a small part of the sewage from Ulhasnagar i.e. about 10 MLD is discharged in the sweet water zone of River Ulhas. During the proceedings of the matter, the Tribunal had directed the Ulhasnagar Municipal Corporation to take urgent measures and after some coercive actions, the Commissioner, Ulhasnagar Municipal Corporation has personally assured the Tribunal on affidavit that the work of preparation of the scheme is finalized and sufficient funds have been reserved for execution of interception and diversion of sewage from Khenani Nullah to the treatment plant. We are hopeful that such assurance will be honoured in the interest of environment.



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49. The facts of the present case would show that legal position considered and made applicable in case of "Tirupur Dying Factory Owners Association" (supra) is squarely applicable herein. There is no escape from conclusion that the Industries are liable to pay damages caused due to the water pollution, restore the environment and ensure that there shall be no further pollution in the river "Ulhas" due to discharging of industrial effluent of the units run by the Industries. Needless to say that all the aspects discussed above indicate that there is an immediate need for taking control and remedial measures to restore the ecology of Ulhas River basin and accordingly, the issue No.5 is answered in the AFFIRMATIVE.

Issue Nos. 6, 7 & 8

53. In the instant case, though the Dombivili area was declared as critically polluted area way back in 2009-10 and remains so even today, and both, MPCB and CPCB are aware that the CETPs are not functioning properly, we do not find any effective intervention by MPCB or even by CPCB to regulate such polluting discharges. This is more serious, in case of CPCB as, it had identified the area as 'critically' polluted and also issued certain directions to MPCB. However, we could not locate any efforts by CPCB to ensure the implementation of its own directions and also, the action plan of MPCB. The actions taken by MPCB are related to closure and opening directions to some industries which have not resulted into any substantial improvements in the CETP performance. Further, MPCB has also failed to ensure that the MIDC provides the necessary effluent disposal system in a time bound manner. We could not locate any action plan for either Ulhas or Waldhuni river pollution control, prepared by MPCB, as mandated under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974. We are, therefore, at pains to note the action or rather inaction of CPCB as well as MPCB to prevent and control the water pollution in the industrial area, in spite of being notified as critically polluted area.

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56. In the present case, it may not be possible to assess exact environmental damage and the cost of restoration thereof in view of the long period of effluent discharges as well untreated waste water discharges involved in the present case and the fact that the statutory Boards empowered to prevent and control pollution have not performed their statutory duties in accordance with the spirit and object of the environmental Acts and jurisprudence. Still, however, industrial units are responsible for causing great environmental pollution of different water bodies including Ulhas river, the estuary and Waldhuni river, even the groundwater in and around the area of these industrial



areas. The data produced by MPCB, NIO and Applicants besides the photographs, show the magnitude of such pollution. Considering such magnitude of the pollution caused by the industrial units, its capacity and prosperity, responsibility of the units to pay compensation cannot be disputed on any plausible cause or ground.

57. Though, it may not be possible to determine with exactitude the exact amount of compensation payable on account of damage to environment because of the long period involved and also for the reason that even scientifically the extent of damage and amounts required for restoration and restitution thereof cannot be determined at this stage now. Cleaning and removal of sludge from Waldhuni River, abatement of other pollutants flowing in the said drains, preventing any discharge into the Ulhas river sweet water zone, and controlling pollution of Ulhas river basin free are the basic urgent steps which require attention of the Regulatory bodies particularly, in the facts and circumstances of this case. It is true that such measures require close co-ordination of various Government agencies and also, require substantial financial support. The Tribunal is, therefore, of the opinion that such a task need to be undertaken by Divisional Commissioner, who heads the entire revenue division, with the aid and assistance of all concerned agencies.

58. Considering the above, the Application is partly allowed with directions which are being issued under the powers conferred under the provisions of Section 19 and 20 of NGT Act, 2010, based on principles of Polluter Pays and Precautionary Principle:

1) The directions issued by CPCB vide letter dated 02-09-2008 shall be strictly enforced by MPCB in case of the CETPs at Dombivili and Ambarnath till the time these CETPs are effectively operational complying the standards and such report is submitted to the Tribunal by MPCB along with substantial time series data and observations. The directions issued by CPCB are reproduced for clarity :

a) Initiate monitoring program for all CETPs at least every quarter and take follow up action against industries/CETPs not complying with the prescribed standards.

b) 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.

c) Submit action report every quarter on (1) and (2) above within one month of every quarter to CPCB.



2) The CPCB shall ensure the effective implementation of its directions referred to above, and also ensure that the action plan submitted by MPCB is enforced in next six (6) months without fail. CPCB shall verify the compliance of CETPs and also, conduct random inspection of major industries for ensuring compliance on monthly basis till its above directions are complied with. CPCB shall independently submit the compliance report on monthly basis to Registry of Tribunal till the CETP performance is as per consent conditions for a period of 3 months and the action plan is implemented, which will result into reduction of CEPI index.

3) The Dombivili CETP (total 16.5 MLD capacity) is directed to pay the restitution and restoration amount of Rs.30 crores (Rs. Thirty crores) based on the excessive COD load released into the water environment. The Ambarnath CETP (total capacity of 7 MLD, and operated at 3 MLD) is directed to pay Rs.15 Crores (Rs. fifteen crores) as restoration and restitution costs. This amount shall be deposited with Divisional Commissioner, Konkan Revenue Division, CBD Belapur, within period of four (4) weeks, failing which the Divisional Commissioner shall submit the report to the Registry for further penal action against the CETP office bearers as permissible under the Law.

4) MPCB shall deposit the funds received from forfeiture of BG in the above industrial areas in last five (5) years with Divisional Commissioner, Konkan Region within four (4) weeks for the above restitution and restoration works.

5) MIDC shall commission both the effluent disposal systems in 24 (twenty four) months, and submit BG of Rs.10 crore (Rs. Ten crores) to MPCB to ensure compliance.

6) The Ulhasnagar Municipal Corporation and Kalyan-Dombivili Corporation shall deposit Rs.15 Crore (Rs. Fifteen Crores) each with Divisional Commissioner for above restoration and restitution measures. The KulgaonBadlapur Municipal Council and Ambarnath Municipal Council shall pay Rs.5 crore (Rs. Five crore) each as restitution and restoration cost with Divisional Commissioner, Konkan Region. These amounts shall be paid within six (six) weeks.

7) The Divisional Commissioner shall deposit these funds in special escrow account and use this amount for implementation of scientific programme for cleaning of the River (Ulhas and Waldhuni) as per the plan submitted earlier and to ensure that no further Riverine pollution would occur hereafter and other kind of restoration and remedial measures like removal of sludge accumulated in the river/nullah, beautification

of river banks in order to protect the river from any the unauthorized dumping of wastes and effluents in River Waldhuni and Ulhas estuary. Such works shall be completed in next 18 (eighteen) months. CPCB/MPCB shall provide necessary assistance for this purpose.

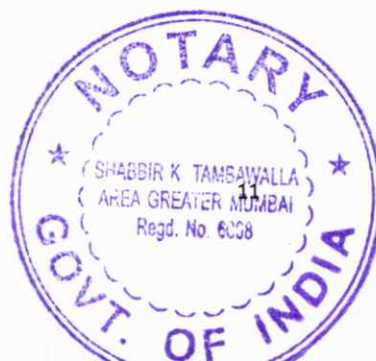
8) A committee under Chairmanship of Divisional Commissioner shall be constituted for this purpose comprising of Collector, Thane; Member Secretary MPCB; Municipal Commissioners of Kalyan-Dombivili Municipal Corporation; Chief Engineer Irrigation department, Chief Officer of Kulgaon Badlapur and Ambarnath Municipal Council; Deputy Commissioner of Police, and Deputy Chief Executive Officer Envt, MIDC. The Committee may adopt suitable experts or other government agencies for effective planning and implementation of such restitution and restoration works.

9) The above committees shall submit the action plan to complete above directions in next six (6) weeks including preventive, remedial and restoration measures.

10) Chief Secretary of Maharashtra shall ensure that all four (4) urban local bodies i.e. KalyanDombivili Municipal Corporation, KulgaonBadlapur Municipal Council, Ulhasnagar Municipal Corporation, Ambarnath Municipal Council provide required STP capacity in phased manner within next twenty four (24) months and they shall submit a comprehensive action plan along with provision of funds for sewage treatment and disposal system to the Divisional Commissioner and Member Secretary MPCB in four (4) weeks. In case of non-submission of such plan in satisfactory manner, Member Secretary MPCB shall initiate urgent steps to provide such STPs as per provisions of Section 30 of Water (Prevention and Control of Pollution) Act, 1974 and initiate credible legal action against the municipal bodies, besides reporting the matter to MCZMA for suitable action at their end. The Divisional Commissioner may take suitable action against these Corporations and Councils under the provisions of Municipal Acts, including taking over the Corporation and/or disqualification of Members, etc. as deemed necessary.

10) The Respondent No.1, 4, 5 and 6 shall pay litigation costs of Rs.25000/- (Rs. Twenty five thousand) each to the Applicants.

The Application is accordingly disposed of alongwith all Misc. applications."



Orders of Hon'ble Supreme Court in pending appeal

4. Against the above judgment, Civil Appeal No. 10582/2017, *Ulhasnagar Municipal Corporation vs. Vanashakti Public Trust & Ors.* has been filed before the Hon'ble Supreme Court by the Ulhas Nagar Municipal Corporation which is still pending. It first came up for hearing on 14.08.2017 when following order was passed:

"Delay condoned.

Issue notice to the respondents returnable on 18.09.2017.

We would like the Principal Secretary of the Environment Department of the Government of Maharashtra as well as Member Secretary of the Maharashtra Pollution Control Board to be present in Court on the next date of hearing.

We require their personal appearance because on a reading of the impugned judgment and order passed by the National Green Tribunal, it appears to us that there is absolutely no coordination or coordinated efforts between the various authorities to protect Ulhas river as well as Walduni river. From a reading of the judgment and order passed by the Tribunal, it is clear that these rivers are more or less dead due to pollution.

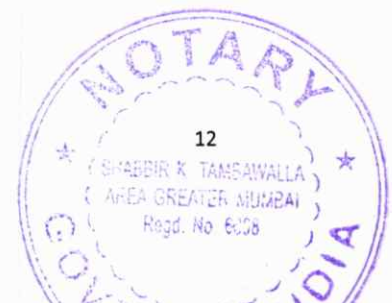
The aforesaid two officers shall before appearing in this Court have necessary discussions with the Director, IIT Powai, the concerned authorities from the National Environmental Engineering Research Institute (NEERI) at Nagpur and the National Institute of Oceanography.

At this stage, the amounts ordered by the National Green Tribunal may not be deposited."

5. Our attention has been drawn to further orders of the Hon'ble Supreme Court dated 31.07.2019, 07.09.2020 and 05.11.2020. Order dated 07.09.2020 is reproduced below:

"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 Ambernath, 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 concerned municipal corporations including the Municipal Corporations, or Councils as the case may be, of Ulhasnagar, Kalyan Dombivali, Kulgaon - Badlapur and Ambarnath 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."*
6. Order dated 05.11.2020 is also reproduced below:

"1. A report has been submitted to this Court by the Central Pollution Control Board (CPCB) and National Environmental Engineering Research Institute (NEERI) in pursuance of the order dated 7 September 2020. The report contains an exhaustive analysis of the situation on the ground and the causes of water pollution. The report suggests concrete steps required for remedial measures. Though several projects have been set up and steps have been taken by diverse authorities and local bodies, incidents such as the one which led to this Court constituting the above Committee reflect a regulatory failure. The report is indicative of the fact that the collective deficit of regulatory authorities has allowed a sorry state of affairs to come to pass, where the right to a clean environment which is an integral feature of the right to life under Article 21 of the Constitution, is imperilled. The Ulhas and Waldhuni rivers continue to be polluted. Rather than this court dealing with a multitude of local bodies and statutory authorities, including MIDC, individually, the state government must be required to do so. Previous orders of this court have called upon the Chief Secretary and the Secretary in the Department of Environment to monitor compliance with environmental norms, fulfilment of targets and completion of projects. Insofar as this Court is



concerned, the collective responsibility towards the environment is that of the State of Maharashtra which must ensure due monitoring and compliance of all its authorities including local bodies and statutory authorities.

2. We accordingly direct that the Chief Secretary and the Secretary in the Department of Environment shall convene a meeting of all the local bodies and statutory authorities within the jurisdiction of the area comprising the CPCB-NEERI report. The representatives of CPCB - NEERI shall also be invited to participate in the meeting and to make a presentation based on the report. A concrete plan of action shall be presented before this Court for compliance with the recommendations which have been made by CPCB-NEERI. A joint affidavit be filed by the Chief Secretary and the Secretary in the Department of Environment. The Court will hear submissions on the next date of listing after this exercise has been completed at the threshold.

3. List the matter on 25 November at 2 pm."

Today's consideration and orders

7. From the above it remains undisputed that pollution had been and is being caused by discharge of sewage and industrial effluents which needs to be remedied. Since the matter is being dealt with by the Hon'ble Supreme Court, on suggestion of the parties, we agree that this Tribunal may not proceed further except for procedural issues with liberty to aggrieved parties to move the Tribunal in the light of further orders of Hon'ble Supreme Court.

Pending issue of hearing affected parties and finality of order dated 2.7.2015

8. We find from the record that Execution Application No. 8/2019(WZ) for execution of order of this Tribunal dated 02.07.2015 remains pending. Review Application No. 4/2017(WZ) sought review of direction in Para No. 58(3) of order dated 02.07.2015 fixing restoration cost payable by Dombivili CETP at Rs. 30 crores, apart from liability for compensation by Ambarnath CETP. The review was allowed vide order dated 19.11.2019 on the ground that the review applicant has to be heard before the said



direction becomes final. OA No. 148/2017(WZ) was filed by Dombivili Common Better Effluent Treatment Plant (DCBETP) for similar relief as in review which was taken up on 15.03.2020 and in view of order dated 19.11.2019 in the review application, the said order was made applicable to DCBETP also. Dombivili Better Environment System Association (DBESA) and DCBETP were impleaded as parties to enable them to place their viewpoint with regard to the compensation issue. OA No. 148/2017(WZ) was accordingly disposed of vide order dated 24.06.2020.

9. In view of categorical material of causing pollution by discharge of sewage and other effluents, compensation liability cannot be avoided by DBESA and DCBETP. In spite of the said authorities being impleaded and given opportunity, no case is made out for not requiring compensation to be deposited in terms of order dated 2.7.2015 passed by the Tribunal, subject to further orders of Hon'ble Supreme Court. Thus, even after opportunity being given in terms of orders of this Tribunal dated 19.11.2019, 05.03.2020 and 24.06.2020, recall of order of this Tribunal dated 02.07.2015 fixing monetary liability on 'Polluter Pays' principle is not justified. The said direction will thus stand reiterated, subject to further orders of the Hon'ble Supreme Court.

Further order in EA

10. A copy of affidavit filed before the Hon'ble Supreme Court on 23.11.2020 in Civil Appeal No. 10582 of 2017, in pursuance of order of the Hon'ble Supreme Court dated 05.11.2020 has been placed on record in response to notice issued in EA. The said affidavit acknowledges continuing violations. It is mentioned that State PCB has issued notice to 117 industries for closure. Monthly review meeting is being held by the Secretary, Environment Department, Maharashtra and being reviewed by

the Chief Secretary on quarterly basis. The State of Maharashtra will make efforts to prevent and abate the pollution of rivers in coordinated manner in the light of report of the CPCB - NEERI which has been quoted in the affidavit showing continuing violations. As already observed, to avoid conflicting orders, we do not make any comment as the matter may first be dealt with by the Hon'ble Supreme Court in pending appeal, as suggested by learned Counsel for the parties. Any aggrieved party will be free to move this Tribunal again, after disposal of the matter pending before the Hon'ble Supreme Court, if necessary.

The EA and pending proceedings before the Tribunal are disposed of with liberty as aforesaid.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Dinesh Kumar Singh, JM

Prof. A. Senthil Vel, EM

Dr. Vijay Kulkarni, EM

April 18, 2022
Original Application No. 37/2013(WZ)
DV

TRUE COPY
ADVOCATE



IN THE SUPREME COURT OF INDIA

IA No 53816 of 2020

in

Civil Appeal No. 10582 of 2017

In the matter of:

Ulhasnagar Municipal Corporation

Appellant(s)

Versus

VanaShakti Public Trust and Ors.

Respondent(s)

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Date: 05.10.2020

Place: Delhi

Through Counsel
Saurabh Mishra
Advocate for R-6, CPCB



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IN THE SUPREME COURT OF INDIA

IA No 53816 of 2020

in

Civil Appeal No. 10582 of 2017

In the matter of:

Ulhasnagar Municipal Corporation

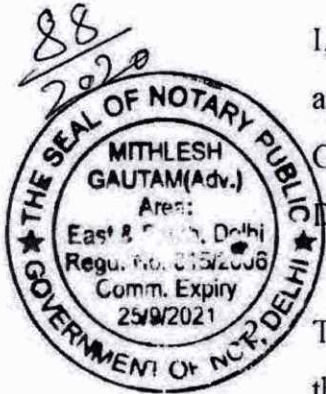
Appellant(s)

Versus

VanaShakti Public Trust and Ors.

Respondent(s)

Compliance Affidavit in compliance of this Hon'ble Court order dated 07.09.2020 on behalf of Central Pollution Control Board



I, Sudhakar Arekatla, S/o Shri Venkateswarlu Arekatla (Late), aged 57 years working as Scientist 'E' in Central Pollution Control Board (CPCB), Parivesh Bhawan, East Arjun Nagar, Delhi-I10 032 do hereby solemnly affirm and declare as under:

That, I am fully conversant with the facts and circumstances of the present case and am duly authorized to affirm and swear this affidavit on behalf of the Central Pollution Control Board, Delhi (hereinafter referred to as CPCB).



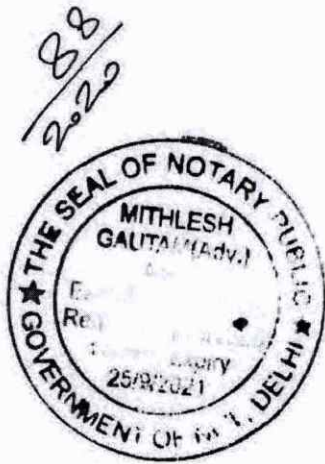
3. That this Hon'ble Court vide order dated 07.09.2020 in I.A No. 53816 of 2020 in Civil Appeal No. 10582 of 2017 in the matter of Ulhasnagar Municipal Corporation Vs. Vanshakti Public Trust directed that: –

“...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 Dombivali, Kulgaon – Badlapur and Ambarnath 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."

4. That in pursuance to this Hon'ble Court directions, teams of CPCB and NEERI held a Video Conference on 13.09.2020 followed by inspection of Ulhas and Waldhuni Rivers, inspection of 05 Common Effluent Treatment Plants (hereinafter referred to as CETPs) and 47 industrial units during September 16-18, 2020 in catchment areas of the said Rivers. A total of 27 water samples from various locations of the Rivers/drains; 10 effluent samples of CETP inlets/outlets; and 11 samples of industrial effluent from the inspected units were collected for

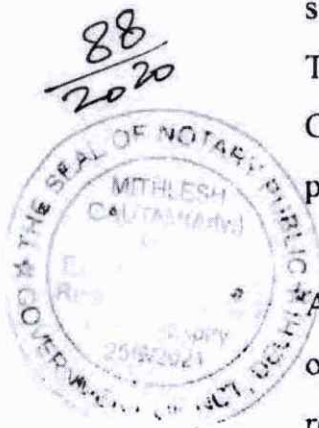


analysis in the Laboratory of NEERI. Five samples of treated sewage from Sewage Treatment Plants (hereinafter referred to as STPs) were also collected and analysed in the Laboratory of NEERI.

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

A meeting through Video Conference was also held with officials from Maharashtra Pollution Control Board (hereinafter referred to as MPCB) and Maharashtra Industrial Development Corporation (hereinafter referred to as MIDC) on 24.09.2020.

A copy of report of CPCB and NEERI in compliance of this Hon'ble Court order dated 07.09.2020 in the matter of IA No. 53816 of 2020 in Civil Appeal No. 10582 of 2017; titled as Ulhasnagar Municipal Corporation Vs Vanashakti Public Trust & Ors. is annexed as **Annexure-A**.

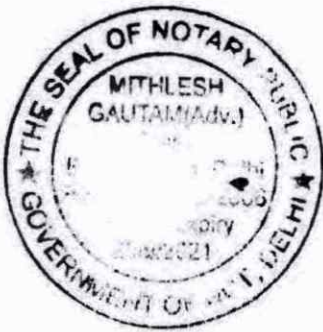


- That conclusions of the aforesaid report of CPCB and NEERI are as below:

A. Inspection of Ulhas and Waldhuni Rivers

Analysis results of water samples of drains/streams and observations made at various locations of Ulhas and Waldhuni Rivers 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 contributing). Analysis results indicate that the stretch of Waldhuni River and the tributaries to Waldhuni are 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 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 monitored nallahs/drains.



(iii) The analysis results of Khemani Nallah reveal that the nallah had high organic load and there are possibilities of effluent from industrial and commercial activities in the catchment of Khemani nallah reaching 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, Ulhasnagar Municipal Corporation has not made any provision for collection of effluent to prevent polluted water reaching Ulhas river.



(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, Ambernath, was observed flowing into nallah meeting Waldhuni River.

(v) The limited sampling carried out and photographs (given in Appendix of Annexure-A) indicate that impact 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.



B. 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 discharge the 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 is due to inlet effluent not meeting to the design/prescribed quality. In Badlapur CETP, out of six aspirators, three aspirators in the aeration tank were not in operation and were under maintenance during the visit.

(c) There is no mechanism placed to check/ ensure the quality and quantity of the effluent being discharged by the member industries to meet the CETP inlet norms.

(d) There is a 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 by MPCB.

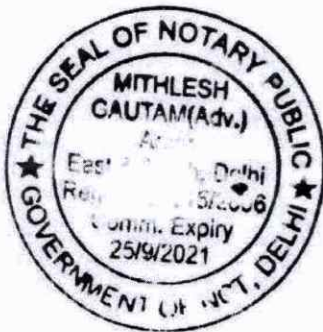


(e) Among the 05 STPs sampled and analysed, the analysis results reveal that 04 of the 05 STPs were non-compliant with respect to BOD parameter (among the analysed parameters) prescribed by MPCB. The compliant STP was Ulhasnagar STP - Vadol unit and non-compliant STPs were Badalapur STP; KDMC- Chinchpada STP; Chikhloli-Moravali STP and Ambernath STP.

(ii) Industrial units identified as causing pollution:

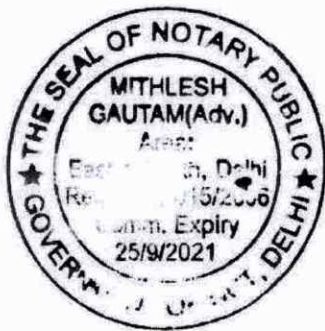
(a) A total of 117 units were identified causing pollution as these were not treating the effluent in ETPs or ETPs were not operated properly or the generated ETP sludge and/or other categories of hazardous wastes are improperly managed or indiscriminately disposed causing adverse impact on soil or water bodies including river. It was also confirmed by MPCB that these 117 units have not sent ETP sludge or other hazardous wastes for disposal to the authorised common TSDF for more than 18 months, violating the maximum permitted storage period of 06 months at hazardous waste generating units. The list of 117 units is annexed as **Annexure-III** of **Annexure A**.

Further, verification of other units is being carried out by MPCB to check the hazardous waste generation and disposed/ transported to the TSDF during 2019-



20 and 2020-21. Based on the records at TSDF, the list of violating units shall be identified, accordingly.

- (b) The team of CPCB and NEERI visited 47 units; found seven units closed and inspected remaining operational industrial units during September 17-18, 2020 and identified 21 units causing pollution, either directly to the attributing drains/rivers or through CETP. Some of the units were found illegally operating and not having adequate equipment required to achieve Zero Liquid Discharge (hereinafter referred to as ZLD) conditions prescribed under the "consent to operate". Other units were not meeting the stipulated discharge standards prescribed under the "consent to operate" or not operating the ETPs properly. In addition, one unit was found illegally disposing hazardous waste in open land near boundary wall about 10 meters from Waldhuni River. List of identified 22 units causing pollution is annexed as **Annexure VI of Annexure A**.

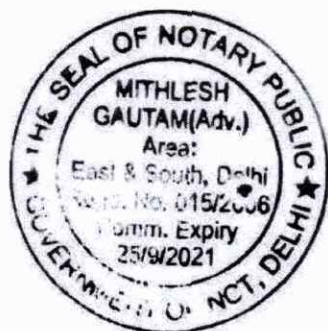


Among the aforesaid 22 polluting units, 12 units are ZLD units/ not permitted to discharge any industrial effluent. There are 125 ZLD units, of which 105 are located in Additional Ambarnath MIDC and all waste water generating units are stipulated to meet ZLD norms/not permitted to discharge any industrial 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 records for quantity of effluent treated in ETP/sent to CETP or recycled/ reused. MIDC has noticed incidences of discharge of unauthorized industrial effluent in storm water drains in industrial area. There is need to closely monitor operations of such ZLD units.



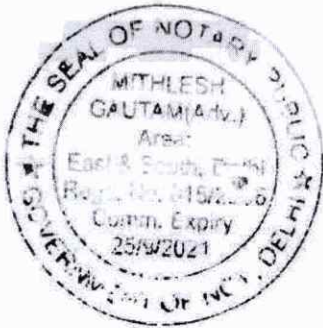
The claim of various by-products produced (such as diluted hydrochloric and sulphuric acids; manganese sulphate solution; sodium sulphate solution, etc.) needs to be revisited by MPCB especially by dye & dye-intermediate, API and other organic/inorganic chemical manufacturing units. The possibility of discharging of some of the by-products into drains/river cannot be ruled out, as the by-products fail to comply the desired quality specifications.

The identified 22 units and the other 117 units may not be the comprehensive list of units causing pollution in the study area. 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 disposal of untreated industrial effluent or hazardous wastes in to drains/open land/river during the night cannot be ruled out and, hence, needs vigilance mechanism.
- (ii) Due to discharge of treated coloured 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.
- (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 in these areas.



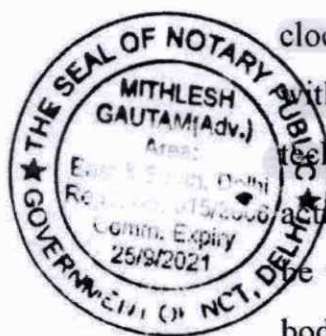
Recommendations in regard to the steps required to be taken by the concerned Municipal Corporations, Regulatory Bodies and Units to Remedy the Situation

6. That multidimensional approach is required with participation of various agencies to control sewage and industrial effluent pollution in Waldhuni and Ulhas Rivers. The recommendations



have been drawn up based on short-term study (carried out in monsoon season and COVID times- which resulted in many industries' closure and also 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 number of wastewater generating units in catchment zone of Waldhuni and Ulhas Rivers, 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 have been formulated in regard to the steps required to be taken by the concerned municipal corporations, regulatory bodies and units to remedy the situation:

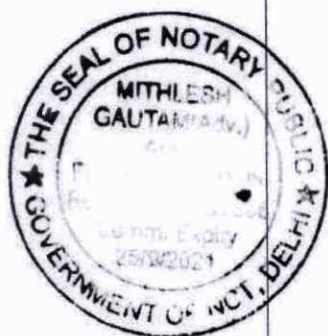


Sl. No.	Actions Required	Responsible agency(ies)	Time target
Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers			
1.	Setting up vigilance teams for monitoring of storm water drains and river stretches of MIDCs and other potential Municipal corporation/ council limits during day and night times to identify illegal	MIDC, concerned Municipal corporation (for outside MIDC jurisdiction) and MPCB	Immediate and continuous

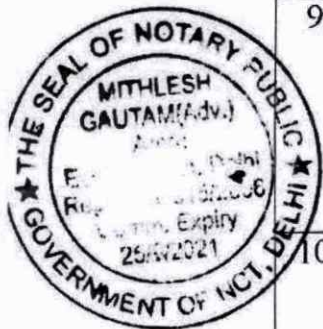
Sl. No.	Actions Required	Responsible agency(ies)	Time target
	discharge in the storm water drain or such river stretch and also identify the polluter(s) or identification of leakages in conveying pipelines.	(Nodal agency – MIDC for areas within its jurisdiction and concerned Municipal Corporation for outside MIDC jurisdiction	
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/rivers 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



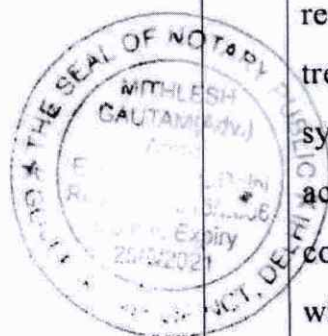
Sl. No.	Actions Required	Responsible agency(ies)	Time target
4.	Setting up vigilance teams for verification of quality & quantity of effluent of member industries being sent to CETP	CETPs, MIDC and MPCB (Nodal agency – MPCB)	Immediate and continuous
5.	Feasibility study & setting up of pipeline network (preferably above the ground) for conveying industrial effluent to CETPs of Chikhholi-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	MIDC	03 months



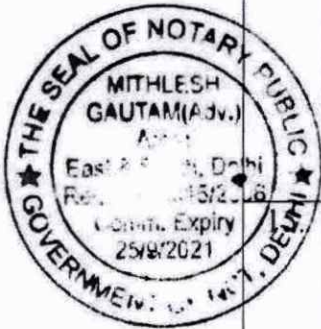
Sl. No.	Actions Required	Responsible agency(ies)	Time target
	of barriers/gates at all entry and exit points of MIDC fitted with CCTV cameras		
8.	Issuance of necessary orders by Commissioner of Police banning tanker movement in MIDC during 6 PM to 6 AM in MIDC areas	Commissioner of Police	Immediately upon commissioning of gates/barriers by MIDC
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,	MIDC and CETP operators (except CETPs of Chikhholi-Morivali and ACMA till pipeline network is commissioned) (Nodal agency – MIDC)	07 months



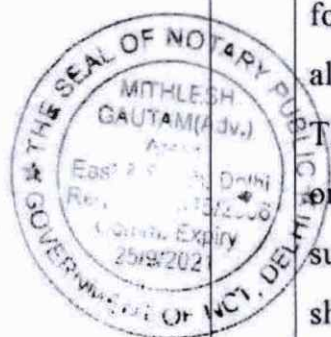
Sl. No.	Actions Required	Responsible agency(ies)	Time target
	electro-magnetic flow meter, auto cut-off valve and manual valve to regulate the effluent discharge from member industries and auto sample collection to be analysed need based.		
11.	Industry specific recalcitrant (High COD) streams and biodegradable 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



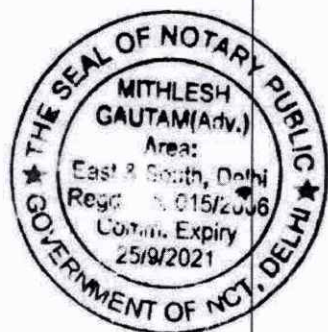
Sl. No.	Actions Required	Responsible agency(ies)	Time target
13.	Reviewing & stipulating BOD, COD, Ammonical Nitrogen and Colour as parameters with standards in CETP inlet effluent and Colour and O&G in CETP outlet effluent in all CETPs.	MPCB	03 months
14.	Reviewing by-products in "Consent to Operate" issued to industrial units and their management as per the CPCB guidelines	MPCB	03 months
	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	MIDC	DPR within 6 months and commissioning within



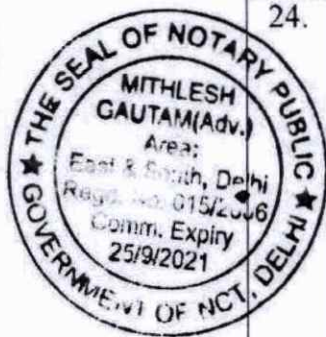
Sl. No.	Actions Required	Responsible agency(ies)	Time target
	increased flows, as the resultant situation warrants.		1.5yr after DPR.
17.	Third party environmental and waste audit to be carried out on a yearly basis based on Gujarat model. Modalities and auditing agencies to be finalised by MPCB	MPCB	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 and MIDC every quarter.	MPCB	Continuous activity
Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers			
19.	Performance improvement of the 04 operational STPs (Badalapur STP; KDMC-Chinchpada STP; Chikhholi-	Respective Municipal Corporations & Councils	06 months



Sl. No.	Actions Required	Responsible agency(ies)	Time target
	Moravali STP and Ambernath STP) so as to meet the prescribed standards of treated sewage being discharged into Waldhuni and Ulhas rivers		
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	Respective Municipal	06 months



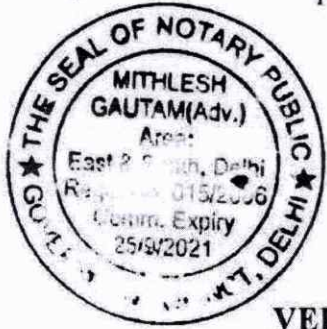
Sl. No.	Actions Required	Responsible agency(ies)	Time target
	installation of barriers/fencing at river bridges and other strategic locations of Waldhuni and Ulhas river to control littering of solid wastes	Corporations/ Councils	
23.	Handling & management of solid waste and dumpsites in accordance with 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	Respective Municipal Corporations/ Councils	03 months for DPR and 09 months for



Sl. No.	Actions Required	Responsible agency(ies)	Time target
	is an urgent need to draw up and execute proper septage treatment plans.		commissioning

7. That in view of the above submissions, CPCB shall abide by any orders that this Hon'ble Court may deem fit and proper to pass in the facts and circumstances of the matter.

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[Signature]
DEPONENT

ए. सुधाकर / A. Sudhakar
वैज्ञानिक "ई" / Scientist "E"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o. Env't. Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर
Park Bhawan, East Arjun Nagar

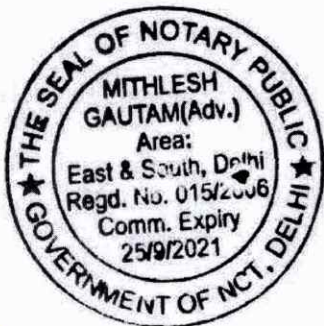
VERIFICATION

Verified at Delhi on this ^{5th} day of October, 2020 that the contents of the above affidavit are correct to the best of my knowledge and belief and nothing has been concealed therein.

Identify the deponent self
the signed in my presence

[Signature]
DEPONENT

ए. सुधाकर / A. Sudhakar
वैज्ञानिक "ई" / Scientist "E"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
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परिवेश भवन, पूर्वी अर्जुन नगर
Park Bhawan, East Arjun Nagar



CERTIFIED THAT THE DEPONENT
Shri/Smt. *A. Sudhakar*
Scientist "E" at CPCB Delhi
Identified by *Shubert*
has solemnly sworn before me at Delhi
on **5 OCT 2020** that the contents of the affidavit which
have been filed in this Court have been
are true & correct to his/her knowledge.

Notary Public - Karkardooma Court, Delhi

5 OCT 2020



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.

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**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 Dombivali, Kulgaon –Badlapur and Ambarnath 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

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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 Chikhholi 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

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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 Badlapru 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.



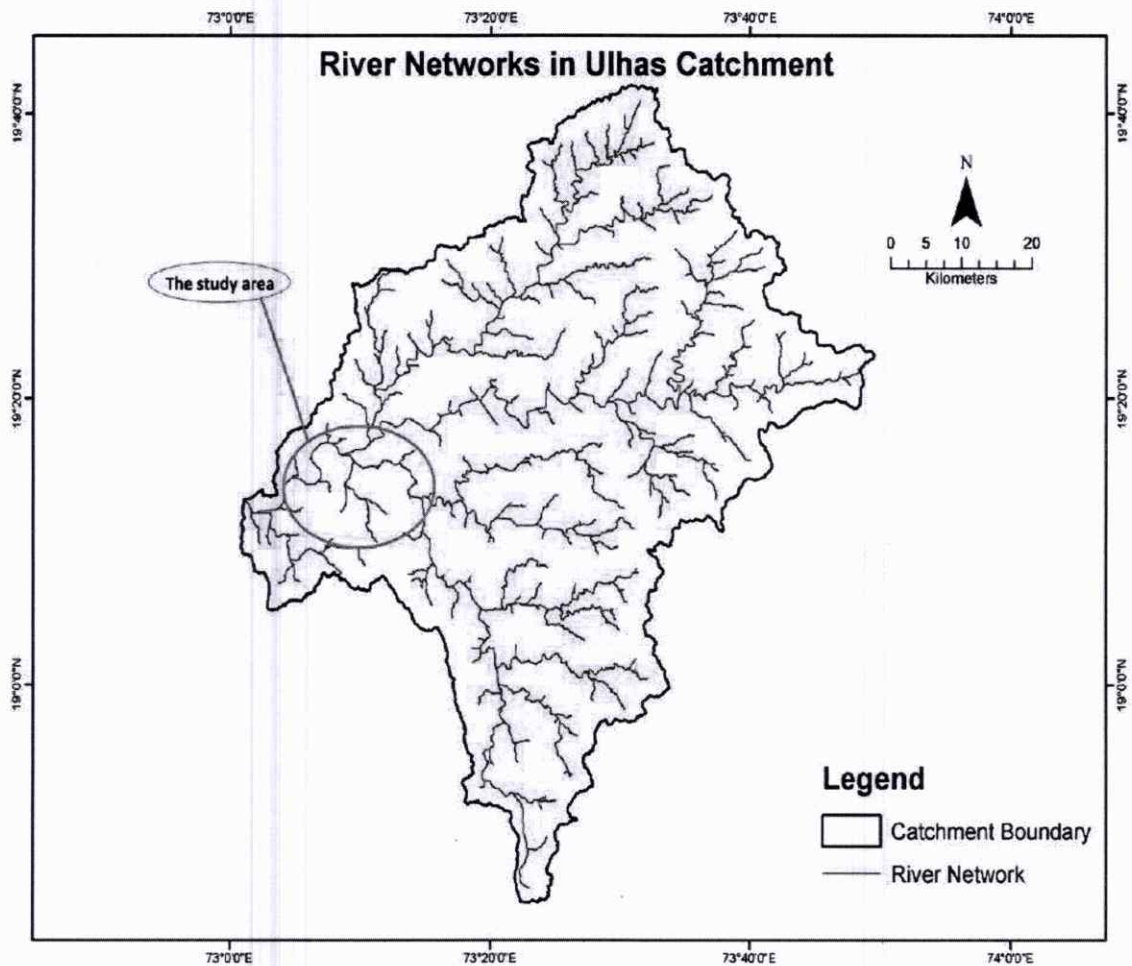


Figure 1: Ulhas River catchment and the study area

(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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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 Ambernath, 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°15'22.15"N	73°09'50.56"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, Thakuri	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	Thakuri
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 (Vadoli, 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, Morivall MIDC, Ambemath	19°12'06.75"N	73°11'48.84"E	17-09-20	Downstream to Chikholi-Morivall CETP discharge point, Nallah to Waldhuni River	R8	Ambemath
9	Random nallah 2, Morivall MIDC, Ambemath	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	Ambemath
10	Govind Pul, Ambemath	19°12'11.32"N	73°10'51.22"E	17-09-20	Nallah to Waldhuni river	R10	Ambemath
11	Waldhuni River (Shiv Mandir, Ambemath)	19°12'02.17"N	73°10'35.38"E	17-09-20	Waldhuni river	R11	Ambemath
12	Near Badlapur CETP, Badlapur	19°09'09.16"N	73°14'45.72"E	17-09-20	Downstream of Badlapur CETP discharge point, Nallah to Ulhas River	R12	Badlapur
13	Ambemath railover bridge, Ambaranth	19°12'42.60"N	73°10'58.90"E	17-09-20	Morivall (R8) and Tehsilidar (R17) nallah downstream, Nallah to Waldhuni River	R13	Ambemath
14	Anandnagar additional MIDC, Ambemath	19°10'24.12"N	73°12'08.14"E	17-09-20	Duct outside Rubicon Research Pvt. Ltd.	R14	Ambemath
15	Ulhas River (Gandhari Bridge, Kalyan)	19°16'04.80"N	73°08'25.70"E	17-09-20	1000 m downstream of Bhatasa and Ulhas River confluence, Kalyan sape 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. Tehsilidar office nallah, Ambemath	19°12'47.78"N	73°11'09.68"E	17-09-20	Nallah to Waldhuni river	R17	Ambemath
18	Random nallah 3, Vadoli, 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)	9°16'3.36"N	73°8'19.21"E	16-09-20	100m downstream of Ganesh Ghat, Ulhas River	R19	Kalyan
20	Random nallah 4, Jeans wash area	19°11'43.28"N	73°12'33.33"E	16-09-20	Reddish-orange colour effluent, Nallah to Waldhuni River	R20	Ambemath
21	MIDC Road	19°11'52.35"N	73°11'08.46"E	16-09-20	Nallah to Waldhuni River	R21	Ambemath
22	Waldhuni River (Shahad Bridge, Shahad)	19°14'34.48"N	73°09'06.79"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, Ambemath)	19°10'30.4"N	73°11'04.0"E	17-09-20	Waldhuni River Origin point	R23	Ambemath
24	Waldhuni River (Shahad Bridge, Shahad)	19°14'34.48"N	73°09'06.79"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, Ambemath)	19°11'14.5"N	73°10'56.7"E	17-09-20	Waldhuni River	R25	Ambemath
26	Waldhuni River (Regency Plaza)	-----	-----	17-09-20	Waldhuni River (Sampling done by CPCB officials)	R26	-----
27	Waldhuni River (Vridhashram)	-----	-----	17-09-20	Waldhuni River (Sampling done by CPCB officials)	R27	-----

Table 3: STP treated wastewater sampling points

Sr. no.	Location Name / Sample Name	Latitude	Longitude	Sampling Date	Remarks	Sample Code	Area
1	Ambemath STP	19°12'59"N	73°10'17"E	18-09-20	STP Outlet, Outlet directly in Waldhuni River	S1	Ulhasnagar
2	Vadol STP	19°12'51"N	73°10'15"E	18-09-20	STP Outlet, Outlet directly in Waldhuni River	S2	Ulhasnagar
3	Badlapur STP	19°09'40"N	73°15'05"E	18-09-20	STP Outlet, Outlet directly in Ulhas River	S3	Badlapur
4	Chinchpada STP	19°13'07"N	73°08'50"E	18-09-20	STP Outlet, Outlet on Nallah which meets Waldhuni River	S4	Kaiyan
5	Chikhloi STP	19°10'59.6"N	73°13'23.0"E	18-09-20	STP Outlet, Outlet on Nallah which meets Ulhas River	S5	Badlapur

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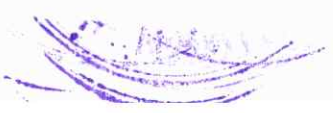




Figure 2: Map of sampling location points for Ulhas – Waldhuni and nallahs emptying in to both the rivers, STP, CETP and Industrial effluent (within the industrial premises) sampling points

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Figure 2A: 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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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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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



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 overbrdige, 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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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
MPCB 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	0.2848	285	157	140	22	75.8	1.4	0.89	18	1.3	23	50	144	47	No colour
R4	5.7	2.1330	2133	1173	1054	22	195.6	0.1	1.56	252	0.0	26	105	491	97	Black
R5	7.3	0.4393	439	242	214	30	4.3	0.6	1.56	43	1.0	19	11	28	62	Light grey
R6	6.9	1.1490	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	149.4	1.9	1.42	64	0.4	9	49	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	381.3	1.6	0.04	408	2.0	45	73	229	39	Light green
R13	6.7	6.9999	7000	3850	3898	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	2261.0	1.6	0.28	7	0.0	27	345	692	78	Black
R15	8.1	0.1803	180	99	90	28	26.2	1.3	0.12	39	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	149	40	No colour
R17	7.3	0.5848	585	322	300	32	275.7	2.0	5.36	35	0.8	12	49	157	35	No colour
R18	1.8	19.2600	19260	10593	251	44	120.3	1.2	0.94	46	0.6	9	60	224	51	Blue
R19	7.7	0.6098	610	335	456	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	586	900	12	78.3	2.9	0.50	135	0.4	12	140	410	45	Light green
R23	6.8	0.161	161	89	486.4	2	BDL	0.5	BDL	BDL	-	13	16	25	33	No colour
R24	6.8	0.9046	905	498	485.9	36	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	603	-	151	31	63	36	Light yellow
R26	6.9	0.9288	929	511	491.1	12	BDL	BDL	0.48	177	-	99	40	100	53	Light green
R27	7.2	0.3431	343	189	181.6	6	28.5	0.1	0.27	248	-	140	14	35	13.7	No colour

MPCB Water Quality Standards for best designated usage; A-III (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

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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, Chikhloli & 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.	Total		191	60	138	72
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.	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
		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 Ambernath mainly comprises of Packing / Repacking, Pharma formulation, food industry & engineering with painting etc.
- (c) Green category industries in Additional Ambernath mainly comprises of- engineering.
- (d) White category industries in Additional Ambernath 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.	Total		190	23	76	29
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.	Total		179	27	168	90
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.

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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.	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/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 Chikhlooli-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:

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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 ³ /day)	0.25 MLD (250 m ³ /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	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 Bridge (ROB) at Forest Naka Ambernath which joins the Waldhuni River
M/s Chikhholi-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 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 Ullhas 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

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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 -Vadoli 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.	Chikhholi-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				
		Ambernath 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

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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:



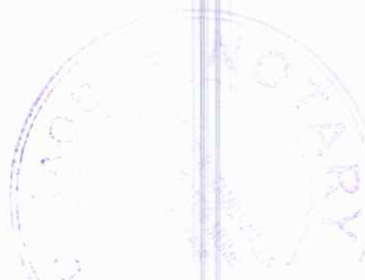


Table 12: Industrial units who have not sent any of their hazardous wastes since April, 2019 till 14/9/2020 and their operational status

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
Ambernath	87	40	3	44	25	5	14
Addl. Ambernath	62	15	0	47	29	9	9
Badlapur	64	16	2	46	35	4	7
Ulhasnagar	8	7	0	1	0	0	1
Total	257	98	7	151	96	21	34

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



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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 Ambernath 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 Ambernath 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.



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- (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, H₂SO₄; 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



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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, Ambernath, 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.

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- (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; Chikhloli-Moravali STP and Ambernath 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



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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, H₂SO₄; 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:

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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
Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers			
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/rivers 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



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 Chikhli-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

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	and MIDC every quarter.		
Control of untreated/treated sewage not meeting the discharge standards and littering of solid wastes in to the rivers			
19.	Performance improvement of the 04 operational STPs (Badalapur STP; KDMC- Chinchpada STP; Chikhholi-Moravali STP and Ambernath 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



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 S

Civil Appeal No.10582/2017

ULHASNAGAR MUNICIPAL CORPORATION

Appellant(s)

VERSUS

VANASHAKTI PUBLIC TRUST & 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 Ambarnath, 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



concerned municipal corporations including the Municipal Corporations, or Councils as the case may be, of Ulhasnagar, Kalyan Dombivali, 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.

(CHETAN KUMAR)
AR-cum-PS

(SAROJ KUMARI GAUR)
BRANCH OFFICER



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 Badalapur 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.

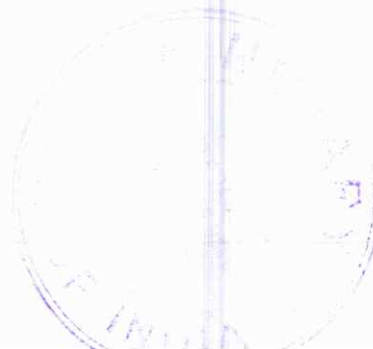
The details of the CETPs in Dombivali, Ambernath and Badalapur region monitored on 17.09.2020 by team of officials comprising of Shri S. Pradeep Raj, Scientist -D, CPCB and Shri Sandeep Shinde, Field Officer, MPCB- HQ, Mumbai are given below:

- i. M/s. Badlapur CETP Association; Plot No. OS-4, MIDC Badalapur, Dist. Thane
- ii. M/s Chikhholi-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 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 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 ³ /day)	0.25 MLD (250 m ³ /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 & G	35	14	18	7	23	20 (10**)
Colour	Dark Green	Light	No colour	Light Pink	Orange	



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		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 Dombivali 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 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 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. Badlapur CETP Association; MIDC Badalapur	Marine Coastal Area at a point to be specified by NIO.	In Waldhuni nallah near Railway over Bridge (ROB) at Forest Naka Ambernath which joins the Waldhuni River
M/s Chikholi-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 Ullhas



		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 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 Badalapur 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 Chikloli 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 Dombivali 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, Dombivali 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&CC 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 suggestion 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.



- To provide SCADA based system for conveying effluent from the member industries to the CETP.
- MPCB 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 Dombivali 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/ MIDC/ MPCB	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 as prominent junctions	MIDC/ Local municipal	6 months



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	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 Chikhholi-Morivali and ACMA	MIDC	1 year
8.	Segregation of effluent from Textile and Chemical clusters in Dombivali 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 O&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 Chikhholi-Morivali and ACMA till pipeline network is commissioned) (Nodal agency - MIDC)	07 Months

S. Pradeep Raj
(S. Pradeep Raj)
Scientist-D, CPCB



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, Mankhawali, 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 Ambarnath – 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 , ChikhloliMorivali 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), Chikhloli 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 Chikhloli, 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 , Mankeveli , 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



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 Badalapur ,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 Mankivali, 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, Chikhloli, Ambernath, Dist. Thane
59	M/s. Asolution Pharmaceuticals Pvt. Ltd, Plot No. K-3/8, Additonal Ambernath MIDC Ambernath, Dit. 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.



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, Chikloli MIDC, Ambernath (West), Dist. Thane - 421501
70	M/s. ASB International Pvt. Ltd, Plot No. B – 85, Additional Ambernath MIDD, 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 Chemcials (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. BushalChemi-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 Chemcial Zone, Ambernath.
94	M/s. Sima Chemicals, W-13, Chemcial 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 - Chikhloli, 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.



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 Waidhuni 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 Waidhuni river	C5	Ambarnath
6	Outlet of Chikholi Morivali CETP (CM2)			17-09-2020		C6	
7	Inlet of M/S Dombivli Better Environment system association (DBESA) (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 (DBESA) (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	Enaltech Pharma, Additional MIDC, Ambarnath	19°10'14.0"N	73°11'34.1"E	17-09-2020	Industrial Effluent	IE5	Ambarnath
16				17-09-2020	Industrial Effluent	IE6	
17	Ullengal, Dombivli	19°12'58.7"N	73°06'41.9"E	18-09-2020	Industrial Effluent	IE7	Dombivli
18	Bishen dyeing 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°13'26.6"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	

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 [^]	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	760	Yellow
C4	7.7	11.26	11260	6193	6056	500	906.5	6.0	8.92	1879	136	35	300	1632	410	Dark green
C5	7.0	4.06	4060	2233	2175	100	668.5	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	6.845	6845	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	-	290	1312	67	Light green
IE5	7.2	4.414	4414	2428	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	6.6	3.726	3726	2049	1990	200	814.5	4.0	0.43	567	108	-	175	769	680	Dark grey
IE10	6.9	0.9308	931	512	500	300	38.0	BDL	0.00	674	48	-	49	170	380	Dark blue
IE11	7.4	0.1603	160	88	86	102	1183.5	14.0	0.00	1170	68	-	140	509	370	Orange

[^] 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

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**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, Sc.E, CPCB RD Pune
2. Shri Nischal C., Sc. D, CPCB RD Vadodara
3. Dr. Nirpendra Semwal, Sc.C, CPCB RD Vadodara
4. Mrs. Arti Soni, Sc. C, NEERI Mumbai
5. Dr. Kumar Amrit, Sc. 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.

Additional Ambernath area						
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.	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.	Total	191	60	138	72	
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;

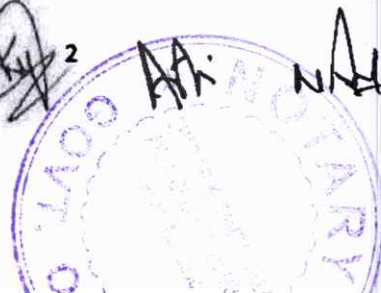
- (a) 04 units have not installed adequate equipment required to achieve ZLD conditions.
- (b) 05 units have provided the system but not operating it properly.
- (c) 02 units are not maintaining record for ZLD compliance.
- (d) 01 unit was found exceeding the prescribed consent standard for discharge 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

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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-1.

Table-1: 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.	Total		190	23	76	29
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.

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ABOUT ULHASNAGAR:

Ulhasnagar is a Municipal Corporation and the headquarters of the Tahsil. The town covers an area of 13 Km² 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.

Ulhasnagar area						
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.	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/creeks/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. Khemee 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 / Gala have been converted to



Handwritten signatures and initials: A.A., (F), 5, N.M., Dew., Shashikant.

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.	Total		179	27	168	90
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.

The bottom of the page features several handwritten signatures and a large circular official stamp. The stamp is from the 'OFFICE OF THE SECRETARY, GOVERNMENT OF INDIA' and includes the text 'Ministry of Environment, Forest and Climate Change'. There are also some handwritten initials and names scattered around the stamp.

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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. Alpic 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 CHWTSDF and are sending their ETP sludge CHWTSDF.
- 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, Muridhar Compound O.T. Section, Ulhasnagar Camp 3, Ulhasnagar.	Green - SSI	No Consent	Plastic Bags	<ul style="list-style-type: none"> ➤ MPCB has issued proposed directions to this industry, as it does not have valid consent to operate. ➤ However, industry was found in operation at the time of visit. 	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"> ➤ The industrial unit has consent to establish and not for to operate. ➤ The industry has been asked to achieve zero liquid discharge by total utilization of liquid effluent in the process itself. ➤ Hence, MPCB has issued closure directions to this industry, as it was operating without valid consent to operate. ➤ Also, during visit, the unit was found in operation and thread dyeing activity was going on. 	Operating without consent.
3.	M/s. S. T. Thread Works, MSEDCL Consumer Number 021510636080, Mr. Ravi Punjwani, Near Fakkad Mandail Chowk, Ulhasnagar-1, Dist. Thane	Red - SSI	No consent	Threads Dyeing	<ul style="list-style-type: none"> ➤ The industrial unit was found closed at the time of visit. 	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"> ➤ 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 	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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	District Thane				Cloth.	<p>7 days after lockdown period.</p> <p>> The unit has installed all required units for Zero liquid discharge (ZLD) as per the issued consent by MPCB.</p> <p>> 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.</p> <p>> The unit has consent valid up to 31.01.2022.</p> <p>> There was no ETP sludge found, as informed sludge was sent to CHTSDF before lockdown (Manifest copy provided indicates sent date is 14/03/2022). Hence there was no ETP sludge.</p>	Zero Liquid Discharge (ZLD) norms of MPCB.
5.	M/s. Asandas Sons Dyeing Works, MSEDCL Consumer Number 021510455239, Khatri Compound, Ulhasnagar-3, Dist. Thane	Red - SSI	No Consent	Jeans Washing	<p>> The industrial unit was found closed at the time of visit.</p>	Unit was closed.	
6.	M/s. Gurakrupa Textiles, MSEDCL Consumer Number 021510465927, Khatri Compound, Ulhasnagar-3, Dist. Thane	Red - SSI	No Consent	Jeans Washing	<p>> The industrial unit was found closed at the time of visit.</p>	Unit was closed.	
7.	M/s. Pitambar Khivalkdas Khatri, MSEDCL Consumer Number 021518882667, Khatri Compound, Ulhasnagar-3, Dist. Thane	Red - SSI	No Consent	Jeans Washing	<p>> The industrial unit was found closed at the time of visit.</p>	Unit was closed.	
8.	M/s. Tulsi Textile Dyeing, MSEDCL Consumer Number 021510774032,	Red - SSI	No Consent	Jeans Washing	<p>> The industrial unit was found closed at the time of visit.</p>	Unit was closed.	




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	Khatri Compound, Ulhasnagar-3, Dist. Thane	Red - SSI	No Consent	Jeans Washing	The industrial unit was found closed at the time of visit.	Unit was closed.
9.	M/s. Prashant Tekchand Khatri, MSEDCCL Consumer Number 021513068287, Khatri Compound, Ulhasnagar-3, Dist. Thane					
10.	<p>The team visited the area behind Shantiprakash School called as Dharmaji Patil area of Ulhasnagar-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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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"> The unit is having CCA from MPCB which is valid till 30.06.2025. As per CCA, daily quantity of trade effluent from the unit is NIL. It was observed during the visit that wastewater is generated from the unit and collected in a collection pit. 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 & Sulphide-44 mg/l) and acidic pH of 4.9. 	<ul style="list-style-type: none"> The unit is not having treatment facility for generated wastewater and hence discharge of untreated effluent in surrounding environment cannot be ruled out. MPCB needs to relook in the prescribed CCA condition for effluent and amend it appropriately.
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"> The unit is having CCA from MPCB which is valid till 30.08.2023. As per CCA condition, the unit needs to provide adequate effluent treatment system and subsequent disposal to CETP for further treatment. The unit has provided only a collection pit for wastewater generated from the plant. It is worth mentioning that CETP has been non-functional in Additional Ambermath MIDC for last 4-5 years. 	<ul style="list-style-type: none"> 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. MPCB needs to amend the CCA condition for disposal of treated effluent.
13.	M/s Kamsons Polymers Pvt. Ltd., K-30/7, Additional Ambermath MIDC, Thane	Red / SSI	Water based Acrylic Emulsion	<ul style="list-style-type: none"> The unit is having CCA from MPCB which is valid till 31.05.2022. As per CCA condition, unit needs to provide ETP comprising primary, secondary and tertiary treatment followed by RO and MEE. The unit has provided primary ETP followed by sand and 	<ul style="list-style-type: none"> The unit is not operating the ZLD system properly and also not maintaining the record of reuse / recycle after primary treatment and hence

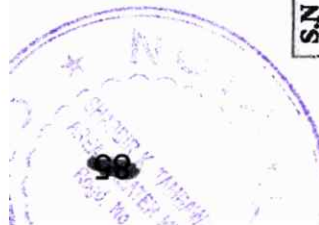




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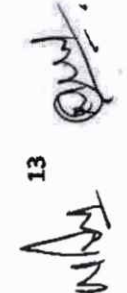

				carbon filter. RO and Evaporator are installed but are not in use. It is informed by the unit representative that after sand and carbon filtration, the treated effluent is directly used in cooling tower and washing etc. As per record of hazardous waste, the unit has disposed 1950 Kgs waste to CHWTSDf at Taloja during April 2019. Flow meter is not provided in the ETP.	probability of discharge in the surrounding environment cannot be ruled out.
14.	M/s Chemical, Anand Additional Ambermath Thane	Krishna N-29, Nagar, MIDC,	Red / SSI	Compound solvent, Paint, Varnish, Thinner	<p>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 it can be inferred that the unit is discharging untreated effluent in the surrounding environment.</p> <p>MPCB needs to amend the CCA condition for disposal of treated effluent.</p>
15.	M/s Chemicals, Anand Additional Ambermath Thane	Turmalin N-30, Nagar, MIDC,	Red / SSI / Recycler / Re- processor	Reprocessing of spent solvents, Distilled acetic acid	<p>The unit is not maintaining the record of effluent generation, ETP sludge disposal and also the unit has not provided the ZLD system. Thus it can be inferred that the unit is discharging untreated effluent in the surrounding environment.</p>
16.	M/s	Trichem	Red / SSI	Organic	<p>The unit is not provided record of ETP sludge disposed to CHWTSDf.</p> <p>No flow meter is provided in ETP.</p> <p>The unit is having CCA from MPCB which is valid till 31.08.2023.</p> <p>As per CCA condition, unit needs to provide ETP consisting of primary, secondary and tertiary treatment system as is warranted with reference to influent quality. The treated effluent shall be recycled and reused to the maximum extent and rest shall be evaporated in a reactor to achieve ZLD.</p> <p>The unit has provided a collection pit and a neutralization tank to treat the generated effluent.</p> <p>The unit has not provided record of ETP sludge disposed to CHWTSDf.</p> <p>No flow meter is provided in ETP.</p> <p>The unit is having CCA from MPCB which is valid till</p>






<p>Laboratories (Bombay) Pvt. Ltd., K-48, Additional Ambermath MIDC, Thane</p>	<p>Chemicals</p>	<p>30.04.2021. > 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. > It is worth mentioning that CETP has been non-functional in Additional Ambermath MIDC from last 4 -5 years. > The unit has provided ETP system comprising of Collection cum neutralization pit followed by Primary settling tank, Aeration Tank and Sand & 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. > The ETP was not operational during visit. > No flow measurement device is provided in ETP. > As per record submitted in MPCB, the unit has disposed 2.025 MT ETP sludge during April 2019 to August 2019. > The unit is having CCA from MPCB which is valid till 30.04.2021. > As per CCA condition the effluent shall be treated in ETP and recycle in the process for various purposes. > The unit has provided ETP consisting of tertiary treatment followed by RO and MEE. > 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. > As per record provided, the unit has disposed 5.92 MT ETP sludge to CHWTSDF at Talaja during April 2019 to August 2019.</p>	<p>on activated sludge process was found non-operational during visit. > 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. > MPCB needs to amend the CCA condition for disposal of treated effluent.</p>
<p>17. M/s Sai Fertilizers and Phosphates Pvt. Ltd., N-45, Additional MIDC, Anand Nagar, Ambermath (E), Thane</p>	<p>Inorganic Chemicals</p>	<p>Red / MSI</p>	<p>> The unit needs to measure quantity of treated wastewater recycled and maintain the record of same. > MPCB needs to verify the same on time to time.</p>
<p>18. M/s Priyadarshani Microtech, N-74, Additional MIDC, Anand Nagar,</p>	<p>Various laboratory reagents and culture media,</p>	<p>Red/SSI</p>	<p>> The unit has not provided record of ETP waste disposal, effluent generation and treated</p>

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<p>Ambemath, Thane</p>	<p>Repacking of various solid chemicals</p>	<p>warranted with reference to influent quality and the unit shall achieve ZLD by total utilization of treated effluent in the process itself. > The unit has provided ETP consisting of one collection tank followed by chemical mixing tank, Settling tank, Polishing tank, Sand & 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. > 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. > The unit has not provided record of ETP waste disposal, effluent generation and treated effluent re-used. > The unit is not having valid CCA from MPCB. The CCA expired on 30.11.2018. > 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 > 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. > The ETP was not operational during visit. > 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>19. M/s Enaltec Pharma Research Pvt. Ltd. (previously known as M/s Getz Pharma Pvt. Ltd.), PL-11, Additional Ambemath MIDC, Thane</p>	<p>Pharmaceutical</p>	<p>The unit is operating without valid CCA. > The unit is not operating the ETP properly. > It can be inferred that the unit is disposing untreated effluent on land or surrounding environment.</p>	<p>The unit is operating without valid CCA. > The unit is not operating the ETP properly. > It can be inferred that the unit is disposing untreated effluent on land or surrounding environment.</p>




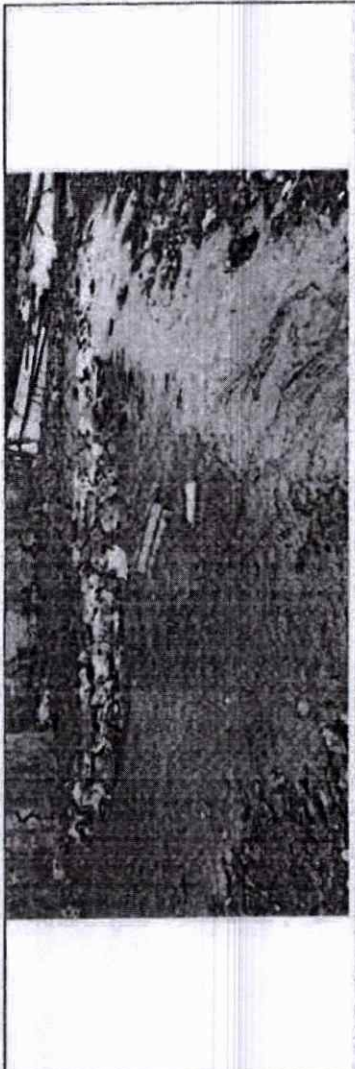


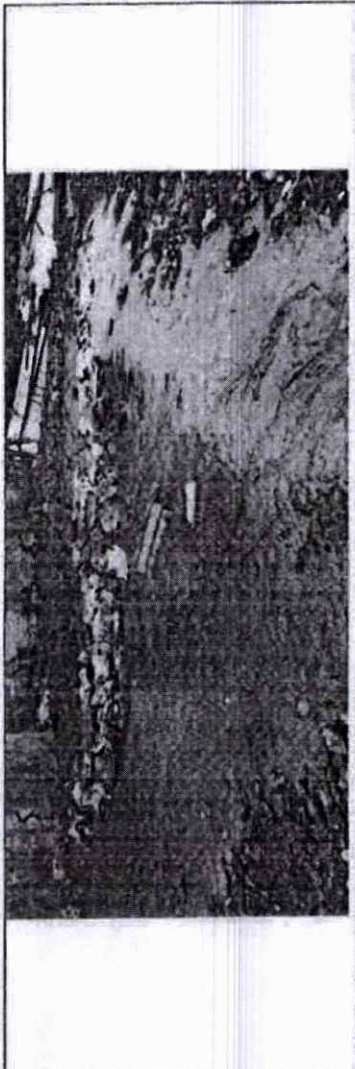





<p>reduced from 2333 mg/l to 1035 mg/l from inlet to outlet. It is worth mentioning that it was raining heavily on the day of visit and hence dilution has more impact than treatment.</p> <p>➤ The unit has disposed 34 Kg of ETP sludge on 04.05.2019, 30 Kg on 22.08.2019 and 35 Kg on 19.11.2019 to CHWTSDF 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 Waldhumi 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 Waldhumi.</p>
<p>20. M/s Minerals Chemicals & MIDC Zone</p>	<p>Paramount & Chemicals Ltd., C/6 Chemical Zone</p>	<p>Red / LSI</p>	<p>Optical Whitening Agent, Di-amino Stilbene Disulphonic Acid</p>

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	<p><i>Hazardous waste being disposed in open near 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> <p>➤ The unit is not maintaining the record of treated effluent recycled and has not disposed ETP sludge during last one year, thus it can be inferred that the unit is not operating the ETP properly and discharging the effluent in the surrounding environment.</p>
	<p><i>A view of River Waldhuni from Boundary wall</i></p>				<p>M/s Pacific Organics Pvt. Ltd., N-4, Additional MIDC, Anand Nagar, Ambernath (E), Thane</p> <p>Inorganic and organic chemicals</p> <p>Red / SSI</p>






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<p>22.</p>	<p>M/s Just Textile, K-5, Additional MIDC, Anand Nagar, Ambernath</p>	<p>Red / LSI</p>	<p>Textile (Dyed Yarn, Knitted Fabrics)</p>	<p>commissioned. > The unit is not maintaining the record of treated effluent recycled in the plant process. > No sludge is disposed to TSDF during last one year. > The unit is having CCA from MPCB which is valid till 31.01.2025. > 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. > 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 dozing tank, Settling tank, Sand & Carbon filter, UF, RO-1, RO-2 and MEE. ATFD unit is under installation. > 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. > 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>
<p>23.</p>	<p>M/s Rhavika Chemicals Corporations, Shed No. 17, MIDC Chemical Zone, Ambernath</p>	<p>Red / SSI</p>	<p>Organic and Inorganic chemicals</p>	<p>> The unit is having CCA from MPCB which is valid till 31.12.2021. > 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. > 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. > As per record provided, the unit has disposed 143 M³ of effluent to CETP and 0.04 MT of sludge to CHWTSDf at Talaja during April 2019 to August 2020.</p>	<p>-</p>
<p>24.</p>	<p>M/s Padnavati Pulp and Paper Mills, N-</p>	<p>Red / LSI</p>	<p>Kraft Paper</p>	<p>> The unit is having CCA from MPCB which is valid till 31.01.2024</p>	<p>-</p>

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25.	M/s Melog Speciality Chemicals Pvt. Ltd., Plot No. N-5, MIDC Addl. Ambermath-East, Thane, Maharashtra	Red / LSI	Specialty chemicals	<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> <p>> The industry has obtained valid Consolidated Consent & Authorization (CC&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&A, the treatment scheme to be provided is; ETP consisting of primary, secondary & tertiary level treatment followed by two stage RO & 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 & 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 flocculant) → Primary clarifier-2 → Bio-reactor-1 → Bio-reactor-2 → Secondary clarifier → Treated effluent collection tank → RO-1 & 2 (parallel operation) → RO permeate tank → Reuse in process & utility/ancillary activities.</p> <p>> High COD/TDS stream: Oil & Grease trap (proportionating of High COD/TDS stream & 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 CHWT/SDF. Whereas MEE condensate is proportionated & 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>	The industry is complied w.r.t. provisions of H&OW (M&TM) Rules, 2016.
55, Additional Ambermath MIDC, Thane					

















<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 & MEE solids (low COD & 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 < 80.7 MTA; Spent carbon: 3.97 < 8 MTA; ETP sludge: 45.31 < 173 MTA; MEE solids: 0.54 < 3 MTD; Used oil: 0.87 < 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 is complied w.r.t. provisions of H&OW (M&TM) Rules, 2016.</p> <p>> During January, 2019 M/s Atul Bioscience Ltd., has taken over M/s Polydrug Laboratories Pvt. Ltd., the present industry and had obtained CC&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>
<p>> The industry has obtained valid Consolidated Consent & Authorization (CC&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&A, the treatment scheme to be provided is; ETP consisting of primary, secondary & tertiary level treatment followed by two stage RO & four stage MEE. The entire treated effluent shall be recycled in the process so as to achieve ZLD.</p> <p>> The various unit operations & processes of ETP are; Screen chamber followed by Oil skimmer, Equalization tank, Flash mixer (addition of poly electrolyte & 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 & processes of ETP are; Screen chamber followed by, Oil skimmer, Equalization tank, DAF, Activated sludge process, MBR, Pressure sand filter, Activated</p>	<p>API</p>	<p>Red / LSI</p>
<p>M/s Atul Bioscience Ltd., Plot No. N-37, MIDC Addl. Ambernath, Thane, Maharashtra</p>		
<p>26.</p>		

				<p>carbon filter, UF, RO, MEE, ATFD → Salt → Disposal to CHWTSDF.</p> <p>➤ RO permeate & MEE condensate → Reuse in process & utility.</p> <p>➤ During inspection, it is observed that ETP was operational.</p> <p>➤ The industry has provided electromagnetic flow meter at inlet and final outlet of ETP. However, it was under maintenance.</p> <p>➤ 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>➤ As per manifest vide even dated 08.06.2029 & 12.10.2019 the unit has disposed 0.188 MT of ETP sludge 0.092 MT process residue respectively.</p>	<p>manufacturing only 3 products and treating effluent in existing ETP.</p> <p>➤ The generator of hazardous waste i.e. new name is not updated in the list of CHWTSDF i.e. M/s MWML, Talaja.</p>
27.	M/s V & V Pharma Industries., Plot No. N-48, MIDC Addl. Ambarnath, Tal: Ambarnath, Dist: Thane, Maharashtra	Red / SSI	Pharmaceuticals	<p>➤ The industry has obtained valid Consolidated Consent & Authorization (CC&A) from MPCB and is valid up to 30.11.2020.</p> <p>➤ Desired information w.r.t. monthly water consumption and effluent generation was not made available to the inspecting team.</p> <p>➤ Consented effluent quantity is 18 KLD; As per CC&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>➤ The various unit operations & processes of ETP are; Screen chamber, O&G trap, Equalization tank, Flash mixer (addition of ploy electrolyte & alum), Primary clarifier, Activated sludge process, Secondary clarifier, Dual media filter, Activated carbon filter, Evaporator cum distillation reactor, Distillate to reuse in utility & fire-fighting.</p> <p>➤ Distillation residue → Disposal to CHWTSDF.</p> <p>➤ During inspection it was observed that tertiary treatment units were not in operation.</p> <p>➤ 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 > 100 mg/L); BOD: (140 > 100 mg/L) and COD: (509 > 250 mg/L)</p>	<p>➤ The industry is non-complied w.r.t. treated effluent discharge standards prescribed by MPCB i.e. SS: (102 > 100 mg/L); BOD: (140 > 100 mg/L) and COD: (509 > 250 mg/L).</p> <p>➤ 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&A.</p> <p>➤ It is gathered from manifest document made available to inspecting team that the industry has not disposed</p>



 Ashi K. N. 20







 Ashi K. N.

 Ashi K. N.





<p>28.</p> <p>M/s. Printex Enterprises, Plot no. 38, MIDC Morivali, Tal Ambermath, Dist. Thane</p>	<p>Red - SSI</p>	<p>Printing of Cloths and Jeans Washing</p>	<p>are exceeding the standards prescribed by MPCB.</p> <p>➤ The industry has provided mechanical flow meter at final outlet of ETP.</p> <p>➤ As per manifest dated 20.03.2020, the unit disposed ETP sludge @ 1570 KL and production sludge @ 150 KL.</p> <p>➤ The industry had a stock of app. 30-50 HDPE drums, reportedly consists of mother liquor, spent methanol and other process residues, which are haphazardly stockpiled on pervious ground.</p> <p>➤ The mother liquor generated from production of Furandicarboxylate & Indanone is being sent to unauthorised recycler, without permission from MPCB.</p> <p>➤ Similarly, spent methanol generated during process is also being sent to unauthorised recycler, without permission from MPCB.</p> <p>➤ 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.</p> <p>➤ During visit, it was observed that unit was carrying only printing activity.</p> <p>➤ The machines / facility required for jeans washing / dyeing activities was observed to be removed and only printing was observed.</p> <p>➤ The ETP condition of this unit was not satisfactory.</p> <p>➤ 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.</p> <p>➤ The unit is a member of Chikloli - Morivali CETP.</p>	<p>➤ Valid Consent for printing and after closer direction, no more dyeing & jeans washing activity is carried out. However, as per the ETP condition it looks like that unit is not treating its effluent</p>
<p>29.</p> <p>M/s. Sarvottam Chemical, Plot No. 49, MIDC Morivali, Tal. Ambermath.</p>	<p>Red - SSI</p>	<p>Jeans washing</p>	<p>➤ The unit has valid consent to operate.</p> <p>➤ MPCB has issued a show cause notice to this unit to upgrade and comply with the effluent treatment facility.</p> <p>➤ The unit has complied with the MPCB show cause notice and developed small scale effluent treatment plant.</p> <p>➤ The unit was in operation and jeans washing activity was observed.</p>	<p>➤ Unit has valid consent, unit has complied to MPCB show cause notice and upgraded its ETP.</p>


<p>30.</p>	<p>M/s. Ankit Wash, Plot No. 52, MIDC Morivali, Tal. Ambernath.</p>	<p>Red - SSI</p>	<p>Jeans Washing</p>	<p>> The unit is a member of Chikloli - Morivali CETP. > The unit has valid consent to operate. > MPCB has issued a show cause notice to this unit to upgrade and comply with the effluent treatment facility. > It has not complied with the MPCB show cause notice and effluent treatment plant was under upgradation. > 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. > The unit is a member of Chikloli - Morivali CETP.</p>	<p>> MPCB issued show cause notice to upgrade ETP. > No proper treatment for generated effluent indicates that untreated effluent may be sending to CETP or may be disposing in the environment.</p>
<p>31.</p>	<p>M/s. Sambho Interling, 31A, MIDC, Luthiyana Silk Mills Compound, Ambernath (W)</p>	<p>Jeans Washing</p>	<p>Closed</p>	<p>-----</p>	<p>-----</p>




[Handwritten signatures and initials]

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. Ullengal Textile Pvt. Ltd., Plot no. B-6, MIDC Phase - I, Dombivali, Tal. Kalyan, Dist. Thane.	Red - SSI Unit	Consent is valid till 31/12/2022	Processing of Fabrics	<ul style="list-style-type: none"> ➤ The unit has valid consent from MPCB, which is valid till 31/12/2022 and it is member of Dombivali Better Environment System Association (DBESA) CETP located at Plot no. OA-8, Phase -I, MIDC Dombivali (East) Dist. Thane. ➤ As per the consent, unit has provided primary / secondary and tertiary treatment to effluent. ➤ The unit operation was closed due to weekly off and power staggering on the visiting day. ➤ 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, COU 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. ➤ 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. ➤ The outlet sample of the ETP was taken which was clear in appearance, without any odour. ➤ The housekeeping in unit was satisfactory. 	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. Bishen Dyeing & Weaving Mills,	Red - SSI unit	Consent is valid till 31/12/2022	Textile Processing of Cotton	<ul style="list-style-type: none"> ➤ 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 	Consent is valid till 31/12/2022 and ETP was not in operation.



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<p>Plot No. C -11, MIDC Phase - I, Dombivali, Kalyan, Thane.</p>	<p>Fabrics</p>	<p>Dombivali (East) Dist. Thane.</p> <ul style="list-style-type: none"> ➤ The unit has provided primary / secondary treatment to effluent. However, as per the consent it need to provide tertiary treatment also. ➤ The unit operation was closed due to weekly off and power staggering on the visiting day. ➤ The ETP of unit was not in operation and inlet to the ETP was observed and primary clarifier was half empty and was not in operation. ➤ The unit has sent ETP sludge to CHWTSDF on 15/09/2020 and ETP sludge about 100 kg was found kept on sludge storing area. ➤ The outlet sample of the ETP was taken which was in wine red colour in appearance, without any odour. The analysis results of the samples shows that pH of sample was 6.6, COD of sample was 805 mg/l whereas BOD was 300 mg/l. These results indicates that the ETP was functioning, outlet norms of the industry for treated 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. ➤ The housekeeping of the unit was satisfactory. 	<p>Very less quantity (about 100 Kg) ETP sludge was found kept on storing impervious surface area.</p>
<p>3 M/s. Mahesh Textile Processors Ltd., Plot no. C - 27/6 & A - 79, MIDC Phase - I, Dombivali, Kalyan, Thane.</p>	<p>Processing of cloth & Manmade Fabrics</p>	<p>Red - SSI unit 31/12/2022</p> <ul style="list-style-type: none"> ➤ The unit has valid consent (up to 31/12/2022) from MPCB, and it is member of DBESA CETP located at Plot no. OA-8, Phase -I, MIDC Dombivali (East) Dist. Thane. ➤ The ETP has primary / secondary and tertiary treatment to treat effluent. ➤ The unit operation was closed due to weekly off and power staggering on the visiting day. ➤ The ETP of unit was not in operation and same was started in front of the visiting team. After starting the ETP sample was collected which was in black colour without any odour. 	<p>Consent is valid till 31/12/2022 and ETP was not in operation. Very less quantity (about 100 Kg) ETP sludge was found kept on storing impervious surface area.</p>







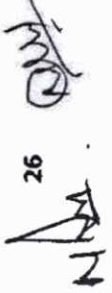




4	M/s. Tirupati Textile Mills, Plot No. A - 187, A - 187/1, MIDC Phase -1, Dombivali, Tal. Kalyan, Dist. Thane.	Red - SSI	Consent is valid till 31/10/2021	Textile Processing Optical Whitening	<p>The outlet sample of the ETP was taken which was in dark grey colour in appearance, without any odour. The 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, outlet norms of the industry for treated 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 Dombivali (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 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.</p> <p>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.</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.
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S	M/s. Tirupati Textile Mills, Plot No. A - 187/3, MIDC Phase - I, Dombivali, Tal. Kalyan, Dist. Thane.	Red - SSI Unit	Consent is valid till 31/05/2024	Textile Processing - Bleaching & Stemmering of cloths	<p>> The housekeeping of the unit was not satisfactory.</p> <p>> 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 Dombivali (East) Dist. Thane.</p> <p>> 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 effluent from this unit is also treated in the ETP of above mentioned industry. 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 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.</p> <p>> 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.</p> <p>> The housekeeping of the unit was not satisfactory.</p>	Consent is valid till 31/05/2024 and ETP was not in operation.
6	M/s. Shanti & Processors Pvt., Ltd.	--	--	--	<p>> The industrial unit is closed and there is no any kind of activity observed.</p>	The unit building is totally closed.
7	M/s. Alpic India Agarwal Dyeing	--	--	--	<p>> The industrial unit is closed and there is no any kind of industrial machinery or production activity observed.</p> <p>> However, there was an illegal jeans washing</p>	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 CEIP.</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 L.
 (Shashikant Lokhande)
 CPCB - RD, Pune

Amrit
 (Dr. Kumar Amrit)
 NEERI - Mumbai

Nishchal C.
 (Nishchal C.)
 CPCB - RD (W), Vadodara

Arti
 (Arti Soni)
 NEERI - Mumbai

Nirpendra S.
 (Dr. Nirpendra Semwal)
 CPCB - RD (W), Vadodara

Komal K.
 (Komal Kalawapudi)
 NEERI - Mumbai

Inspection Reports of industrial units randomly inspected on 18/9/2020 in Ambarnath 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.	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, Morivali, Ambarnath (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., Ambarnath, 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

<p>Plot No. C-1, C-2 & C-3, Chemical Zone, M.I.D.C., Ambermath, Dist-Thane</p>	<p>Type of industry- In Organic Chemical Effluent generation – Qty- 11.0 KLD. Effluent Discharge- ZLD CCA valid till: 31.12.2020.</p> <p>By-Products – Manganese Sulphate Solution; Sodium Sulphate Solution; Ortho Phosphoric Acid Solution; Weak Mono Methyl Amine Solution; Precipitated Manganese Dioxide (Reclaimed MnO₂); HBr Solution 10%.</p>	<p>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.</p>	<p>utilised at end use by authorised users.</p>
<p>4 M/s G. Amphray Pharmaceuticals Pvt Ltd. Plot No. 107, MIDC, Chikhlioli, Ambermath, Dist- Thane :-421 505</p>	<p>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</p>	<p>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.</p>	<p>No specific non-compliance was observed at the time of visit.</p>
<p>5 M/s Triochem Products Ltd. Plot No. 10/2, MIDC, Chikhlioli, Ambermath, Dist- Thane :-421 505</p>	<p>Category - Red Size – SSI Type of industry- Pharmaceutical Effluent generation in 11 KLD. Effluent Discharge- in to CETP. CCA valid till: 31.03.2022</p>	<p>1. During the visit industry found not in operation. 2. Industry has provided collection tank, neutralization tank, flash mixer, primary clarifier, settling tank.</p>	<p>Unit was found closed and non-operational.</p>



(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. Alpic 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 Ambernath MIDC, Thane
- 2) M/s Namau Chem Pvt. Ltd., N-26 & 27, Additional Ambernath MIDC, Thane
- 3) M/s Krishna Chemical, N-29, Anand Nagar, Additional Ambernath MIDC, Thane
- 4) M/s Turmalin Chemicals, N-30, Anand Nagar, Additional Ambernath 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 Ambernath MIDC, Thane
- 2) M/s Trichem Laboratories (Bombay) Pvt. Ltd., K-48, Additional Ambernath MIDC, Thane
- 3) M/s Priyadarshani Microtech, N-74, Additional MIDC, Anand Nagar, Ambernath, Thane
- 4) M/s Enaltec Pharma Research Pvt. Ltd. (previously known as M/s Getz Pharma Pvt. Ltd.), PL-11, Additional Ambernath MIDC, Thane
- 5) M/s Pacific Organics Pvt. Ltd., N-4, Additional MIDC, Anand Nagar, Ambernath (E), Thane
- 6) M/s V & V Pharma Industries., Plot No. N-48, MIDC Addl. Ambernath, Tal: Ambernath, Dist: Thane
- 7) M/s. Printex Enterprises, Plot no. 38, MIDC Morivali, Tal Ambernath, Dist. Thane
- 8) M/s. Ankit Wash, Plot No. 52, MIDC Morivali, Tal. Ambernath.
- 9) M/s Ashu Organics (India) Pvt. Ltd., Plot No. A-64, MIDC SBI Bank, Badlapur, Tal- Ambernath, 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: Ambernath, 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, Chikhholi M.I.D.C., Ambernath, 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, Ambernath MIDC, Thane





Appendix

Site Visit Photographs

Sampling point R1: Ulhas River (Mohane Road river bridge, Shahad)

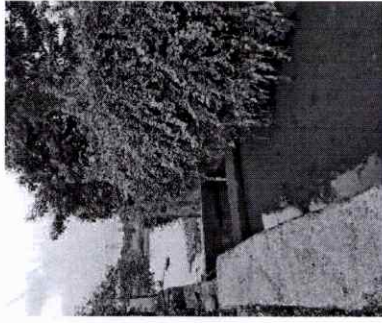
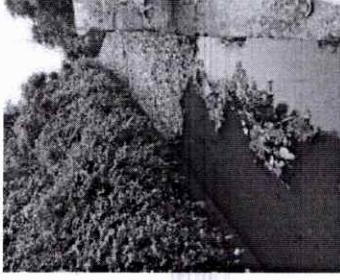


Sampling was done on Ulhas river

Site Description: The location is on Mohane Road which goes to Titwala. 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

Sampling point R2: Khemani nallah MIDC, Shahad

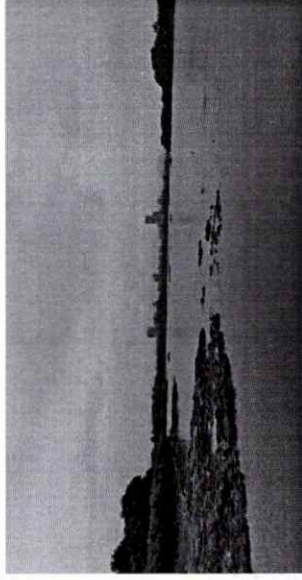
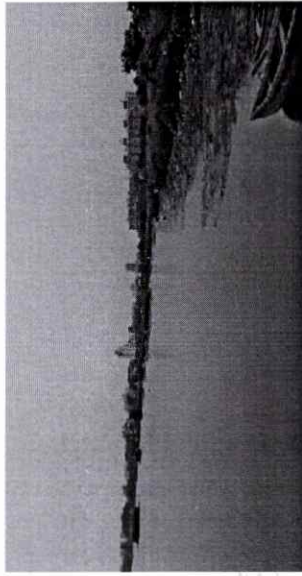


Sampling was done on Nallah which empties in to Ulhas/Waldhuni river

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

Sampling point R3: Ulhas River (Kachore Ganesh Ghat, Kalyan [EI])



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

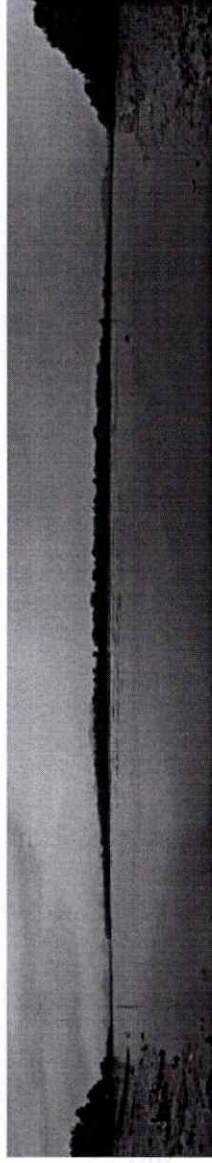
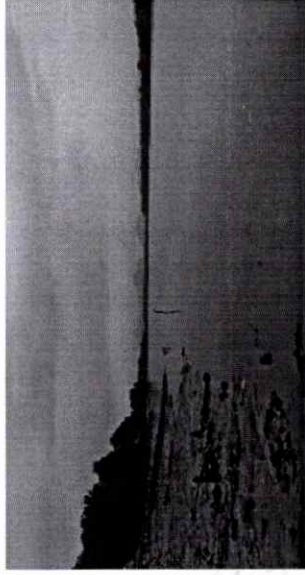
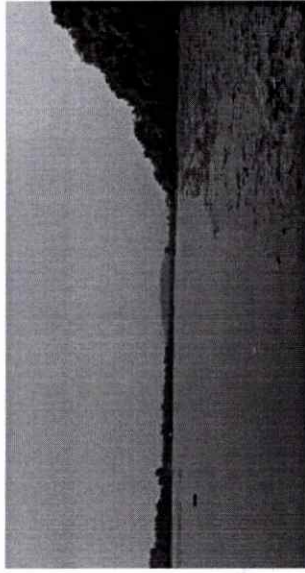


Sampling was done on Nallah which empties in to Ulhas river

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.

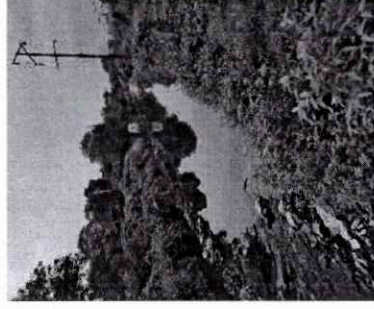
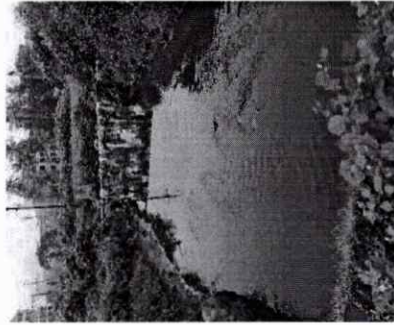
Colour of Sample: Light Grey





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Sampling point R8: Random nallah 1, Morivali MIDC, Ambernath

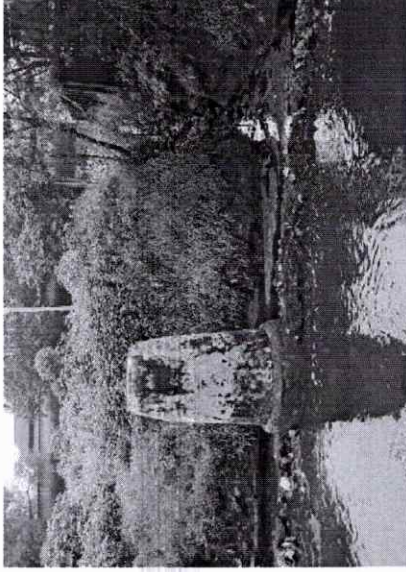
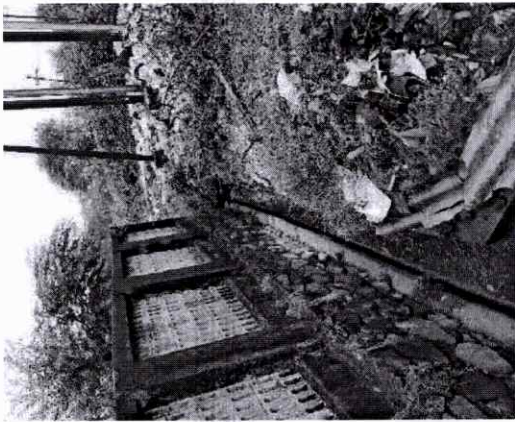


Sampling was done on Nallah which empties in to to Waldhuni river

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

Sampling point R9: Random nallah 2, Morivali MIDC, Ambernath



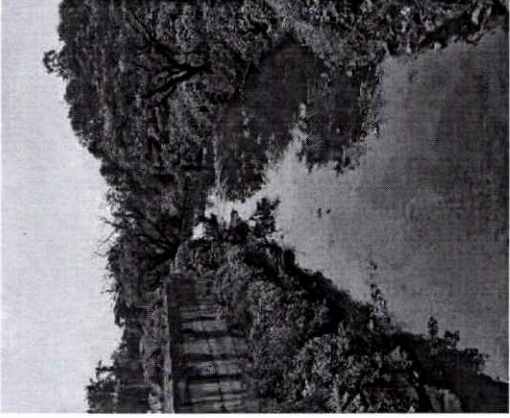
Sampling was done on nallah which empties in to Waldhuni river

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, Ambarnath

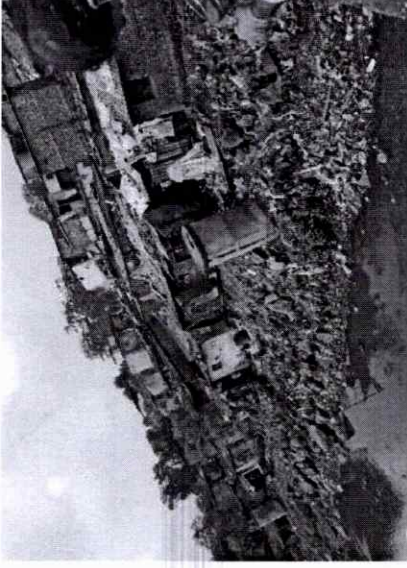
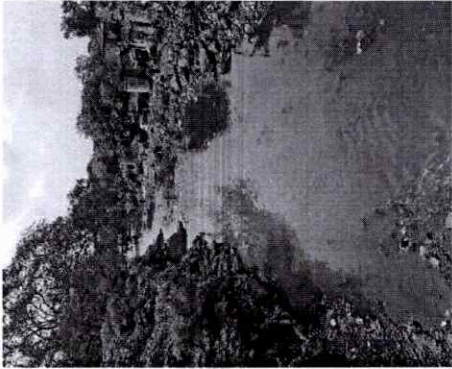


Sampling was done on nallah which empties in to Waldhuni river

Colour of Sample: Dark Grey



Sampling point R11: Waldhuni River (Shiv Mandir, Ambarnath)



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



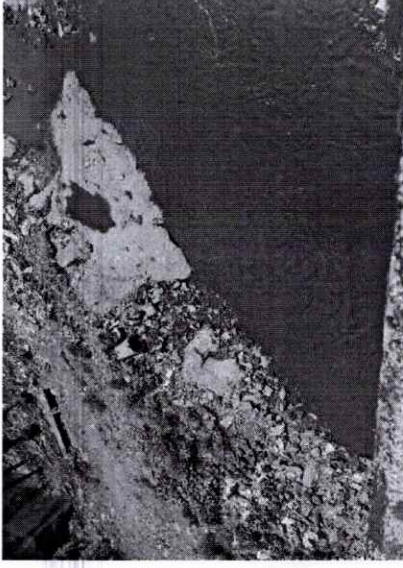
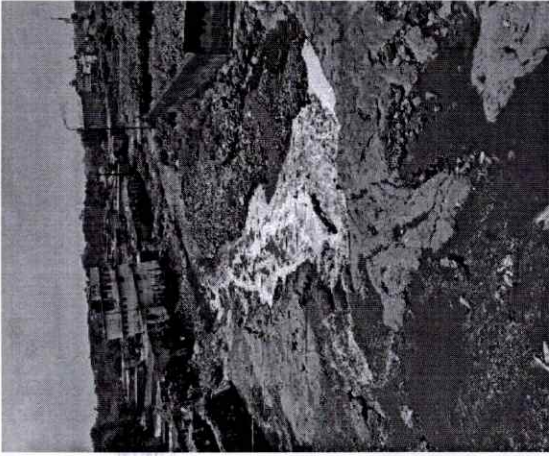
Sampling was done on nallah which empties in to Ulhas river

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



Sampling point R13: Ambernath railover bridge, Ambaranth





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

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Sampling point R14: Anandnagar additional MIDC, Ambernath





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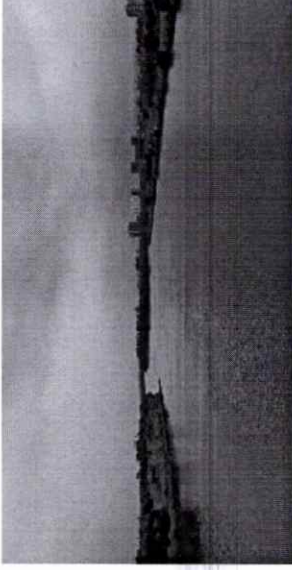
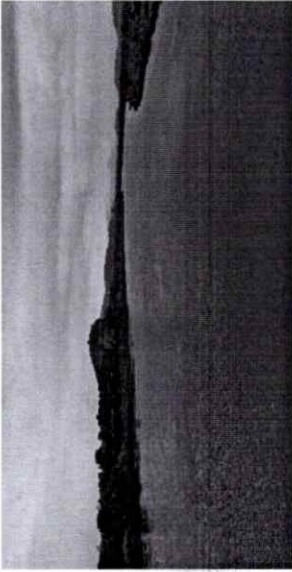


Sampling was done inside Additional MIDC, Ambernath

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)



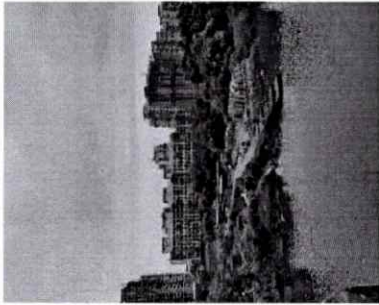
Sampling was done on Ulhas river

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



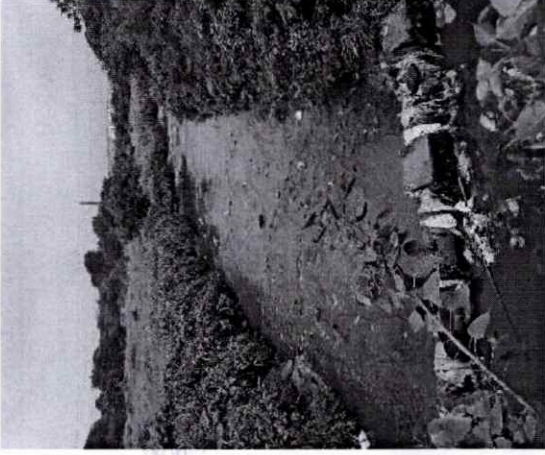
Sampling was done on nallah which empties in to Ulhas river

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



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

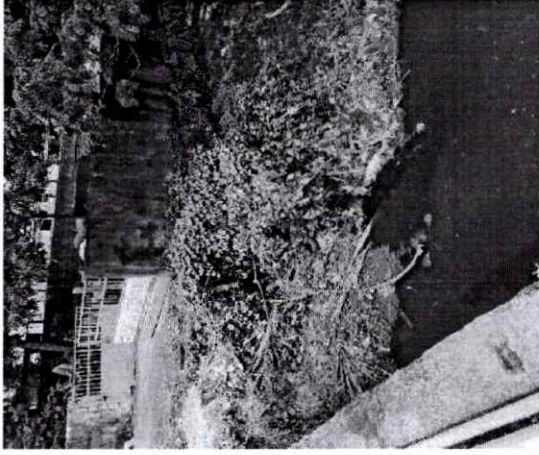
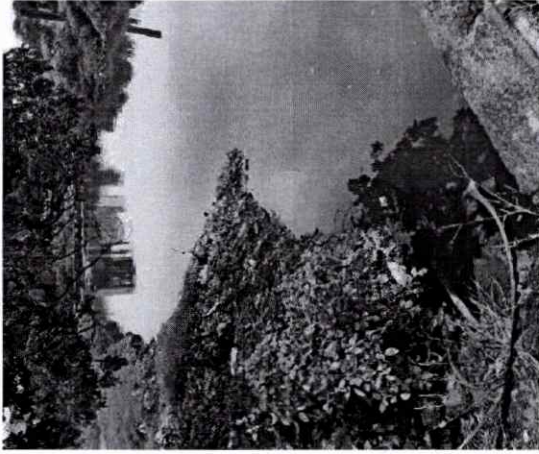
Colour of Sample: No colour





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3/16

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

Sampling point R20: Random nallah 4, Jeans wash area, Ambernath



Sampling was done on nallah which empties in to Waldhuni 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, Ambernath

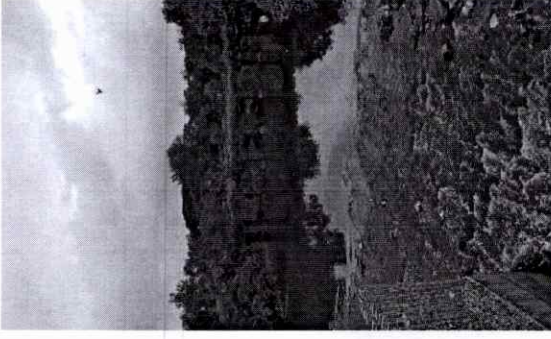


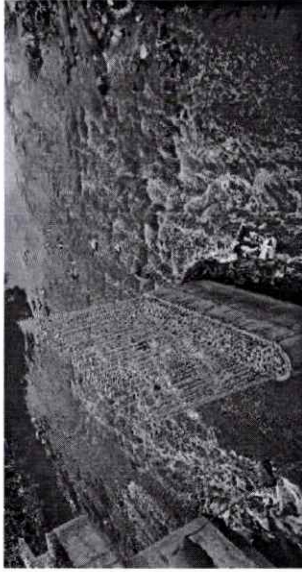
Sampling was done on nallah which empties in to Waldhuni river

Site Description: Black water flowing with no solid waste.

Colour of Sample: Grey

Sampling point R22 & R24: Waldhuni River (Shahad Bridge, Shahad)





Sampling was done on Waldhuni 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



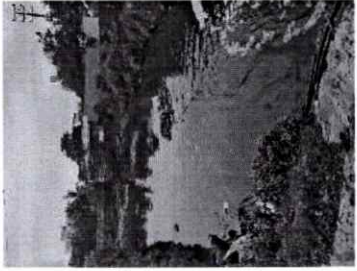


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Nallahs and areas visited during the site visit



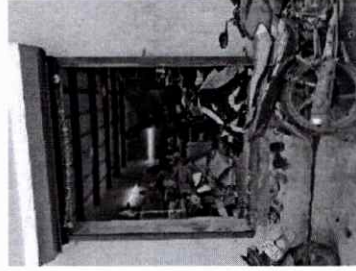
Khemani nallah meeting Ambika nallah



Ambika nallah, Ulhasnagar



Nallah passing through Dharmaji Patil area, Ulhasnagar



Jeans stitching work inside Dharmaji Patil area, Ulhasnagar

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कार्यकारी अभियंता, ठाणे पाटबंधारे विभाग, कळवा (ठाणे)

सहकार विद्यालयासमोर, जुना मुंबई-पुणे महामार्ग, कळवा (ठाणे) ४००६०५

दूरध्वनी क्रमांक :- ०२२-२५३००६६४

Email:- eetmidkalwa@gmail.com

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कार्यकारी अभियंता

जा.क्र.ठापावि/प्रशा-४/१६५०/२०२४

दिनांक :- १०/१०/२०२४

ANNEXURE-A.4

प्रति,

१. मा.आयुक्त, कल्याण डोंबिवली महानगरपालिका, कल्याण
२. मा.आयुक्त, उल्हासनगर महानगरपालिका, उल्हासनगर
३. मा.मुख्यधिकारी, अंबरनाथ नगर परिषद, अंबरनाथ.
४. मा.मुख्यधिकारी, कुळगाव बदलापूर नगर परिषद, बदलापूर.

विषय:- "स्वातंत्र्यांच्या अमृत महोत्सव" अंतर्गत "चला जाणुया नदीला" अभियान

- संदर्भ :-
१. शासन निर्णय पर्यटन व सांस्कृतिक कार्य विभाग क्र. संकिर्ण ८२२२/ प्र.क्र.२७६/सा.का.४ दि. ३०/०९/२०२२
 २. शासन निर्णय पर्यटन व सांस्कृतिक कार्य विभाग क्र. संकिर्ण ८२२२/ प्र.क्र.२७६/सा.का.४ दि. १४/१०/२०२२
 ३. डॉ स्नेहल दोंडे, जलनायक, यांनी विश्व नदी दिवस २०२४ निमित्त विविध महानगरपालिका यांचे कार्यक्षेत्रामध्ये केलेली पहाणी.

"स्वातंत्र्यांच्या अमृत महोत्सव" अंतर्गत "चला जाणुया नदीला" हा उपक्रम शासनामार्फत राबविण्यात येत आहे. सदर अभियानासंदर्भात नदीच्या सद्यस्थितीत चांगला बदल घडवून आणणे तसेच नदीची प्रवाहितता सुरु करून त्यात अखंडता राहिल याची काळजी घेणे व त्यासाठी आवश्यक ते स्त्रोतांचा वापर करणे आवश्यक आहे.

उपरोक्त संदर्भिय विषयान्वये, उल्हास नदी व वालधुनी नदी आपल्या महानगर पालिका /नगर परिषद क्षेत्रातून जात असून सदर नद्यांना महानगर पालिका /नगर परिषद क्षेत्रातील अनेक सांडपाणी नाल्यांवर कोणतीही प्रक्रिया न करता थेट नाल्यांतील सांडपाणी नदीमध्ये सोडण्यात आले आहे.

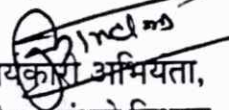
तसेच नद्यांच्या /नाल्यांच्या किनारी मोठ्या प्रमाणात घन कचरा टाकण्यात येत आहे. त्यामुळे नदीतील पाण्याच्या मोठ्या प्रमाणात प्रदुषण होत आहे. तसेच महानगर पालिका /नगर परिषद क्षेत्रातील नदी/ नाल्यावर सिमेंट काँक्रीटचे अडथळे तयार करून नदीच्या प्रवाहात बदल करण्यात आल्याचे निदर्शनास येत आहे. नदीच्या किनारी वाहणे धुणे, कपडे धुणे, आंघोळ करणे तसेच कारखान्यातून निघणारी रसायने, प्लास्टिकचा वाढता वापर, या सारख्या अनेक कारणांमुळे नदीचे पाणी प्रदुषित होत आहे. त्यामुळे नदीपात्रात मोठ्या प्रमाणात जलपर्णी निर्माण होत आहे.तसेच नदी /नाल्यां किनारी अवैध बांधकामे/ घाट होत आहेत.

याकरीता आपल्या महानगर पालिका /नगर परिषद क्षेत्रातील सांडपाण्यावर प्रक्रिया करून नदीपात्रात सोडण्यात यावे. तसेच नद्यांच्या प्रवाहात असलेली अडथळे/ बांधकामे काढून नदीचा प्रवाह पूर्ववत करावा. दैनंदिन

मानवी कार्यामुळे होणारे जल प्रदुषण थांबविणेकरिता ठिकठिकाणी बॅरेगेट, फलक लावावेत. नदी /नाल्यां किनारी अवैध असलेली बांधकामे/घाट निश्कासित करण्याबात आपल्या स्तरावरून संबधितांस निर्देश देण्यात यावेत, हि विनंती.

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स्वातंत्र्यांच्या अमृत महोत्सव" अंतर्गत "चला जाणुया नदीला" या अभियांतर्गत सदर पत्राच्या अनुषंगाने नदीच्या सवर्धनाकरिता आवश्यक ती उपाय योजना व कार्यवाही करण्यात यावी. याबाबत आपल्या विभागाकडून करण्यात आलेल्या उपाय योजना व कार्यवाहीबाबत या कार्यालयास अवगत करावे, हि विनंती.


कार्यकारी अभियंता,
ठाणे पाटबंधारे विभाग,
कळवा-ठाणे.

- प्रत:- मा. अधीक्षक अभियंता, ठाणे पाटबंधारे मंडळ, ठाणे, सह सदस्य सचिव, चला जाणुया नदीला अभियान यांचे माहितीसाठी सविनय सादर.
- प्रत:- उप वनसंरक्षक, ठाणे वनविभाग, ठाणे, सदस्य सचिव, चला जाणुया नदीला अभियान यांचे माहितीस्तव.
- प्रत:- उपप्रादेशिक अधिकारी, महाराष्ट्र प्रदुषण नियंत्रण मंडळ, कल्याण यांचे माहितीसाठी व पुढील कार्यवाहीसाठी.
- प्रत:- डॉ स्नेहल दोंडे, जलनायक, चला जाणुया नदीला अभियान यांचे माहितीस्तव.



TRANSLATION COPY OF ANNEXURE-A.4

English translation of original document in Marathi

**EXECUTIVE ENGINEER, THANE IRRIGATION
DEPARTMENT, KALWA (THANE)**

Opp. Sahakar School, Old Mumbai-Pune Highway, Kalwa (Thane) 400605

Tel: 022 25300664

Email:

eetmidkalwa@gmail.com

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OUT.NO.TPV/PRASHA-4/4650/2024
10.10.2024

Date:

To,

1. Hon'ble Commissioner, Kalyan Dombivali
Municipal Corporation, Kalyan.
2. Hon'ble Commissioner, Ulhasnagar Municipal
Corporation, Ulhasnagar.
3. Hon'ble chief Officer, Ambernath Municipal
Council, Ambernath.
4. Hon'ble Chief Officer, Kulgaon Badlapur
Municipal Council, Badlapur.

Subject: Mission "Let us Know the River"
under "Diamond Jubilee of Freedom
Festival"

Reference: 1. Government GR Tourism &
Cultural Affairs Dept. No. Misc 8222/
Pra. Kra. 276/ S.K.4 dt. 30.09.2022.

2. Government GR Tourism & Cultural
Affairs Dept. No. Misc 8222/ Pra.
276/S.K. 4 dt. 14.10.2022.

3. Survey conducted by Dr. Snehal Donde,
Jala Nayak, in the areas of various
Municipal Corporations on the occasion
of "International River Day 2024".

The mission "Let us Know the River" under
"Diamond Jubilee of Freedom Festival" is being
celebrated by the Government. The mission aims at
bringing reforms in the present condition of the river,
to ensure uninterrupted flow of the river and to
maintain its stream.



Ulhas River and Valdhuni River are passing through the areas of our Municipal Corporation / Municipal Council. It is observed that the wastewater from several drainage canals is directly released in these rivers without treatment.

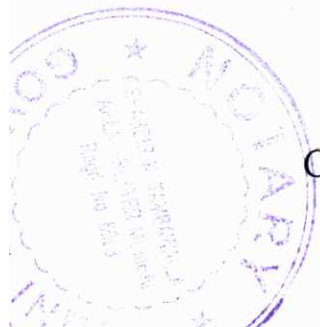
Further, solid waste also is dumped on the banks of the rivers / canals in huge quantity causing serious pollution of the water. It is also observed that cement concrete barricades have been constructed on the rivers / canals in the areas to divert the course of the river. Bathing in the river, releasing chemicals into the water, increasing use of plastic, and such several bad practices are polluting the river water and generating weeds in large scale. Illegal structures / jetties are also being constructed on the banks of rivers / side of canals.

Therefore, it requested to get the wastewater generated in the areas of your Municipal Corporations / Municipal Councils, processed before releasing it into the river water. Also get removed the barricades / structures causing obstructing in the river stream to restore the watercourse. Signposts, boards also can be displayed for avoiding water pollution caused by human activities. You are also requested to issue directions to the concerned at your level to remove the structures / jetties which are illegally constructed on the banks of rivers / canals.

You are requested to take necessary measures and take action for conservation of sanctity of rivers under Mission "Let us Know the River" under "Diamond Jubilee of Freedom Festival", and also apprise this office about the measures and steps taken by your offices.

Sd/-
Executive Engineer
thane Irrigation
Department
Kalwa – Thane.

Copy to: Hon'ble Superintending engineer, Thane
Irrigation Department, Thane, Jt. Member



Secretary, for information.

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Copy to: Dy. Conservator of Forest, Thane Forest
Department, Thane, Member Secretary, for
information.

Copy to: Dy. Regional Officer, Maharashtra
Pollution Control Board, Kalya, for
information and further necessary action.

Copy to: Dr. Snehal Donde, Jala Nayak, for
information.

TRUE COPY
ADVOCATE



ANNEXURE - A.5

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ठाणे महानगरपालिका, ठाणे

प्रदूषण नियंत्रण विभाग

जा.क्र.ठामपा/प्रनिक/२६७/२४-२५

दिनांक : ०७/०८/२०२४

इतिवृत्तांत

विषय : "चला जाणुया नदीला" या अभियानाच्या अनुषंगाने जिल्हास्तरीय तिसरी बैठक दिनांक २४.०७.२०२४ रोजीचे इतिवृत्तांत.

स्थळ : स्थायी समिती सभागृह, तिसरा मजला, ठाणे महानगरपालिका, मुख्यालय

सदर सभेस कल्याण डोंबिवली महानगरपालिका, भिवंडी निजामपुर महानगरपालिका, उल्हासनगर महानगरपालिका, कुळगाव बदलापूर नगरपरिषद, अंबरनाथ नगरपरिषदमधील खालीलप्रमाणे अधिकारी उपस्थित होते. मुख्य पर्यावरण अधिकारी यांनी "चला जाणुया नदीला" या अभियानामध्ये सर्व संबंधितांचे स्वागत केले.

अ.क्र	अधिकार्यांचे नाव	पदनाम
१.	श्री. प्रशांत रोडे	अतिरिक्त आयुक्त, ठामपा
२.	अनघा कदम	उपआयुक्त, प्रनिक, ठामपा
३.	डॉ.स्नेहल दोंडे	जलनायक आणि नदी समन्वयक
४.	मनिषा प्रधान	मुख्य पर्यावरण अधिकारी, प्रनिक, ठामपा
५.	विद्या सावंत	उप पर्यावरण अधिकारी, प्रनिक, ठामपा
६.	वैशाली पालकर	उप पर्यावरण अधिकारी, ठाणे
७.	अतुल पाटील	उपआयुक्त (घ.क.व्य) कल्याण डोंबिवली मनपा
८.	विनोद पवार	उप नगर अभियंता, पाणी पुरवठा विभाग, ठामपा
९.	सुवर्णा जाधव	महाराष्ट्र प्रदूषण नियंत्रण मंडळ, फिल्ड ऑफिसर
१०.	एस.जे.मुराई	उपअभियंता कल्याण डोंबिवली मनपा
११.	बाजीराव जाधव	उल्हासनगर मनपा
१२.	अनिल आव्हाड	भिवंडी-निजामपूर मनपा
१३.	निलेश चौधरी	भिवंडी-निजामपूर मनपा पर्यावरण विभाग
१४.	किरण बोडके	सिंचन विभाग, कळवा
१५.	प्रशांत फिरके	उप अभियंता, पाणी पुरवठा विभाग, ठामपा
१६.	प्रशांत म्हात्रे	कार्यकारी अभियंता, मलनिःसारण विभाग, ठामपा
१७.	अतुल कुलकर्णी	कार्यकारी अभियंता, पाणी पुरवठा विभाग, ठामपा
१८.	अजित देसाई	कल्याण डोंबिवली मनपा

सदर बैठकीमध्ये खालीलप्रमाणे संस्थानी माहिती सादर केली व त्याबाबत प्रो.स्नेहल दोंडे यांनी कामाच्या पुर्ततेबाबत मुद्दे उपस्थित केले.

D://चला जाणुया नदीला/ इतिवृत्तांत २४.०७.२०२४



मनपा सादरीकरण/माहिती	प्रो.स्नेहल दौंदे यांचे कार्यवाहीचे मुद्दे
<p>• ठाणे महानगरपालिका</p> <p>ठाणे महानगरपालिकेच्या खाडी किनारा सुशोभिकरणाचे प्रकल्पाचे (Water front Beautification) सादरीकरण केले.</p> <p>सदर सुशोभिकरणामुळे खाडी किनाऱ्याचे संवर्धन, कांदळवनाचे संरक्षण, याप्रकल्पामध्ये अस्तित्वातील सर्व कांदळवनाचे संरक्षण करून नागरीकांना मनोरंजनाचे ठिकाण प्राप्त झाले. अनधिकृत रित्या होत असलेल्या भरण्णी, थांबविली गेली.</p>	<p>a. सदर प्रकरणी प्रो.स्नेहल दौंदे यांनी सदर प्रकल्पामुळे जल प्रदूषण नियंत्रित झाले, जैवविविधता वाढली, या बाबींसाठी कॉलेजचे सहकार्य प्रकल्प हाती घ्यावे, असे सुचविले जेणेकरून प्रत्येक कॉलेज टिमला एकेक जागा दिल्याने सातत्याने वर्षानेवर्ष डेटा गोळा होत जाईल तसेच त्याबाबतची Monitoring हि होईल, अशा सुचना केल्या.</p> <p>b. कोपरी येथील Water Front Beautification मध्ये SBT Technology चा वापर करून सांडपाणी प्रक्रिया करण्याबाबत सुसाध्यता अहवाल तयार करावा. प्रक्रिया केलेल्या सांडपाण्याचा पुर्नवापर करण्यासाठी कृती आराखडा द्यावा.</p> <p>c. पुढील बैठकीस आरोग्य व शिक्षण विभाग प्रतिनिधी यांना बोलवावे.</p>
<p>• भिवंडी निजामपुर महानगरपालिका</p> <p>भिवंडी निजामपुर महानगरपालिकेने सादरीकरण केले. त्या अंतर्गत त्यांनी STP, नाला, तलाव याबाबत माहिती दिली.</p>	<p>a. वऱ्हाला देवी तलाव जेथून ५ MLD पिण्याचे पाणी घेण्यात येते त्या ठिकाणी कचरा असल्याने तिथे त्वरीत साफसफाई करावी. दिवानशहा या तलावाचे इतर पुर्नरूज्जीवनाचे काम हाती घ्यावे. तिलक घाट व वऱ्हाला देवी तलाव येथून गणपती मुर्ती विसर्जनाबाबत बंदी करावी. सदर ठिकाणी कृत्रिम तलाव व्यवस्था करावी. वऱ्हाला देवी तलावामध्ये तरण तलाव क्रिकेट ग्राऊंड, टेनिस कोर्स, गणेश घाट यासारखी कामे सुरु असलेली आढळली आहेत. तरी त्याबाबत त्वरीत कार्यवाही सुरु करावी. CCTV व Information Board वऱ्हाला देवी तलावाजवळ लावावेत.</p> <p>b. ०८STP पैकी ०५STP चे काम सुरु आहे. इदगाह स्लॉटर हाऊस येथील STP चे कामकाज पूर्ण करावे.</p> <p>c. ओसवाल वाडी, अंजूर फाटा, नारपोली येथील Textile युनीटचे सांडपाणी कामवारी नदीमध्ये जात आहे. तरी त्याबाबत MPCB बरोबर समन्वयाने कारवाई सुरु करावी.</p> <p>d. कामवारी नदी असलेला काठी असलेल्या Slaughter House Area जवळ मोठ्या प्रमाणात गाळ असून तो Irrigation विभागा समवेत काढणे व प्रदूषित पाणी नदीत जाणे थांबविणेचे काम तातडीने हाती घ्यावे.</p>
<p>• कल्याण डोबिंवली महानगरपालिका</p> <p>कल्याण डोबिंवली महानगरपालिकेने सादरीकरण केले.</p>	<p>a. मोहने पंपीन स्टेशन येथे CCTV व डिस्पे बोर्ड येथे उभारणी करावी. नाल्याचे पाणी नदीत जात आहे. तीथे प्रक्रिया करावी. गांधीनगर ब्रीज येथून सांडपाणी मोठ्या प्रमाणात येते. तरी त्याचे प्रक्रियेसाठी Soil Bio Technology प्रयोजल सुसाध्यता अहवाल तयार करावा. आधारवाडी ठिकाणाकडून अर्धवट प्रक्रिया केलेले सांडपाणी नदीमध्ये जात आहे. त्याबाबत त्वरीत उपाययोजना करावी. STP Inlet व Outlet चे पाणी नमूना NABL लॅब मधून</p>

	<p>तपासण्यात यावा. STP चे सांडपाणी प्रक्रिया करण्यासाठी Soil Bio Technology पद्धत वापरावी. सेंट्रल पार्कमध्ये सदर कामाचे एकत्रितकरण करण्याबाबत सुसाध्यता अहवाल तयार करावा.</p> <p>b. कल्याण डोंबिवली भागामध्ये उल्हास नदी मध्ये मोठ्या प्रमाणात MIDC कडून प्रदूषण होत आहे. त्याबाबतचा अहवाल NIO संस्थेकडे प्रलंबित आहे. तरी त्याबाबत पुर्तता करावी.</p>
<p>• उल्हासनगर महानगरपालिकेस प्रो.स्नेहल दोंडे यांनी खालील प्रमाणे सुचना दिल्या.</p>	<p>a. वालधूनी नदीमध्ये उद्यान, मॅरेज हॉल, हॉटेल्स इतर अनधिकृत बांधकामे सिंचन (Irrigation) विभागाच्या मान्यते विना सुरू आहेत. त्याबाबत त्वरीत कार्यवाही व्हावी. Soil Bio Technology नैसर्गिक तत्वावर आधारीत असलेल्या प्रक्रिया केंद्र उभारणीस सुरूवात करावी. खेमाणी नाल्याचे पाणी उल्हास नदीमध्ये जात असल्याने प्रक्रिया करण्याची कार्यवाही सुरू करावी.</p> <p>b. प्रक्रिया केलेल्या सांडपाण्याचा पुर्नवापर, विहिरी, कुंपनलिका यांचा पुर्नभरण प्रक्रिया सुरू करावी.</p> <p>c. नदी प्रदूषण नियंत्रण जनजागृतीसाठी शाळांचा सहभाग घ्यावा व वेळोवेळी अहवाल सादर करावा.</p>
<p>• कुळगाव बदलापूर महानगरपालिकेस प्रो.स्नेहल दोंडे यांनी खालील प्रमाणे सुचना दिल्या.</p>	<p>a. नदी पत्रामध्ये वलव्हती व हेंद्रेपाडा येथील नाल्याचे पाणी जात असल्याने सांडपाणी प्रकल्पा केंद्र उभारणीचे काम सुरू करावे.</p> <p>b. उल्हास नदीमध्ये मोहन बिल्डर्स यांनी सिंचन (Irrigation) विभागाची न घेता बांधकाम केल्याचे निदर्शनास आलेले आहे. तरी त्याबाबत त्वरीत कार्यवाही करावी.</p> <p>c. घनकचरा व्यवस्थापनाचे काम शास्त्रोक्त पद्धतीने करावे.</p>
<p>• अंबरनाथ महानगरपालिकेस प्रो.स्नेहल दोंडे यांनी खालील प्रमाणे सुचना दिल्या.</p>	<p>a. शिवमंदिरा जवळ वालधूनी नदीचे गोविंद पूलाजवळ केलेले कॉक्रीटचे काम त्वरीत निष्काषित करावे. सिंचन (Irrigation) विभागातर्फे वालधूनी नदीचे Demarcations प्राप्त करावा. तसेच घाट तयार करण्याचे काम थांबवावे. शिवमंदिराच्या कामाबाबत तज्ञांची बैठक घ्यावी. STP बाबत Soil Bio Technology सोल्युशन प्रक्रिया केंद्र उभारणीबाबत सुसाध्यता अहवाल सादर करावा.</p> <p>b. लोक नगरी शाळेजवळ व पेट्रोल पंपाजवळील टेक्साईल युनीटला त्वरीत नोटीस देऊन निष्कासित करावेत.</p> <p>c. RHW योजनांची अंमजबजावणी करावी.</p>

सर्व अधिकाऱ्यांनी नमुद कामाची पुर्तता अहवाल १ महिन्यास सादर करावा व सक्षम अधिकाऱ्यासह पुढील बैठकीस उपस्थित रहावे.

(प्रशांत रोडे)
अतिरिक्त आयुक्त
ठाणे महानगरपालिका, ठाणे

प्रत सादर : मा.आयुक्त सो.यांचेकडे माहितीसाठी सादर

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Translation COPY OF ANNEXURE-A.5

ENGLISH TRANSLATION

330

THANE MAHANAGARPALIKA, THANE

Pollution Control Department

JA.KR.THAMPA/PRNIK/267/24-25

Date: 07/08/2024

MINUTES

Subject : Minutes of the District-level Third Meeting held on 24.07.2024 with reference to "Chala Januya Nadila" Campaign.

Venue : Standing Committee Sabhagruh, Third Floor, Thane Mahanagarpalika, Head Office.

The following officials from Kalyan Dombivli Mahanagarpalika, Bhiwandi Nizampur Mahanagarpalika, Ulhasnagar Mahanagarpalika, Kulgaon Badlapur Nagarparishad, Ambarnath Nagarparishad were present in the said meeting. The Chief Environment Officer welcomed all in the "Chala Januya Nadila" Campaign.

Sr.No.	Name of Official	Designation
1.	Shri Prashant Rode	Additional Commissioner, TMP
2.	Anagha Kadam	Deputy Commissioner PRNIK, TMP
3.	Dr. Sneha Donde	Jalnayak and River Coordinator
4.	Manisha Pradhan	Chief Environment Officer, PRNIK, TMP



5.	Vidya Sawant	Deputy Environment Officer, PRNIK, TMP
6.	Vaishali Palkar	Deputy Environment Officer, Thane
7.	Atul Patil	Deputy Commissioner (S.W.M.) Kalyan Dombivli MNP
8.	Vinod Pawar	Deputy City Engineer, Water Supply Department, TMP
9.	Suvarna Jadhav	Maharashtra Pollution Control Board, Field Officer
10.	S. J. Murai	Deputy Engineer, Kalyan Dombivli MNP
11.	Bajirao Jadhav	Ulhasnagar MNP
12.	Anil Avhad	Bhiwandi-Nizampur MNP
13.	Nilesh Chaudhari	Bhiwandi Nizampur MNP Environment Department
14.	Kiran Bodke	Irrigation Department, Kalwa
15.	Prashant Firke	Deputy Engineer, Water Supply Department TMP
16.	Prashant Mhatre	Executive Engineer, Sewage Department. TMP
17.	Atul Kulkarni	Executive Engineer, Water Supply Department, TMP
18.	Ajit Desai	Kalyan Dombivli MNP

In the said meeting the following Institutions submitted information and in that regard Prof. Snehal Donde raised the issue about completion of work.

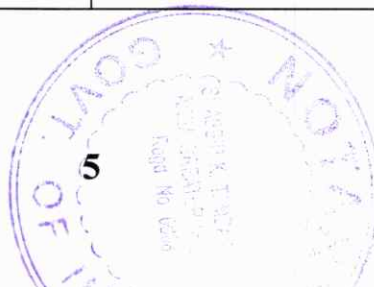
MNP's presentation / information	Prof. Snehal Donde's issue for action
<p>• Thane Mahanagarpalika Presented the Water front Beautification Project of Thane Mahanagarpalika.</p> <p>Due to the said beautification with the conservation of Waterfront, protection of Mangroves, protection</p>	<p>a. In this matter Prof. Snehal Donde suggested that due to said Project water has been controlled, bio-diversity has increased, and for this purpose College Co-operation Project should be taken in hand due to which if different locations are given to each</p>

<p>of all existing Mangroves in the Project an amusement site has been obtained. The filling being done unauthorizedly has been stopped.</p>	<p>College team data will be collected continuously on yearly basis as also monitoring will be done in this behalf.</p> <p>b. Feasibility Report should be prepared in respect of Waer Front Beautification by use of SBT Technology and treatment of effluent water. For recycling the treated water action plan be given.</p> <p>c. In the next meeting representatives from the Health and Education Department should be invited.</p>
<p>• Bhiwandi Nizampur Mahanagarpalika</p> <p>Bhiwandi Nizampur Mahanagarpalika made presentation. Under that they gave information about STP, Nala, Talao.</p>	<p>a. As there is garbage at Varhala Devi Talao location from which 5 MLD drinking water is taken, it should be cleaned immediately. Other rejuvenation work of Divanshah Talao should be taken in hand. Immersion of Ganpati idols should be stopped at Tilak Ghat and Varhala Devi Talao. Arrangement of artificial pond should be done there. It is found that activities like swimming pool, cricket ground, tennis court, Ganesh Ghat have been started at the Devi Talao. Therefore immediate action should be taken in this behalf. CCTV and Information Board should be installed near the Varhala Devi Talao.</p> <p>b. 05 STP out of 08 STP are working. STP work at Idgah Slaughter House shod be completed.</p>

	<p>c. Effluent water from the textile units at Ostwal Wadi, Anjur Fata, Narpoli are being discharged into the Kamvari River. In this regard therefore action should be started in coordination with MPCB.</p> <p>d. Near the Slaughter House Area on the bank of Kamvari River there is sludge on a large scale. With the Irrigation Department it should be removed and work for stopping the flow of polluted water into the River should immediately be taken up.</p>
<p>• Kalyan Dombivli Mahanagarpalika Kalyan Dombivli Mahanagarpalika made presentation.</p>	<p>a. CCTV and Display Board should be erected at Mohone Pumping Station. It should be treated there. Effluent water from Gandhinagar Bridge is flowing on a large scale. Therefore for its treatment Feasibility Report of Soil Bio Technology Prayojal should be prepared. Partly treated water from Aadharwadi is entering the River. Immediate measures should be taken in this regard. Samples of STP Inlet and Outlet water should be got tested from the NABL Lab. For treatment of effluent water from the STP Soil Bio Technology process should be used. Feasibility Report should be prepared for consolidation of the said work.</p> <p>b. In Kalyan Dombivli region Uhas River is being pollute by MIDC on a large scale. The report in this</p>



	<p>regard is pending with NIO Institution. Compliance should be done in that behalf.</p>
<ul style="list-style-type: none"> • Prof. Snehal Donde has given following instructions to Ulhasnagar Mahanagarpalika. 	<ol style="list-style-type: none"> Near Valdhuni River garden, marriage hall, hotels and other unauthorized constructions have been done without approval of the Irrigation Department. Immediate action should be taken in this behalf. The process for setting up a Treatment Centre based on the natural principle of Soil Bio Technology should be initiated. Process should be started for re-use of the effluent water, replenishment of wells, kumpanlikas. Participation of schools should be taken for public awareness about control of water pollution and reports submitted from time to time.
<ul style="list-style-type: none"> • Prof. Snehal Donde has given following instructions to Kulgaon Badlapur Mahanagarpalika. 	<ol style="list-style-type: none"> As water from Valvhati and Hendrepada is entering the river bed work for erection of Effluent Water Project Centre should be initiated. It has come to notice that Mohan Builders have done construction in Ulhas River without permission of Irrigation Department. Therefore immediate action should be taken in this regard. Solid Waste Management work should be done scientifically.



<ul style="list-style-type: none"> • Prof. Snehal Donde has given following instructions to Ambarnath Mahanagarpalika. 	<ul style="list-style-type: none"> a. Concrete work done near Govind Pool of Valdhuni River near Shivmandir should immediately be evicted. Demarcations of Valdhuni River should be obtained from the Irrigation Department. The work of preparing Ghat should also be stopped. As regards work of Shivmandir meeting of Experts should be held. As regards STP Feasibility Report should be submitted for setting up Soil Bio Technology Solution Treatment Centre. b. The textile units near Lok Nagari School and near Petrol Pump should be evicted by giving immediate notice. c. Implementation of RHW Scheme should be done.
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All officials should submit compliance report of the mentioned works within 1 month and should remain present with the competent officer at the next meeting.

Sd/-

(Prashant Rode)

Additional Commissioner

Thane Mahanagarpalika, Thane

TRUE COPY
ADVOCAT

Copy submitted to : Hon'ble Commissioner So. for information.



ANNEXURE - A.6

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OK २९५२/५१.३.१८.३१.३१८
13/1/2025

Application under Right to Information act, 2005

To,
The Public Information Officer
City Engineer office/CO office
Ambernath Municipal Council



Name of applicant: Atanu Bhaumik

Correspondence address & Phone no: 001, Building no. 1, Waterford, Panvelkar classic, Navare Nagar, Panvelkar greencity, Ambernath East. Thane Dist Pin 421501.

Phone no. 8108107567 email id atanu.bhaumik@gmail.com

Subject of Information required: - Waldhuni river concretization for Ghat construction work

Period of Information required: 2019 -2024

Particulars of Information required: Provide minutes/remarks/reports/records/ GR/ policy papers related to;

1. Hydrology and flood plain map of Waldhuni river
2. Waldhuni river Shiv Mandir Temple Ghat construction work proposal and design copy
3. Waldhuni river Ghat construction tender details, work order and environment clearance certificate
4. All approvals obtained from various authorities for the Ghat construction work in Waldhuni river bank at Shiv Mandir temple vicinity in Ambernath
5. Hydraulic and hydrology survey work reports of the site
6. work order of Construction of diversion partition made in river to put river water in pipeline
7. NOC/approval from Archaeological survey department and norms under which it is allowed
8. NOC of North Konkan Irrigation department, Kalwa, Thane
9. Under which Land of Law the concretization of Waldhuni river bed is undertaken at Shiv Mandir premises
10. List of expert committee who has sanctioned the Ghat Construction project and basis on which respective departments authorised
- 11- Geotechnical Mapping Report of GSDA for the said location.

Information to be made available: any means

Name of applicant: Atanu Bhaumik

Signature:

Place: Ambernath

Date: 13 Jan, 2025

TRUE COPY

AMBERNATH

आत कोणतेही बांधकाम न होण्याच्या दृष्टान्त
पुररक्षणी आखणी करण्याबाबत.

महाराष्ट्र शासन,
पाटबंधारे विभाग,

शासन परिपत्रक क्र. एफडीडब्ल्यू-१०८९/२४३/८९/सि.व्य.(कामे) मंत्रालय, मुंबई-३२.

दिनांक २५/९/१९८९.

संदर्भ :- शासन परिपत्रक क्र. एफडीडब्ल्यू-१०८९/२४३/८९/सि.व्य.(कामे) दि. २/९/१९८९

परिपत्रक

पावसाळ्यात झालेल्या अतिवृष्टी व पूर यामुळे काही वेळा शहरांमध्ये गावांमध्ये नदी किनाऱ्यावरील वरांची मोठ्या प्रभारावर पडझड होते. पडझड झालेल्या घरांच्या पुरबांधणी कार्यक्रम महसूल व ग्राम विभागातर्फे हाती घेतांना संबंधित जिल्हाधिकार्यांकडून पाटबंधारे विभागाच्या अधिकाऱ्यांकडे संबंधित शहरात/गावात पुररक्षा आखून देण्याबाबत मागणी आल्यास संबंधित शहरात/गावात पुररक्षा आखून देण्याबाबत पाटबंधारे विभागाच्या अधिकाऱ्यांनी कशा प्रकारे कार्यवाही करावी याबाबत सूचना संदर्भाधीन परिपत्रकान्वये देण्यात आलेल्या आहेत. आता पुरक्षेत्र (Flood Zone) व संबंधीत पुररक्षा यांच्या आखणीविषयी तसेच पुरक्षेत्रातील जमिनीच्या वापराबाबत धरणा सुरक्षितता संहिता प्रकरण-६, १९८४ मध्ये दिलेल्या मार्गदर्शक सूचनांच्या आधारे

खालीलप्रमाणे अधिक सविस्तर खुलासा या परिपत्रकाद्वारे करण्यात येत आहे. त्यामध्ये वापरण्यात आलेले शब्दप्रयोग, जसे की, निषिद्ध क्षेत्र, निषेधक पुररक्षा इ. यापुढे मराठीत वापरात आणावेत.

महत्वाच्या पुररक्षा ह्या मुख्यत्वेकरून दोन प्रकारच्या आहेत. निषेधक पुररक्षा की, ज्या कोणत्याही वर्षी पूर येण्याच्या शक्यतेमुळे बांधकामाचे दृष्टिकोनातून पुरक्षेत्र निषिद्ध ठरवितात. नियंत्रक पुररक्षा ह्या पुर्जन्यमानाचे दृष्टीने कोणत्याही वर्षी (परंतु साधारण १०० वर्षांत एकदा) ज्या ठिकाणा पर्यंत पूर येऊ शकता तो तलाफ दर्शवितात. म्हणून बांधकामे केली तरी पूर येणारच नाही असे गृहीत न धरता नियंत्रित प्रकारचे बांधकाम या रेषेखाली परंतु निषिद्ध क्षेत्र वगळून करता येईल. ही क्षेत्र व पुररक्षा खालीलप्रमाणे असाव्यात.

अ) निषिद्ध क्षेत्र (Prohibited Zone)

धरणाचे जलाशयातून नियंत्रित पद्धतीने नदीत सोडण्यात येणारा विसर्ग तसेच धरणाखालील मुक्त पाणलोट क्षेत्रामुळे येणारा पावसाळ्यातील विसर्ग वाहून जाण्यात जे नदीचे मुख्य पात्र व त्याचे लगतचे क्षेत्र आवश्यक असते त्यांना निषिद्ध क्षेत्र म्हणावे. हे प्रत्यक्षात ठरवितांना सरासरीने २५ वर्षांतून एकदा या धारवारितेने (Frequency) येणारा पुरविसर्ग किंवा प्रस्थापित नदी पात्राच्या विसर्ग क्षमतेच्या वीडपेट विसर्ग यातील जास्तीचा विसर्ग वाहून नेण्यासाठी नदीचे पात्र व त्यालगतचे क्षेत्र आवश्यक असेल ते क्षेत्र निषिद्ध क्षेत्र म्हणून अशा क्षेत्रांचा उपयोग फक्त मोकळ्या जमिनीच्या स्वरूपात उदा. उद्याने, खेळाची मैदाने किंवा हलकी पिके घेणे (ज्या ठिकाणी पिके घेण्याचा हक्क पारंपारिक वापरामुळे प्रस्थापित झाला आहे अशा ठिकाणी) अशासारख्या कारणासाठी केला जावा.

ब) निषेधक पुररक्षा (Blue Line)

नदीचे दोन्ही तीरांवरील निषिद्ध क्षेत्राची हद्द ठरविणाऱ्या गावाजवळील अशा पुराच्या हिशोवाने जी पाण्याची पातळी येईल तिच्या समतल रेषांना त्या गावातील निषेधक पुररक्षा असे संबोधण्यात यावे.

क) नियंत्रित क्षेत्र (Restrictive Zone)

संकल्पित महत्तम पूर वाहून नेण्यासाठी वरील पेक्षा जास्त पुरक्षेत्राची आवश्यकता लागेल अकल्पित महत्तम पूर प्रवाह हा प्रकल्पाचे संकल्पातील सांडव्यावरून वाहणारा संकल्पित महत्तम पूर विसर्ग व धरणाखालील स्वतंत्र पाणलोट क्षेत्रातून तसाच अपेक्षित पूर विसर्ग यांचेमुळे एकत्रित पुरविसर्ग धरण्यात यावा (ज्या भागात धरण नसेल त्या भागात १०० वर्षांतून एकदा या धारवारितेचा पुरविसर्ग विचारात घेण्यात यावा).

हा संकल्पित महत्तम पूर वाहून नेण्यासाठी लागणाऱ्या क्षेत्रातून निषिद्ध क्षेत्र वगळता धरणाच्या नदीचे दोन्ही तीरांवरील क्षेत्रात नियंत्रित क्षेत्र असे संबोधण्यात यावे. नियंत्रित क्षेत्रातील बांधकामाच्या तळमजल्याच्या जोत्साची पातळी सुरक्षित उंचीपर्यंत असावी, की ज्यामुळे पुरपातळी नियंत्रित क्षेत्रात जास्त भागात उदावयाचे आत अशा इमारतीमधील माणसे इमारत सोडून सुरक्षित ठिकाणी सहजतेने जाऊ शकतील. ही उंची ह्याशी संबंधित स्थानिक अधिकाऱ्यांनी जमिनीचा चढउतार व उपलब्ध रस्त्याचे तलक इ. बाबी विचारात घेऊन ठरविणे अपेक्षित आहे. तसेच इमारतीचे बांधकाम अशा प्रकारचे असावे की, जे स्वयंचित येऊ शकणाऱ्या पुरामुळे कोसळणार नाही.

अशा क्षेत्रातील इमारतीच्या वापराबाबतची बंधने देखील सुस्पष्टपणे विहित असणे आवश्यक आहे हे करताना या क्षेत्रामध्ये येणारा संभाव्य पूर व तसेच पुरामुळे होणारी जीवितानी हानी या घालमतेचे नुकसान टाळण्यासाठी ह्या क्षेत्रातील लोकांना, जनावरांना व वस्तूंना अल्पवधीची पुर सूचना मिळताच हे क्षेत्र तातडीने सोडून सुरक्षित स्थळी जाणे/येणे आवश्यक राहिल. याचा विचार व्हावा.

ड) नियंत्रक पुररक्षा (Red Line)

नदीचे दोन्ही तीरांवरील नियंत्रित क्षेत्राची हद्द ठरविणाऱ्या समतल रेषांना नियंत्रक पुररक्षा म्हणून संबोधण्यात यावे.

वरील बाबींचा विचार करून पुराचा संभाव्य धोका असणाऱ्या शहरांमध्ये गावांमध्ये वरील प्रकारच्या पुररक्षा आखून देण्याबाबत पाटबंधारे विभागाच्या अधिकाऱ्यांनी कार्यवाही करावी. त्याचप्रमाणे वरील पुररक्षासाठी नकाशे तयार करतांनाही धरण सुरक्षितता संहितेच्या प्रकरण ६ मधील सूचनांचे अनुषंगाने कार्यवाही करावी. महाराष्ट्राचे राज्यपाल यांचे आदेशानुसार व नावाने.

(व. ल. थोरात)

शासनाचे सहाय्यक सचिव

Translation COPY OF ANNEXURE-A.7

Regarding marking of flood line to restrict any type of construction
inside.

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**STATE GOV. OF MAHARASHTRA,
IRRIGATION DEPARTMENT,**

Government Circular No.: FDW-1089/243/89/Sin Vya (Work)

Mantralaya, Mumbai-32

Dat. 21/9/1989.

Ref.: Government Circular No.: FDW-1089/243/89/Sin Vya (Work) Dat.
2/9/1989.

CIRCULAR

Due to heavy rains and floods in rainy seasons, sometimes houses on the riverbanks get seriously damaged in towns and cities. While reconstruction of the damaged houses is undertaken by Revenue and Forest Departments, and when concerned Dist. Collectors demand demarcation of flood lines to Irrigation officers in the affected towns/cities, instructions are given to the Irrigation officers in the referred Circular regarding how to implement the demarcation of flood lines. Now; demarcation of Flood Zones, Flood Lines and land use in the Flood Zones is explained in more details in this Circular as per the guide lines given in the Dam Safety Manual Chapter 8-1984. The phrases used in this circular, like Prohibited Zone (Nishiddha Kshetra), Prohibitive Flood Line (Nishedhak Poor Resha) etc. shall be henceforth used in Marathi.

Mainly flood lines are of two types. Prohibitive Flood Lines, which earmark the area prohibited for any construction due to probability of floods any year. And Restrictive Flood Lines, which earmark the levels of floods which may come any year (but generally once in 100 years). Therefore buildings can be constructed below this line but excluding Prohibited Zone, with certain restrictions without assuming that floods



will not come though buildings are constructed. These Zones and the Flood Lines should be as mentioned below:

A) Prohibited Zone:

Main riverbed and the area on both banks required to carry the controlled discharge from dam and the flow from free catchment area below the dam should be called as "Prohibitive Zone". While identifying this, flood discharge frequency in average 25 years or one and half times the discharge of the established riverbed carrying capacity, whichever is more and the area on its both banks should be considered as Prohibited Zone. This zone should be left open and can be used for gardens, play grounds or light crops (only where the easement right to take such crops is established).

B) Prohibitive Flood Line (Blue Line):

The level of water on both banks of the river during such floods shall be considered as Prohibitive Flood Line of that particular town identifying the "Prohibitive Zone".

C) Restricted Zone:

More carrying area shall be required to carry maximum possible flood. Maximum flood shall be considered as the maximum discharge from the dam and the free flow on the downstream side of the dam. (Where there is no dam, flood at the frequency of once in 100 years shall be considered.)

The balance area after deducting the Prohibited Zone from this area required to carry the maximum flood shall be considered as Restrictive Zone. Plinth level of the buildings in Restricted Zone shall be sufficiently high so that, occupants shall be able to shift easily to safer places. Concerned local officers are expected to finalise this level after



considering the topography of the ground and levels of the roads. The construction of the buildings should be such that it shall not collapse in the rare floods.

The restrictions on the use of buildings in this zone also should be clear. While doing this, possible flood in this zone and need of fast shifting of the occupants residing in this area at a short notice to avoid loss of life and property should be considered.

D) Restrictive Flood Line (Red Line):

The lines earmarking Restricted on both banks of river shall be called as Restrictive Flood Lines.

After considering the above mentioned points, Irrigation Department officers should mark flood lines in the towns/cities where there is a risk of floods. Also instructions in Chapter 8 of Dam Safety Manual should also be implemented while preparing the maps of flood lines.

At the order and in the name of the Governor, Maharashtra State.

(D. L. Thorat)

Dy. Secretary to Gov.

TRUE COPY
ADVOCATE



पुराचा संभाव्य धोका टाळण्यासाठी पुररेषेच्या आत कोणतेही बांधकाम न होण्याच्या दृष्टीने पुररेषेची आखणी करणे व निषिद्ध व नियंत्रित क्षेत्राचा उपयोग करण्याबाबत मार्गदर्शक सूचना

महाराष्ट्र शासन
जलसंपदा विभाग,
शासन परिपत्रक क्र पूरनि-२०१८/(१८२/२०१८) सि.व्य.(महसूल)
मंत्रालय, मुंबई ४०००३२,
दिनांक:-३ मे, २०१८

वाचावे :- शासन परिपत्रक क्र.एफडीडब्लू -१०८९/२४३/८९/ सि.व्य.(कामे), दि. २.०९.१९८९,
दि.२९.९.१९८९

प्रस्तावना :-

पाटबंधारे विभाग शासन परिपत्रक क्र एफडीडब्लू १०८९/२४३/८९/ सि.व्य (कामे) दि.२.९.१९८९ व दि.२९.९.१९८९ अन्वये पुराचा संभाव्य धोका टाळण्यासाठी पुररेषेच्या आत कोणतेही बांधकाम न होण्याच्या दृष्टीने पुररेषेची आखणी करण्याबाबत सूचना निर्गमित करण्यात आल्या आहेत.

नदीच्या निळ्या पुररेषेच्या आत निषिद्ध क्षेत्रात व लाल पुररेषा व निळी पुर रेषा यांच्यामधील नियंत्रित क्षेत्रात शहरांच्या ,गावांच्या, तिर्थक्षेत्र विकासाच्या दृष्टीने नदीवर पूल बांधणे,पूलाचे दोन्ही बाजूने पोहोच रस्ते तयार करणे, शहराच्या विकास आराखडयानुसार नदीच्या बाजूने जाणारे रस्ते, उद्याने व जॉर्गींग ट्रॅक तयार करणे तसेच पुरसंरक्षक कामांतर्गत नदीच्या तीरालगत पुर संरक्षक भित बांधणे,घाट बांधणे या शिवाय गॅस पाईपलाईन क्रॉसिंग करणे ,विद्युत वाहिनी क्रॉसिंग करणे, नदीच्या कडेने ड्रेनेज पाईप लाईन टाकणे,मल:निसारण प्रकल्पाचे काम करणे, इ. प्रकारच्या सार्वजनिक स्वरुपाच्या अपरिहार्य कामांसाठी संबंधित शासकीय / निमशासकीय संस्था, स्थानिक स्वराज्य संस्था कडून ना-हरकत प्रमाणपत्रांची वाढती मागणी, जलसंपदा विभागामार्फत राज्यातील विविध नदीनाल्यांवर पूर्ण झालेल्या प्रकल्पांची संख्या व बांधकामाधीन प्रकल्पांची संख्या ,काळानुरूप बदलेले पर्जन्यमानाचे स्वरुप, पूरनियंत्रण व पुराचे अंदाज वर्तवण्याबाबत उपलब्ध अत्याधुनिक यंत्रणा इत्यादी गोष्टींचा एकत्रित पणे विचार करण्याची आवश्यकता निर्माण झाली आहे.

शासन परिपत्रक क्र न्यायप्र -२०१४ प्र.क्र.४२४/२०१४ सि.व्य (म), दि.२.३.२०१५ , अन्वये जलसंपदा विभागामार्फत पूरक्षेत्र व पुररेषा नकाशे व आराखडयांना मान्यता देण्यात येते. तथापि पाटबंधारे विभाग शासन परिपत्रक क्र एफडीडब्लू १०८९/२४३/८९/ सि.व्य (कामे), दि.२.९.१९८९ व दि.२९.९.१९८९ अन्वये नदीच्या निळ्या पुररेषेच्या (Blue Line) आत निषिद्ध क्षेत्रात (Prohibitive Zone) आणि लाल पुररेषा(Red Line) व निळी पुर रेषा(Blue Line) यांच्यामधील नियंत्रित क्षेत्रात(Restrictive Zone) सार्वजनिक सुविधांच्या दृष्टीने आवश्यक नेमकी कोणती अपरिहार्य कामे घ्यावीत याबाबत अधिक स्पष्टता आणण्याच्या दृष्टीने सुधारणा करण्याची बाब शासनाच्या विचाराधीन होती. यादृष्टीने एकत्रित सुधारित / अद्ययावत सूचनांचा समावेश करुन आता खालील प्रमाणे परिपत्रक निर्गमित करण्यात येत आहे.



८. नियंत्रक क्षेत्राचा (Restrictive Zone) उपयोग खालील कारणांसाठीच केला जावा .

i) सार्वजनिक हिताच्या दृष्टीने आवश्यक व अपरिहार्य मलःस्सारण योजना .

ii) सार्वजनिक हिताच्या दृष्टीने आवश्यक व अपरिहार्य सार्वजनिक रस्ते की जेणेकरून सदर रस्त्याची माथा पातळी निळया पूररेषा पातळीच्या वर असेल. सदर पातळी किती वर असावी याची निश्चिती संबंधित Indian Road Congress Code मधील तरतुदीनुसार करावी.

iii) सार्वजनिक हिताच्या दृष्टीने आवश्यक व अपरिहार्य पाणीपुरवठा पाईपलाईन, गॅस पाईप लाईन , ड्रेनेज पाईपलाईन की जेणेकरून सदर पाईप लाईन भूमिगत असावी व त्यामुळे नियंत्रित क्षेत्रातील नदीच्या काटछेदात कोणताही अडथळा येऊन त्यात बदल होणार नाही.

iv) नियंत्रित क्षेत्रातील बांधकामांच्या तळमजल्याच्या जोत्याची पातळी लाल पूररेषा पातळीच्या वर सुरक्षित उंचीपर्यंत असावी की ज्यामुळे पूरपातळी नियंत्रक क्षेत्रात जास्त वाढण्यापूर्वी तेथील नागरिकांना सुरक्षितस्थळी सहजपणे जाता येईल. तसेच या क्षेत्रामध्ये येणारा संभाव्य पूर व तसेच पुरामुळे होणारी जिवित हानी व मालमत्तेचे नुकसान टाळण्यासाठी ह्या क्षेत्रातील लोकांना, जनावरांना व वस्तुंना अल्पावधीची पूरसूचना मिळताच हे क्षेत्र तातडीने सोडून सुरक्षित स्थळी जाणे शक्य होईल.

९. उपरोक्त मुद्दा क्र. ८ मध्ये नमूद उपयोगांमुळे नदी प्रवाहात कोणताही अडथळा येणार नाही , नदीची वहनक्षमता कमी होणार नाही व नदीच्या काटछेद क्षेत्रात कोणताही बदल होणार नाही , याची दक्षता घेण्यात यावी . प्रवाहाला अडथळा आणणारे बांधकामाविरुद्ध मुख्य अभियंता कारवाई करण्यास सक्षम असतील. निषिध (Prohibitive Zone) व नियंत्रित क्षेत्रात (Restrictive Zone) करावयाच्या सदर सार्वजनिक कामांच्या सुरक्षिततेची संपूर्ण जबाबदारी संबंधित विभागाची / स्थानिक स्वराज्य संस्थेची असेल व संभाव्य पुरामुळे होणाऱ्या जिवित व वित्त हानीस संबंधित विभाग/ स्थानिक स्वराज्य संस्था जबाबदार राहिल व त्याअनुषंगाने उद्भवणाऱ्या न्यायालयीन प्रकरणास संबंधित विभाग / स्थानिक स्वराज्य संस्था जबाबदार असेल.

१०. वरील बाबींचा विचार करून पुराचा संभाव्य धोका टाळण्यासाठी व निषिध व नियंत्रित क्षेत्राची निश्चिती करण्याच्या दृष्टीने आवश्यक पूररेषा आखून देण्याबाबत जलसंपदा विभागाकडे जिल्हाधिकारी , स्थानिक स्वराज्य संस्था अथवा अन्य विभागाकडून मागणी प्राप्त झाल्यास जलसंपदा विभागाच्या संबंधित क्षेत्रिय मुख्य अभियंता यांनी शासन परिपत्रक क्र न्यायप्र -२०१४ प्र.क्र.४२४/२०१४ सिं.व्य (म), दि.२.३.२०१५ अन्वये कार्यवाही करावी.

११. जलसंपदा विभागाचे कार्यक्षेत्र नदी किनारी पूररेषेची आखणी करण्याइतपतच मर्यादित असल्याने निषिध क्षेत्रातील व नियंत्रित क्षेत्रातील उपरोक्त परिच्छेदात नमूद केलेली सार्वजनिक हिताच्या दृष्टीने अपरिहार्य व आवश्यक कामांना जलसंपदा विभागाच्या ना-हरकत प्रमाणपत्राची आवश्यकता राहणार नाही .



तथापि, पर्यावरण विभाग/ इतर विभाग/ स्थानिक संस्था/ इतर शासकीय विभाग यांची वैधानिक मान्यता आवश्यक असेल तर ती स्वतंत्रपणे घेण्यात यावी.

१२. सदर शासन परिपत्रक विधी व न्याय विभागाचा अनौपचारिक संदर्भ क्र. ३८८-२०१८/E दि.१३.४.२०१८ व नगरविकास विभागाच्या अनौपचारिक संदर्भ क्र. टिपीएस -१०१८/अनौस.५/२०१८/ नवि -९ दि.१९.४.२०१८ नुसार निर्गमित करण्यात येत आहे .

१३. सदर शासन निर्णय महाराष्ट्र शासनाच्या www.maharashtra.gov.in या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा संकेतांक २०१८०५०३१८०१५९५७२७ असा आहे. हा आदेश डिजीटल स्वाक्षरीने साक्षांकित करून काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांचे आदेशानुसार व नावाने,

C. A. Birajdar

Digitally signed by C. A. Birajdar
DN: c=IN, o=Government Of Maharashtra, ou=Water
Resources Department, postalCode=400032,
st=Maharashtra,
2.5.4.20=bf1b26f0a8f1d09e25cd9d6bf37b84d8e843d220d27
2af12bd94b7eee717c5fa, cn=C. A. Birajdar
Date: 2018.05.03 18:06:32 +05'30'

(च.आ.बिराजदार)

सचिव (लाक्षेवि)

प्रत :- मा. राज्यपाल यांचे सचिव,

१. मा.मुख्यमंत्री यांचे कार्यालय,
२. मा.अध्यक्ष / उपाध्यक्ष, विधानसभा, विधानभवन, मुंबई,
३. मा.सभापती / उपसभापती, विधानपरिषद, विधानभवन, मुंबई,
४. मा.विरोधी पक्षनेते, विधानसभा, मुंबई, यांचे कार्यालय, विधानभवन, मुंबई,
५. मा.विरोधी पक्षनेते, विधानपरिषद, मुंबई, यांचे कार्यालय, विधानभवन, मुंबई,
६. मा. मंत्री, जलसंपदा यांचे खाजगी सचिव, मंत्रालय, मुंबई,
७. मा. राज्यमंत्री (जलसंपदा) यांचे खाजगी सचिव, मंत्रालय, मुंबई,
८. महालेखापाल १ / २ (लेखा व अनुज्ञेयता) महाराष्ट्र राज्य, मुंबई/नागपूर
९. महालेखापाल १ / २ (लेखा परीक्षा) महाराष्ट्र राज्य, मुंबई/नागपूर,
१०. अ.मु.स (गृह) यांचे स्वीय सहायक, गृह विभाग, मंत्रालय, मुंबई,
११. अ.मु.स (महसूल) यांचे स्वीय सहायक, महसूल व वन विभाग, मंत्रालय, मुंबई
१२. अ.मु.स. (पर्यावरण) यांचे स्वीय सहायक, पर्यावरण विभाग, मंत्रालय, मुंबई,
१३. प्रधान सचिव (जलसंपदा) यांचे स्वीय सहायक, जलसंपदा विभाग, मंत्रालय, मुंबई,
१४. प्रधान सचिव (नगरविकास) यांचे स्वीय सहायक, नगरविकास विभाग, मंत्रालय, मुंबई,
१५. सचिव (जसंव्य व लाक्षेवि) यांचे स्वीय सहायक, जलसंपदा विभाग, मंत्रालय, मुंबई,
१६. सचिव (प्रकल्प समन्वय) यांचे स्वीय सहायक, जलसंपदा विभाग, मंत्रालय, मुंबई,
१७. सर्व मंत्रालयीन विभाग, मंत्रालय, मुंबई,
१८. माहिती व जनसंपर्क महासंचालनालय, मंत्रालय, मुंबई,
१९. सर्व महासंचालक, जलसंपदा विभाग,

२०. सर्व विभागीय आयुक्त, महसूल विभाग, महाराष्ट्र राज्य,
२१. सर्व जिल्हाधिकारी, महाराष्ट्र राज्य,
२२. सर्व कार्यकारी संचालक, जलसंपदा विभाग,
२३. संचालक, नगररचनाकार, पुणे,
२४. सर्व मुख्य अभियंता/मुख्य अभियंता व मुख्य प्रशासक, जलसंपदा विभाग,
२५. जलसंपदा विभागातील सर्व सहसचिव व उपसचिव, मंत्रालय, मुंबई,
२६. सर्व अधीक्षक अभियंता/अधीक्षक अभियंता व प्रशासक, जलसंपदा विभाग,
२७. ग्रंथालय, विधानमंडळ सचिवालय, विधानभवन, मुंबई,
२८. सि.व्य. (महसूल) कार्यासन, संग्रहार्थ,

Translation COPY OF ANNEXURE-A.8

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Guidelines on planning of flood line and use of restricted and controlled area with a view to no construction of flood line and...

Government of Maharashtra Water Resources Department, Government Circular No. Purani-2018/ (182/2018) S.V. (Revenue) Ministry, Mumbai 400032,

Date:-May 3,

Should read :- Government Circular No. FDW-1089/243/89/C.V. (Works), Dt. 2.09.1989, dated 21.9.1989

Preface :-

Irrigation Department Government Circular No. FDW 1089/243/89/Simvya (Works) dated 2.9.1989 and dated 21.9.1989 issued instructions regarding the planning of the flood line in such a way that there is no construction inside the flood line to avoid the possible risk of flooding. are

Construction of bridges on the river for the purpose of development of towns, villages, pilgrimage areas in the restricted area within the blue flood line of the river and in the controlled area between the red flood line and the blue flood line, construction of access roads on both sides of the bridge, construction of roads, parks and jogging tracks along the river as per the development plan of the city as well as flood protection The works include construction of flood protection wall along the river bank, construction of ghats besides gas pipeline crossing, power line crossing, laying of drainage pipe line along the river, work of sewage disposal plant, etc. Increasing demand for non-destructive certificates from relevant government/semi-government organizations, local self-government bodies for essential public works, number of completed projects and number of projects under construction on various rivers in the state through water resources department, changing pattern of rainfall over time, state-of-the-art systems available for flood control and flood forecasting etc. There is a need to think things through collectively.

Government Circular No. Justice-2014 Pro.No.424/2014 Sinvyva (M), dated 2.3.2015 through the Water Resources Department approves flood zone and flood line maps and plans. However, under the Irrigation Department Government Circular No. FDW 1089/243/89/Sivya (Works), dated 2.9.1989 and 21.9.1989 within the Blue Line of the river in the Prohibitive Zone and Red The issue of reforming the restricted zone between the flood line (Red Line) and the blue line (Blue Line) was under the consideration of the government in order to bring more clarity about the exact necessary works to be done in terms of public facilities. In this regard, the following circular is now being issued by incorporating the revised / updated instructions.

GOVERNMENT CIRCULAR NO.: OLD-2018/(182/2018) CV. (Revenue)

Circular -

1. Irrigation Department Government Circular No. FDW 1089/243/89/ Simvya (Works) dated 2.9.1989 and 21.9.1989 is being updated.
2. Dam Safety Manual chapter on land use in floodplains

Important floodplains are mainly of two types based on the guidelines issued in 1984. Prohibitive Flood Line (Blue Line) and Control Flood Line (Red Line).

3. Blue Line :-



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The Blue Line is the line drawn at the maximum discharge water level from the following.

- a) Flood discharge occurring at an average frequency of once in 25 years (1 in 25 years) or
- b) Discharge beyond the discharge capacity of an established river bed.

4. Red Line :- Red Line should be referred to as the line [9:33 pm, 27/07/2024] Bhavika: 4. drawn on the water level of the following discharges.

- A) Flood discharge occurring at an average frequency of once in 100 years (1 in 100 years) in areas where there is no dam.
- b) Conceptual runoff from project concept spillway in area where dam will be located

Maximum flood discharge plus expected frequency of 1 in 100 year flood discharge from the catchment area below the dam.

5. Prohibitive Zone :-

The area from the Blue Line on the right bank of the river to the Blue Line on the left bank of the river should be called Prohibitive Zone.

Restrictive Zone :-

The area between the blue flood line (Blue Line) of the river and the red flood line (Red Line) on the same bank should be called Restrictive Zone.

7. Use of Prohibitive Zone is only in the form of open land eg. Emergence, taking of playgrounds or light crops, where the right to take crops has been established by customary use (e.g. cultivation of Kalingad / Watermelon / Watermelon etc. near riverbeds, public latrines and excreta drainage facilities) should be done for similar reasons such as There will be no obstruction in the flow of the river, there will be no reduction in the carrying capacity of the river and there will be no change in the cross section of the river.

8. Restrictive Zone should be used only for the following reasons.

- i) Necessary and unavoidable excreta in public interest: disposal scheme.
- ii) Public roads necessary and indispensable in the public interest so that the level of the said road is above the blue flood line level. How high the said level should be should be determined as per the provisions of the relevant Indian Road Congress Code.
- iii) Water supply pipelines, gas pipelines, drainage pipelines which are necessary and indispensable in the public interest so that the said pipelines are underground and thereby do not alter the river crossing in the controlled area.
- iv) The ground floor level of the structures in the controlled area should be at a safe height above the red flood line level to enable easy evacuation of the residents before the flood level rises in the controlled area. Also, in order to avoid the possible flood in this area and also the loss of life and property due to flood, it will be possible for the people, animals and things in this area to leave the area immediately and go to a safe place as soon as the short term flood warning is received.

9. Above issue no. Care should be taken that due to the uses mentioned in 8, there will be no obstruction in the flow of the river, the carrying capacity of the river will not decrease and there will be no change in the cross-sectional area of the river. The Chief Engineer will be able to take action



against constructions obstructing the flow. The concerned Department / Local Self-Government will be fully responsible for the safety of the said public works to be done in the Prohibitive Zone and Restrictive Zone and the concerned Department / Local Self-Government will be responsible for the loss of life and money due to possible flood and the related court case arising accordingly. The local self-government will be responsible.

10. Considering the above matters, if a request is received from the Collector, local self-government body or other department to the Water Resources Department to draw the necessary flood line in order to prevent the possible risk of flooding and to determine the prohibited and controlled area, the concerned Regional Chief Engineer of the Water Resources Department will issue the Government Circular No. Justice P-2014 P.No. 424/2014 Sivya (M), dated 2.3.2015 should proceed.

11. Since the jurisdiction of the Water Resources Department is limited to the planning of river bank flood lines, the works mentioned in the above paragraph in the prohibited areas and controlled areas which are indispensable and necessary for public interest will not require the no-obligation certificate of the Water Resources Department.

However, if statutory approval of Environment Department / Other Departments / Local Bodies / Other Government Departments is required, it should be taken separately.

12. The said Government Circular Law and Justice Department Informal Reference No. 388-2018/E dated 13.4.2018 and Urban Development Department's informal reference no. TPS-1018/Anous.5/2018/Navi-9 is being issued as per 19.4.2018.

13. The said government decision has been made available on the website of Maharashtra Government www.maharashtra.gov.in and its reference number is 201805031801595727. This order is being authenticated with digital signature.

By order and in the name of the Governor of Maharashtra,

C. A. Birajdar

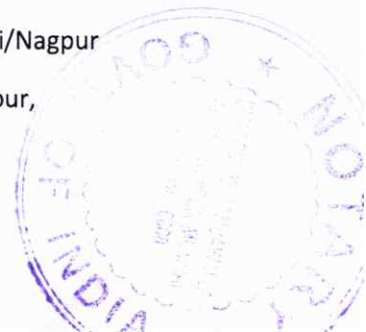
(Cha.Birajdar) Secretary (Lakshevi)

Copy :- Hon. Secretary to the Governor,

1. Hon. Chief Minister's Office,
2. Ma. Chairman / Deputy Chairman, Legislative Assembly, Vidhan Bhavan, Mumbai,
3. Hon. Speaker / Deputy Speaker, Legislative Council, Vidhan Bhavan, Mumbai,
4. Hon. Office of Leader of Opposition, Vidhan Sabha, Mumbai, Vidhan Bhavan, Mumbai.
5. Hon. Office of Leader of Opposition, Legislative Council, Mumbai, Vidhan Bhavan, Mumbai.

Hon. Private Secretary to Minister, Water Resources, Ministry, Mumbai,

6. 7. Hon. Private Secretary to Minister of State (Water Resources), Ministry, Mumbai,
8. Accountant General 1/2 (Accounts and Permissibility) State of Maharashtra, Mumbai/Nagpur
9. Accountant General 1/2 (Account Examination) State of Maharashtra, Mumbai/Nagpur,



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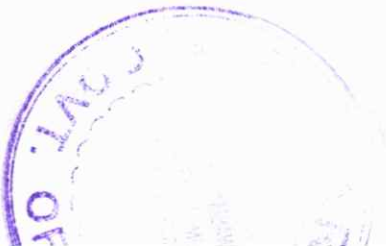
10. Personal Assistant to A.M.S (Home), Home Department, Ministry, Mumbai,
11. Personal Assistant to A.M.S. (Revenue), Department of Revenue and Forests, Ministry, Mumbai
12. A.M.S. (Environment) Personal Assistant, Department of Environment, Ministry, Mumbai,
13. Personal Assistant to Principal Secretary (Water Resources), Department of Water Resources, Ministry, Mumbai,
14. Personal Assistant to Principal Secretary (Urban Development), Department of Urban Development, Ministry, Mumbai,
15. Personal Assistant to Secretary (Jasamvya and Lakshevi), Department of Water Resources, Ministry, Mumbai,
16. Personal Assistant to Secretary (Project Coordination), Department of Water Resources, Ministry, Mumbai,
17. All Ministerial Departments, Ministry, Mumbai,
18. Directorate General of Information and Public Relations, Ministry, Mumbai,
19. All Directors General, Water Resources Department,

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GOVERNMENT CIRCULAR NO.: PURNI-2018/(182/2018) Cr.P.C. (Revenue)

20. All Divisional Commissioners, Revenue Department, State of Maharashtra,
21. All Collectors, State of Maharashtra,
22. All Executive Directors, Water Resources Department,
23. Director, Town Planner, Pune,
24. All Chief Engineers/Chief Engineers and Chief Administrators, Water Resources Department,
25. All Joint Secretaries and Deputy Secretaries in Water Resources Department, Ministry, Mumbai,
26. All Superintending Engineers/Superintending Engineers and Administrators, Water Resources Department,
27. Library, Legislative Secretariat, Vidhan Bhavan, Mumbai,
28. C.V. (Revenue) Karyasan, for collection,

TRUE COPY
ADVOCATE



महाराष्ट्र पाटबंधारे अधिनियम १९७६
(कलम ११ व ११७) अन्वये नदी नाले
अधिसूचित करण्याबाबत

महाराष्ट्र शासन
जलसंपदा विभाग

शासन निर्णय क्रमांक अधिसू-२००४/(१३०/२००४) सि.व्य.(महसूल)

मंत्रालय, मुंबई ४०० ०३२

दिनांक :- १/०२/२००५

नदीनाले अधिसूचित करणेबाबत शासनाने वेळोवेळी वरील संदर्भान्वये आदेश निर्गमित केले आहेत, असे प्रपत्र अ मध्ये दर्शविलेले शासन निर्णय,ज्ञापन,परिपत्रके याचे या शासन निर्णयान्वये एकत्रिकरण करुन आणि काही नवीन सुधारणा करुन शासन पुढीलप्रमाणे आदेश देत आहे.

शासननिर्णय

१.० अधिसूचने संबंधात मार्गदर्शक तत्त्वे :

१.१) पुढील परिच्छेदात घालून देण्यात आलेल्या मार्गदर्शक तत्वानुसार, नद्या व नाले ज्यावर मोठे/मध्यम पाटबंधारे प्रकल्प उभारले जातात केवळ त्यांना महाराष्ट्र पाटबंधारे अधिनियम, १९७६ च्या कलम-११ अन्वये अधिसूचित करण्यांत यावे. इतर सर्व नद्या,नाले ज्यांवर लघु पाटबंधारे प्रकल्प किंवा बंधारे बांधण्यात आले आहेत त्यांना अधिसूचित करण्यांत येऊ नये.

१.२) जलसाठ्याच्या उर्ध्वभागास उदग्रहण बंधा-याच्या आणि बंधा-याच्या उर्ध्व बाजूस मुख्य नदीला मिळणा-या उपनद्या, नाले व उपनाले ह्यांना त्यांच्या उगमापासून अधिसूचित करण्यात यावे.

१.३) प्रकल्पाच्या मुख्य नदीचा शेवटच्या बंधा-याच्या खालचा भागही त्याला पुननिर्मित प्रवाहाचा लाम मिळतो त्या भागापर्यंत अधिसूचित करण्यात यावे.

१.४) उपरोक्त सुचनेप्रमाणे अधिसूचित नसलेले नदी/नाले त्यावर जलाशय/बंधारे होऊन पाण्याचा पूर्ण क्षमतेने वापर सुरु झाल्यानंतर तात्काळ अधिसूचित करण्यांत यावेत.

२.० अधिसूचनेकरीता कार्यपध्दती

२.१ संबंधित अधीक्षक अभियंता यांनी सिंचनाच्या आणि बिगरसिंचनाच्या नसलेल्या प्रयोजना करिता पाण्याच्या वापरासाठी, नवीन प्रकल्पावरील सिंचन सुरु करण्यापूर्वी बारा महिने अगोदर शासनाला, वर घालून दिलेली तत्त्वे आणि महाराष्ट्र पाटबंधारे अधिनियम १९७६ च्या कलम-११ अन्वये, अधिसूचित करणे आवश्यक असलेल्या मर्यादेपर्यंत नवीन मोठे/मध्यम प्रकल्प आणि नद्या, उपनद्या यांच्या अधिसूचनेकरीता प्रस्ताव सादर करावेत

२.२ अधिसूचनेकरीता प्रस्तावित असलेल्या प्रस्तावांसोबत, अधिसूचित करावयाच्या नद्या,नाले आणि प्रवाह हयांचे क्षेत्र ठळकपणे दर्शविणारा दर्शक नकाशा आणि नदी/नाले अधिसूचित करावयाचे संबंधित गावनिहाय गट क्रमांक अंतर्भूत असणारे नकाशे यांचा समावेश असावा. त्याचप्रमाणे दर्शक रेट/एच-८७१(१०००-०२-२००५)-१

संकेतांक क्रमांक - २०१४/२०१३२१५६२०२७



नकाशात योग्य रंगाने अधिसूचनेचे निरनिराळे घटक स्पष्टपणे सूचित करावेत. नकाशांवर योग्यरीतीने गावाच्या सीमारेषा दर्शविण्यांत याव्यात.

२.३ अधिसूचित करण्यासाठी प्रस्तावात समावेश केलेल्या नद्या आणि नाले किंवा त्यांचा भाग यांचा, यापूर्वी काढण्यात आलेल्या कोणत्याही इतर अधिसूचनेत समावेश करण्यात आलेला नाही. याची सुध्दा खात्री करून घेण्यात यावी.

२.४ शासनाकडे प्रस्ताव सादर करण्यापूर्वी प्रस्तावाची क्षेत्रीय अधिका-यांच्या (मंडळ पातळी) पातळीवर १०० टक्के तपासणी करण्यात यावी.

२.५ शासनाकडे प्रस्तावित करावयाच्या अधिसूचना प्रस्तावा सोबतच्या नकाशात संबंधित नदी, नाला, ओढा यांचा प्रस्तावापूर्वीचा अधिसूचित प्रभाग लाल रंगाने व नव्याने अधिसूचित करावयाचा प्रभाग हिरव्या रंगाने दाखविण्याची दक्षता घेण्यांत यावी.

३.० कलम-११ अन्वये अधिसूचित करावयाची कामे.

३.१ (अ) महाराष्ट्र पाटबंधारे अधिनियम १९७६ च्या कलम-११ अन्वये मसुदा अधिसूचना सादर करण्यापूर्वी, हे पाहण्यात यावे की, ते कलम लागू करण्यापूर्वी असलेल्या शर्तीची पूर्तता करण्यात आली आहे. म्हणजेच नैसर्गिक कालव्यातून वाहणारे कोणत्याही नदीचे किंवा ओढ्याचे (झ-याचे) पाणी किंवा स्थिर पाण्याचा कोणताही नैसर्गिक साठा हा, कोणत्या अस्तित्वात असलेल्या किंवा प्रकल्पित कालव्याच्या प्रयोजनाकरीता लागू करावयाचा किंवा वापरावयाचा आहे.

४.० महाराष्ट्र पाटबंधारे अधिनियम १९७६ च्या कलम ११७ अन्वये अधिसूचित करावयाची कामे.

४.१ वर्ग दोनचे पाटबंधारे कामे.

(महाराष्ट्र पाटबंधारे अधिनियम, १९७६ च्या कलम ११७ अन्वये अधिसूचित करावयाचा प्रस्ताव असलेली कामे).

(अ) महाराष्ट्र पाटबंधारे अधिनियम, १९७६ च्या कलम ११७ अन्वये मसुदा अधिसूचना सादर करण्यापूर्वी असे पाहिले जावे की त्या कलमाच्या पूर्ववर्ती असलेल्या शर्तीची पूर्तता झाली आहे म्हणजेच कोणताही जलस्त्रोत हा कोणता जलस्त्रोत प्रत्यक्षात वापरात आहे आणि कोणता जलस्त्रोत सिंचनाकरीता नियोजित आहे ते वेगवेगळे दर्शविणे आवश्यक आहे. या बाबतीत संदिग्धता टाळण्यासाठी, सिंचनाच्या प्रयोजनाकरीता प्रत्यक्षात वापरण्यात असणा-या किंवा संकल्पित प्रयोजनाकरीता आवश्यक असलेल्या, असे दोन स्वतंत्र अधिसूचना प्रस्ताव सादर करण्यात यावेत.

सदर अनुसूचित पुढील तपशीलाचा समावेश असावा.

(एक) ग्राम, तालुका व जिल्हा यांच्या जवळ असलेले मुख्य नदी, नाले आणि उपनद्या या त्यांच्या उगमस्थानापासून साठ्यापर्यंत किंवा अडथळ्यापर्यंत आणि त्यापलीकडे (आवश्यक वाटेल तितक्या मर्यादेपर्यंत)

(दोन) सदर काम त्याच्या ठिकाणासह (नाव, सर्वेक्षण क्रमांक इत्यादी)



(तीन) ग्राम, तालुका आणि जिल्हा यांच्या जवळ असलेले उपकालवे, जलमार्ग इत्यादी निर्देशासह.

(चार) प्रवाह उदभवाच्या उर्ध्व बाजूचे व खलील बाजूचे सर्व बंधारे.

४.२ ज्या वेळी कलम ११ आणि कलम ११७ अन्वये अधिसूचना काढण्यात येते त्यावेळी अधिनियमान्वये जनतेचे दायित्व जनतेला समजणे शक्य व्हावे हे अनुसूचित वेगवेगळे तपशील देण्याचे उद्दिष्ट आहे. सर्वेक्षण क्रमांक तपशीलवार दर्शविल्याशिवाय हे उद्दिष्ट साध्य होत नाही. तसेच सर्वेक्षण क्रमांक दर्शविल्याशिवाय अधिसूचना सादर करण्यासाठी कोणतीच कायदेशीर हरकत नाही, मात्र उद्दिष्ट साध्य होत नसेल तर सर्वेक्षण क्रमांक दर्शविण्यात येतील. उपनदी किंवा ओढा ओळखण्याकरीता जनतेला सहाय्यभूत होण्यासाठी, उपनदीचा प्रवाह आणि सादर प्रवाह नदीला कोणत्या ठिकाणी जोडला होता हे निश्चित करण्याकरीता उपनदीच्या प्रवाहाचा तपशील देणे आवश्यक आहे. शासनाच्या माहितीकरीता, संबंधित अधिका-यांनी अधिसूचित करावयाचा सर्व तपशील आणि भाग या बाबी दर्शविण्यास योग्य अशा प्रमाणात स्पष्ट आणि विभिन्न नकाशा (दोन प्रतीत) सादर करावा.

४.३ शासनाने प्रारूप अधिसूचनेचा विचार करावा म्हणून, मसुदा अधिसूचना सादर करण्यापूर्वी स्थानिक अधिका-यांनी विशिष्ट भागाच्या आवश्यकतेचा संपूर्ण विचार करावा आणि मसुदा अधिसूचनेत, कोणत्याही ओढ्याचा किंवा जलसाठ्याचा अनावश्यक भाग समाविष्ट झालेला नाही, हे पहावे.

४.४ जी कामे महसूल विभागाच्या प्रभारात आहेत (किंवा पुढे प्रभारात येऊ शकतील) त्या कामांकरीता असलेली अधिसूचना शासनाला जिल्हाधिका-यांकडून थेट (आणि जर आवश्यक असेल तर कार्यकारी अभियंत्याशी विचार विनिमय करून) सादर करण्यात यावी आणि जी कामे पाटबंधारे विभागाच्या प्रभारात आहेत त्या कामांकरीता असलेल्या अधिसूचना कार्यकारी अभियंत्याकडून, मंडळाच्या अधीक्षक अभियंत्यामार्फत (आणि जर आवश्यक असेल तर जिल्हाधिका-यांशी विचार विनिमय करून) सादर केल्या जाव्यात.

४.५ महाराष्ट्र शासन राजपत्रात, कलम ११७ अन्वये मसुदा अधिसूचना प्रसिध्द झाल्यावर, जिल्हाधिका-याने, महाराष्ट्र पाटबंधारे अधिनियम, १९७६ च्या कलम ११८ द्वारे आवश्यक असल्याप्रमाणे शासनाची उद्दिष्टे स्थानिक जनतेस कळविण्याकरीता आवश्यक त्या उपाययोजना कराव्यात. यानंतर स्थानिक अधिका-यांनी, आक्षेप प्राप्त होण्याकरता अंतिम दिनांक निश्चित होईपर्यंत प्रतीक्षा करावी आणि जर कोणताही आक्षेप किंवा सूचना प्राप्त झाली नाही तर, तसे शासनाला कळविण्यांत यावे. जर कोणताही आक्षेप किंवा कोणतीही सूचना प्राप्त झाली तर ते आवश्यक शे-यासह शासनाकडे अग्रेषित करण्यांत यावे.

४.६ कलम ११ अन्वये असलेल्या अधिसूचनेच्या संबंधात, कलम ११७ अन्वये असलेल्या अधिसूचनेच्या बाबतीत तशी कार्यवाही करणे हे विधीत: आवश्यक नसले तरी, महाराष्ट्र शासन राजपत्रात अशी अधिसूचना प्रसिध्द झाल्यावर त्वरीत शासनाचा निर्णय स्थानिक जनतेस कळविण्याकरीता जर स्थानिक अधिका-यांनी आवश्यक उपाययोजना केली तर ते इष्ट होईल.



४.७ जर वरील आदेशांची अंमलबजावणी करताना कोणतीही अडचण आली तर सदर बाब आवश्यक त्या आदेशांकरीता शासनाकडे संदर्भित करावी.

४.८ महाराष्ट्र सिंचन कायदा १९७६ मधील कलम ११ (३) अन्वये राज्यातील सर्व नदी नाल्यावरील पाणी वापरावर नियंत्रण राहण्यासाठी कोणत्याही अधिसूचित अथवा अनधिसूचित नदीच्या प्रभागांत जलसंपदा खात्याच्या परवानगीशिवाय पाणी वापर करता येणार नाही. अनधिसूचित भागात महसूल खात्याकडून पाणीवापरास संमती देण्यापुर्वी जलसंपदा विभागाची पूर्वसंमती घेणे आवश्यक राहिल. तसेच अधिसूचित / अनधिसूचित नदी-नाले यांच्या पाणीवापरासाठी जलसंपदा विभागाने वेळोवेळी निश्चित केलेल्या पाणीपट्टीच्या दराने आकारणी करण्यात यावी.

५.० अधिसूचना प्रपत्र

अधिसूचना व त्यासोबतचे कागदपत्र यांच्या प्रसिध्दीकरीता असलेले प्रपत्र यासोबत जोडपत्र-१ (मराठी) आणि जोडपत्र-२ (इंग्रजी) मध्ये देण्यात आले आहे. ही प्रपत्रे मराठी व इंग्रजी या दोन्ही भाषेत आहेत. सदर अधिसूचना इंग्रजी आणि मराठी भाषेत प्रसिध्द केली जाईल.

६.० तपासणीसूची

नदी नाले अधिसूचनेच्या प्रस्तावासह सोबत जोडलेल्या तपासणीसूचितील सर्व मुदयांबाबत सखोल तपासणी मंडळ कार्यालयात करुन आणि तपासणीसूचित मुद्देनिहाय माहिती नमूद करुन अधीक्षक अभियंता हयांच्या स्वाक्षरीने सादर करण्यात यावी.

७.० अधिसूचित नदीवरील पाटबंधारे योजनांच्या पाणी वापराबाबत पाणीपट्टीची आकारणी व वसुली.

लघु पाटबंधारे तलाव किंवा उध्दरण सिंचन योजना किंवा कोणताही इतर लहान तलाव हा, योग्य प्राधिका-यांकडून बांधण्यात किंवा देखभाल करण्यात किंवा नियंत्रित करण्यात आलेल्या जलाशयाप्रमाणे असतो, कारण पाण्याचा पुरवठा व पाण्याची साठवण ही महाराष्ट्र पाटंधारे अधिनियम, १९७६ च्या पोटकलम ३ (अ) अन्वये **कालवा** याच्या व्याख्येत समाविष्ट आहे. म्हणून लघु पाटबंधारे तलाव किंवा उध्दरण सिंचन योजना किंवा इतर पाणी साठवण्याचे बांधकाम, अशी बांधकामे, जर ज्या मूळ नदीवर बांधण्यात आले आहेत ती नदी, महाराष्ट्र पाटबंधारे अधिनियम, १९७६ च्या कलम ११ अन्वये अधिसूचित करण्यात आलेली नसली तरी, लघु पाटबंधारे तलाव किंवा उध्दरण सिंचन योजना किंवा कोणतेही इतर पाणी साठवण्याचे बांधकाम यांच्या पाणी वापराकरीता पाण्याचा दर आकारुन पाणीपट्टी वसूल करणे हे विधितः योग्य आहे.

८.० अधिसूचित नदया नाले ओढे यांच्या पाणी वापराचे नियमन.


महाराष्ट्र सिंचन कायदा १९७६ मधील कलम ११ (३) व कलम १७ (१) अन्वये कोणत्याही अधिसूचित नदी नाल्यातील पाणी वापराचे नियमन आणि नियंत्रण अधिसूचना जारी झाल्यापासून जलसंपदा विभागाच्या कक्षेत येते अशा अधिसूचित नदी नाल्याच्या प्रभागांत पाणी वापरावर जलसंपदा खात्याचे नियंत्रण रहावे आणि नदीच्या पाण्याचा गैरवापर होवू नये म्हणून कालवा ते नदी या परिसरात

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तसेच कालव्याच्या वरच्या बाजूस ३०० मी. (१००० फूट) अंतरापर्यंत खाजगी विहीरीवरील विद्युत कनेक्शन देण्या व घेण्यापूर्वी जलसंपदा खात्याच्या सक्षम प्राधिकरणाकडून ना हरकत प्रमाणपत्र धारण केल्याशिवाय विद्युत मंडळास कनेक्शन देता येणार नाही.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नांवाने.


(वि.दि.होशिंग)
शासनाचे उप सचिव

- सहपत्रे : १) प्रपत्र अ .
२) जोडपत्र- १ (अधिसूचना व अनुसूची - मराठी))
३) जोडपत्र-२ (Notification and Schedule)
४) तपापसणीसूची

प्रत :-

स्वीय सहाय्यक सचिव (पाटबंधारे), जलसंपदा विभाग, मंत्रालय, मुंबई
स्वीय सहाय्यक सचिव (लाक्षेवि), जलसंपदा विभाग, मंत्रालय, मुंबई
मंत्रालयीन सर्व प्रशासकीय विभाग, मंत्रालय, मुंबई
कार्यकारी संचालक, सर्व पाटबंधारे विकास महामंडळे
महासंचालक, महाराष्ट्र अभियांत्रिकी संशोधन संस्था, नाशिक
महासंचालक, महाराष्ट्र जल व भूमी व्यवस्थापन संस्था, औरंगाबाद.
मुख्य अभियंता व प्राचार्य, अभियांत्रिकी अधिकारी महाविद्यालय, नाशिक
मुख्य अभियंता, जलविज्ञान प्रकल्प, नाशिक
मुख्य अभियंता, ल.पा. (स्था.स्तर), पुणे.
सर्व विभागीय आयुक्त (महसूल विभाग)
सर्व मुख्य अभियंते व सह सचिव, जलसंपदा विभाग, मंत्रालय, मुंबई
सर्व क्षेत्रिय मुख्य अभियंते, जलसंपदा विभाग
सर्व जिल्हाधिकारी
मंत्रालयीन तांत्रिक उप सचिव/अवर सचिव, /उपअभियंता जलसंपदा विभाग, मंत्रालय
सर्व क्षेत्रिय अधीक्षक अभियंता, जलसंपदा विभाग
सर्व तांत्रिक कार्यासने, जलसंपदा विभाग, मंत्रालय, मुंबई.
सि.व्य.(महसूल) कार्यासन संग्रहार्थ.



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प्रपत्र-अ

विषय :- नदी नाले अधिसूचित करणेबाबत.

अ.क्र.	शासन निर्णय/ज्ञापन/परिपत्रक/हयांचा संदर्भ
१	२
१	Govt.Circular No.MNB/5754,dated 17.4.1954
२	Govt.Circular No.BIA/1067/33510-I(4) dated 12 th May 1967
३	Govt.Resolution No.BKS/1764/68846-I(4) dated 19.2.1968
४	Govt.Resolution No.BKS/1968/3277-I(4) dated 31.1.1969
५	Govt.Letter No.MIA/1077/820-IMG-(3) dated 27.4.1977
६	Govt.Circular No.MIA/1078/11422 1058 IMG (3) dated 4.8.1968
७	Govt.Circular No.MIA/1078/11422 1068 IMG (3) dated 15.9.1979
८	Govt.Letter No.MIA/1076/IMG-I 4519 dated 26.6.1980
९	Govt.D.O No.MIA/1078/14422/1068 IMG.3 dated 28.11.1980
१०	शासनपत्र क्र.एमआयए-१०८४/१०३१/५९१/सि.व्य.कारवाई,दिनांक २६.१.१९८४
११	शासनपत्र क्र.एमआयए-१०९२/१११४/(२००/९२)सि.व्य.(म.) दिनांक १२.२.१९९३
१२	शासनपत्र क्र.एमआयए-१०९६/(२/९६) सि.व्य.(म.) दि. १२.३.१९९६
१३	Govt.Circular No.BIA/1077/42389/805/IMG.3 dated 25.7.1978
१४	शासनपत्र क्र.अशा/एमआयए/१०९२/(३५/९२) सि.व्य.(म.) दिनांक ११.२.१९९२
१५	शासनपत्र क्र.बीकेएम/१५८८/६८१/सि.व्य.(घो.) दिनांक ३०.७.१९९२
१६	शासनपत्र क्र.बीकेएस/१५९६/(१७८) सि.व्य.(घो.) दिनांक १४.५.९८
१७	एकत्रित शासन निर्णय क्र. संकीर्ण १०९९/(१७८/९९) सि.व्य.(म) दि.२७/९/२००२



जोडपत्र-१
अधिसूचना

महाराष्ट्र पाटबंधारे अधिनियम १९७६
क्रमांक सि.व्य. (म.)

ज्याअर्थी महाराष्ट्र शासनास असे वाटते की नदीच्या/नाल्याच्या पाण्याचा जिल्हयातील तालुक्यातील या गावातील त्याच्या उगमस्थानापासून जिल्हयातील तालुक्यातील गावापर्यंतच्या पाण्याचा आणि धरणाच्या वरच्या बाजूच्या पाणलोट क्षेत्रातील तिच्या उपनद्यांच्या आणि कालव्याच्या सोबतच्या अनुसूचित विनिर्दिष्ट केलेल्या हददीतील जलप्रदाय क्षेत्रातील पाण्याचा, प्रकल्पाचा प्रयोजनासाठी व उक्त नदीचे/नाल्याचे आणि कालव्याच्या जलप्रदाय क्षेत्रातील पाण्याचे नियमन व पुरवठा करण्यासाठी वापर करणे इष्ट आहे.

त्याअर्थी आता महाराष्ट्र पाटबंधारे अधिनियम १९७६ (महाराष्ट्र अधिनियम क्र.३८) कलम ११ अन्वये प्रदान केलेल्या अधिकाराचा वापर करुन आणि शासकीय अधिसूचना पाटबंधारे विभाग क्र. दि. (राजपत्र दि.....) चे अधिक्रमण करुन / च्या अनुरोधाने महाराष्ट्र शासन असे घोषित करीत आहे की, पासून उक्त नदीचे/नाल्याचे पाणी पूर्वोक्त प्रयोजनासाठी वापरले जाईल व त्याचे नियमन केले जाईल.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नांवाने.

शासनाचे उप सचिव



अ)..... नदी विषयी अधिसूचना
.....या मुख्य नदीच्याजिल्यातील..... तालुक्यातील
..... गावाच्या जवळील उगमस्थानापासून जिल्हयातील
..... तालुक्यातील या गावापर्यंत.

ब) पाणलोटक्षेत्र भागाकरीता.

ब (१) या मुख्य नदीच्या उजव्या किना-यावरील
धरणाच्या वरच्या बाजूने वाहणा-या नाल्याचे भाग

१) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

२) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

३) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

४) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य
नदीशी/मुख्य नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

५) (याप्रमाणेच पुढे).....

ब (२) या मुख्य नदीच्या डाव्या किना-यावरील
धरणाच्या वरच्या बाजूने वाहणा-या नाल्याचे भाग :-

१) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

२) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

३) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य नदीशी/मुख्य
नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

४) नाला क्रमांक :- गावाच्या सर्वेक्षण / गट क्रमांकापासून
..... गावाच्या सर्वेक्षण / गट क्रमांकामधील मुख्य
नदीशी/मुख्य नाल्याशी झालेल्या त्याच्या संगमापर्यंत.

(याप्रमाणेच पुढे).....



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जोडपत्र-२

NOTIFICATION.

Water resources Department
Mantralaya, Mumbai-400 032
Dated :-

Maharashtra Irrigation Act 1976

No. IM (R)

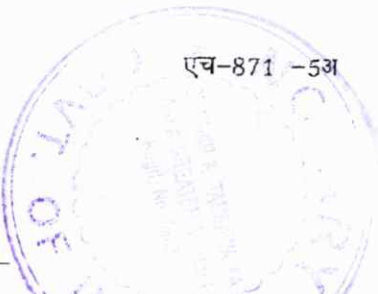
Whereas, it appears expedient to the Government of Maharashtra that the waters of the River/Nalla from its source near Village Taluka District upto village Taluka District and its tributaries laying in the catchment upstream of Dam and in the Command of canal] within the limits specified in the schedule hereto annexed, should be applied and used by the State Government for the purpose of Project and for regulation and supply of waters of the said River/Nalla and its tributaries in the command of the canal.

Now, therefore, in exercise of powers conferred by Section-11 of Maharashtra Irrigation Act. 1976 (Maharashtra XXXVIII) of 1976 and supersession/continuation of Government Notification, Irrigation and Power Department No. dated the the Government of Maharashtra Declares that from the waters of the said River/Nallas will be applied and regulated for the aforesaid purpose=

By order and in the name of the Governor of Maharashtra.

Deputy Secretary to the
Government

एच-871 -531



(A) Notification of River

Main river from its source near village.....
Tal..... District..... upto village.....
Taluka..... District.....

(B) For Catchment area portion

(B1) The nalla portion upstream of Dam on right Bank of main river

1. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
2. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
3. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
4. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
5. (..... To be continued accordingly)

(B2) The Nalla portion upstream of Dam on Left Bank of the main river.

1. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
2. Nalla No. :- From Survey No/Gat No.. of village..... upto its confluence with main river in Survey No/Gat No..... of village.
3. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.
4. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with



main river in survey No/Gat No. of village.

5. (..... To be continued accordingly)

(C) Command Area :-

(C1) Nallas on the Right Bank of the river falling in the command of Right Bank canal, from the point where they cross the canal and up to their confluence with river or main nalla in the command

1. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

2. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

3. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

4. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

5. (..... To be continued accordingly)

(C2) Nallas on the Left Bank of the river falling in the command of Left Bank canal, from the point where they accros the canaland up to their confluence with river or main nalla in the command

1. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

2. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

3. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

4. Nalla No. :- From Survey No/Gat No.. of village upto its confluence with main river in survey No/Gat No. of village.

5. (..... To be continued accordingly)

तपासणीसूचि

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प्रस्तावाचे नांव --

प्रस्तावाची व्याप्ति --

अ.क्र.	बाब	होय / नाही शेरा
१	पाणलोट क्षेत्रातील नदीनाले हयांचे उगमस्थान तपशीलासह दर्शक नकाशांमध्ये दर्शविले आहे का ?	
२	पाणलोट क्षेत्रातील सर्व नद्या नाले उगमापासून अधिसूचित केली आहेत का ?	
३	प्रकल्पाच्या समादेशक्षेत्रात (लाभक्षेत्रात) येणारे सर्व नदी-नाल्यांचे भाग अधिसूचनेसाठी समाविष्ट केले आहेत हयाची खातरजमा केली आहे का ?	
४	प्रकल्पाशी संबंधित नदी/ नाले हयांचा यापूर्वी अधिसूचित केलेला प्रभाग लाल रंगाने (राजपत्र संदर्भ व प्रतिसह) व आता नव्याने अधिसूचित करण्याचा प्रभाग हिरव्या रंगाने दर्शविला आहे का ?	
५	प्रकल्पाची पूर्ण संचयक्षमता केव्हा निर्माण झाली ते साल नमूद करून पाणलोट क्षेत्रातील नदी/ नाले अधिसूचनेचा परिपूर्ण व दोषरहित प्रस्ताव १२ महिने आधी शासनाला सादर करण्यात आला होता का ?	
६	प्रकल्पाचे प्रथम सिंचन केव्हा सुरु झाले ते नमूद करून संबंधित क्षेत्र सिंचनाखाली येण्यापूर्वी १२ महिने आधी हया क्षेत्रातील नदी-नाले अधिसूचनेचा परिपूर्ण व दोषरहित प्रस्ताव शासनाला सादर करण्यात आला होता का ?	
७	अधिसूचनेशी संबंधित नसलेला (अनावश्यक) तपशील नकाशात व प्रस्तावात दिसून येते का ?	
८	प्रस्तावाची शब्दरचना निसंदीग्ध व स्वयंस्पष्ट आहे का ?	
९	पाटबंधारे अधिनियम १९७६ कलम ३ अन्वये कार्यकारी अभियंता हयांनी लाभक्षेत्राच्या अधिसूचनेचे काम पूर्ण केले आहे का ?	
१०	नसल्यास, कारणे व सद्यःस्थिती	
११	प्रस्ताव व नकाशा यामध्ये गावाचे नांव संबंधित सर्वे क्रमांक इत्यादी बाबतीत विसंगती आहे का ?	
१२	छाननीनंतर अंतिम केलेला प्रस्ताव इंग्रजी मध्ये तसेच मराठी मध्ये विहित प्रपत्रात फ्लॉपी / सीडीसह / (ISM प्रणाली वापरून) सादर केला आहे का ?	
१३	नकाशात गावाच्या चतुःसिमा व नांवे स्पष्टपणे दर्शविल्या आहेत का ?	
१४	संबंधित सर्वे क्रमांक लाल वर्तुळात दर्शविले आहेत का ?	
१५	नदी/नाले हयांना सुलभ संदर्भक्रमांक देऊन प्रस्तावात व नकाशात अंतर्भूत केले आहेत का ?	
१६	नकाशे वरील पहाता येतील व हाताळण्यास सोईस्कर अशा आकरात आहेत का ?	

अ.क्र.	बाब	होय / नाही शेरा
१७	एकच नाला दोन नकाशात विभागून दाखविला आहे का ? (एकाच नकाशात सलग दाखविणे आवश्यक आहे)	
१८	आवश्यक तपशील दर्शविणारे व अनावश्यक तपशील वगळलेले नकाशे संदर्भसूचीसह प्रस्तावासोबत जोडले आहेत का ? प्रस्तावाच्या अनुसूचिशी ह्या तपशीलांचा मेळ बसतो का ?	
१९	शासनपत्र क्र. एमआयए १०००/(१९२/२०००) सि.व्य.(म) दि.५/३/२००३ मधील परिच्छेद ३ प्रमाणे करावयाच्या कार्यवाहीची नोंद घेण्यात आली आहे का ? अधीक्षक अभियंता हयानी घेतलेल्या शेवटच्या तीन पुनर्विलोकन आढाव्यांच्या तारखा नमूद कराव्यात	
२०	प्रस्तावाच्या तपशीलाची सखोल तपासणी मंडळ कार्यालयात करण्यात आली आहे का ? प्रस्तावाच्या नावाचा समावेश असणारे मंडळ कार्यालयात प्रस्तावाचा तपशील १००% तपासला आहे असे प्रमाणपत्र जोडले आहे का ?	
२१	प्रस्तावाची अधिसूचना (मराठी) अनुसूचि (मराठी) NOTIFICATION (इंग्रजी) व SCHEDULE(इंग्रजी) यावर अधीक्षक अभियंता हयांची दिनांकित स्वाक्षरी आहे का ?	
२२	प्रस्ताव धारिकेत समाविष्ट करता येईल अशा आकाराच्या पृष्ठांचा फक्त एका प्रतीत शासनास सादर केला आहे का ?	
२३	प्रस्ताव नकाशाची धारिका सोबत जोडली आहे का ?	

टीप -- सर्व मुद्यांची माहिती देणे आवश्यक आहे.आवश्यकता असेल तेथे कारणे देऊन समर्थन करावे.

(सही/-) - - - - -

अधीक्षक अभियंता

----- मंडळ

River drains under the Maharashtra Irrigation Act,
1976 (sections 11 and 117). Regarding notification

Government of Maharashtra

Water Resources Department

Government Decision No. Notification 2004/ (130/2004) Reg. (Revenue)

Mantralay, Mumbai 400 032

Dated 1/02/2005

The Government has issued orders from time to time with reference to the above regarding the notification of rivers, the Government is giving the following orders by consolidating the Government Decisions, Memorandums, Circulars shown in Form A in accordance with this Government Decision and making some new amendments.

Government decision

1.0 Guidelines regarding Notifications:

1.1) As per the guideline laid down in the next paragraph, only rivers and streams on which major/medium irrigation projects are constructed should be notified under Section-11 of the Maharashtra Irrigation Act, 1976. All other rivers, streams on which minor irrigation projects or dams have been constructed should not be notified.

1.2) The catchment dam upstream and the tributaries, drains and tributaries upstream of the dam which join the main river should be notified from their source.

1.3) The section of the main river of the project downstream of the last barrage should also be notified up to the point where it receives the benefit of regenerated flow.

1.4) Rivers/streams which have not been notified as per the above instructions should be notified immediately after the full capacity utilization of the water is started by having reservoirs/dams on them.

2.0 Procedure for Notification

2.1 New large/medium to the extent required by the Superintending Engineer concerned to notify the Government twelve months prior to commencement of irrigation on the new project for the use of water for irrigation and non-irrigation purposes, on the principles set out above and under Section-11 of the Maharashtra Irrigation Act, 1976. Proposals should be submitted for notification of projects and rivers, tributaries

2.2 Proposals for notification should be accompanied by a visual map highlighting the area of rivers, streams and streams to be notified and maps containing the respective village wise group numbers of rivers/streams to be notified. Likewise vide Rota/H-871 (1000-02-2005)-1 Index No. 20141209132156 2027

The map should clearly indicate the various elements of the notification with appropriate colour. Village boundaries should be properly indicated on the maps.

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2.3 Rivers and streams or part thereof included in the proposal to be notified. These have not been included in any other notification issued earlier of this It should also be ensured.

2.4 Before submitting the proposal to the Government, the proposal should be 100% scrutinized at the level of field officers (board level).

2.5 In the map accompanying the notification proposal to be proposed to the government, care should be taken to show the pre-notified section of the concerned river, stream, stream in red color and the newly notified section in green color.

3.0 Works to be notified under Section-11.

3.1 (a) Before submitting a draft notification under section 11 of the Maharashtra Irrigation Act, 1976, it should be seen that the condition precedent to the application of that section has been satisfied. That is, the water of any river or stream flowing through a natural canal or any natural body of stagnant water to be applied or used for the purposes of any existing or proposed canal.

4.0 Works to be notified under Section 117 of the Maharashtra Irrigation Act, 1976.

4.1 Irrigation works of class two.

(Works proposed to be notified under section 117 of the Maharashtra Irrigation Act, 1976).

(a) Before submitting a draft notification under section 117 of the Maharashtra Irrigation Act, 1976, it should be seen that the condition precedent to that section is fulfilled i.e. any water body must be clearly indicated as to which water body is actually in use and which water body is intended for irrigation. In order to avoid ambiguity in this regard, two separate notification proposals should be submitted for the purpose of irrigation actually being used or required for the purpose contemplated.

The said schedule should include the following details.

(i) the main rivers, streams and tributaries adjacent to the village, taluka and district from their source to the reservoir or barrier and beyond (to such extent as may be necessary);

H-871-1A/ 233/ 3

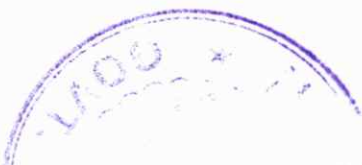
(ii) the said work with its location (name, survey number etc.)

iii) Villages, Talukas and Districts near by sub-canals, waterways etc. with direction.

(iv) all embankments upstream and downstream of the stream,

4.2 At the time when the notification under Section 11 and Section 117 is issued, the purpose is to provide the various details scheduled to enable the public to understand their obligations under the Act. This objective is not achieved unless the survey number is shown in detail. Also, there is no legal objection to submitting the notification without indicating the survey number, but if the objective is not achieved then the survey number will be indicated. In order to assist the public in identifying a tributary or stream, it is necessary to provide details of the tributary's course and where the stream joins the river. For the information of the Government, the authorities concerned should submit a clear and varied map (in two copies) to a suitable extent showing all the details and parts to be notified.

4.3 In order for the Government to consider the draft notification, the local authority before submitting the draft notification should consider the requirements of the particular section thoroughly and see that in the draft notification, unnecessary section of any stream or water body is not included.



4.4 Notifications for works which are (or may come under the charge of) the Revenue Department should be submitted to the Government directly (and if necessary in consultation with the Executive Engineer) and for works which are under the charge of the Irrigation Department. Notifications should be submitted by the Executive Engineer, through the Superintending Engineer of the Board (and if necessary in consultation with the Collector).

4.5 After the publication of the draft notification under Section 117 in the Maharashtra Government Gazette, the District Collector shall take such steps as may be required by Section 118 of the Maharashtra Irrigation Act, 1976 to communicate the objectives of the Government to the local public, after which the local authorities shall, after receiving the objections, Wait until the date is fixed and if no objection or suggestion is received, the same should be brought to the notice of the Government. If any objection or any suggestion is received, it should be forwarded to the Govt with necessary support.

4.6 In relation to notification under Section 11, although it is not legally required to act as in the case of notification under Section 117, it would be desirable if the local authorities take necessary steps to communicate the decision of the Government to the local people promptly after such notification is published in the Maharashtra Government Gazette. .

H-871-2

4.7 If there is any difficulty in implementing the above orders, the matter should be referred to the Government for necessary orders.

4.8 Under Section 11 (3) of the Maharashtra Irrigation Act, 1976, water cannot be used in any of the notified or unscheduled river divisions without the permission of the Water Resources Department to control water use on all river channels in the state. In unscheduled areas, prior approval of the Water Resources Department will be required from the Revenue Department before granting permission for use of water. Also, for water usage of notified / un-notified rivers and canals, the Water Resources Department should be charged at the rate fixed from time to time.

5.0 Notification Form

The form for publication of notification and accompanying documents is given herewith as Annexure-1 (Marathi) and Annexure-2 (English). These forms are in both Marathi and English languages. The said notification will be published in English and Marathi languages.

6.0 Checklist.

A thorough inspection of all the points in the inspection list attached with the proposal for river drainage notification should be made in the board office and submitted under the signature of the Superintending Engineer.

7.0 Levy of water levy on water consumption of notified river irrigation schemes and recovery.

Small Irrigation Pond or Udharan Irrigation Scheme or any other small pond is like a reservoir constructed or maintained or controlled by the appropriate authority, as the supply and storage of water is a canal under sub-section 3 (a) of the Maharashtra Irrigation Act, 1976. Included in the definition. Therefore minor irrigation ponds or extraction irrigation schemes or other water storage structures, if the source river on which they are constructed is not notified under section 11 of the Maharashtra Irrigation Act, 1976, minor irrigation ponds or extraction irrigation schemes or It is legally appropriate to levy a water tariff for the water consumption of any other water storage structure.



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8.0 Regulation of Water Use of Scheduled Rivers and Streams.

Under Section 11 (3) and Section 97 (1) of the Maharashtra Irrigation Act, 1976, from the date of issuance of notification for regulation and control of water use in any notified river channel, the Water Resources Department shall exercise control over the use of water in the notified river channel division falling under the purview of the Water Resources Department and prevent misuse of river water. So in the area from the canal to the river

H-871-2A 02/01/05

Notification (GR) dor

Also 300 m on the upper side of the canal. (1000 feet) electric connection to a private well shall not be provided to the Electricity Board without obtaining a no objection certificate from the competent authority of the Water Resources Department before taking it up.

By order and in the name of the Governor of Maharashtra.

(V D. Hoshing)

Deputy Secretary to Govt

Attachments

- 1) Form A
- 2) Addendum- 1 (Notification and Schedule Marathi))
- 3) Addendum-2 (Notification and Schedule)
- 4) Checklist

Self Assistant Secretary (Irrigation), Department of Water Resources, Ministry, Mumbai

Self Assistant Secretary (Lakshevi), Department of Water Resources, Ministry, Mumbai

Ministry of All Administrative Departments, Ministry, Mumbai

Executive Director, All Irrigation Development Corporations

Director General, Maharashtra Engineering Research Institute, Nashik

Director General, Maharashtra Water and Land Management Institute, Aurangabad.

Chief Engineer and Principal, Engineering Officers College, Nashik

Chief Engineer, Hydrology Project, Nashik

Chief Engineer, L.P. (Estt. Level), Pune.

All Divisional Commissioners (Revenue Department)

All Chief Engineers and Joint Secretaries, Water Resources Department, Ministry, Mumbai

All Divisional Chief Engineers, Water Resources Department

All Collectors



Ministerial Technical Deputy Secretary / Under Secretary / Deputy Engineer Water Resources
Department, Ministry

All Zonal Superintending Engineer, Water Resources Department

All Technical Offices, Department of Water Resources, Ministry, Mumbai.

C.V. (Revenue) Karyasan for collection.

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Copy :-

Rota/H-871 (1000-02-2005)-3

River Tributator...

Subject: Regarding Notification of River Drains.

Reference to Government Decisions/Memorandums/Circulars/His

1. Govt. Circular No.MNB/5754, dated 17.4.1954
2. Govt. Circular No.BIA/1067/33510-1(4) dated 12th May 1967
3. Govt. Resolution No. BKS/1764/68846-1(4) dated 19.2.1968
4. Govt. Resolution No.BKS/1968/3277-1(4) dated 31.1.1969
5. Govt.Letter No.MIA/1077/820-IMG-(3) dated 27.4.1977
6. Govt. Circular No.MIA/1078/11422 1058 IMG (3) dated 4.8.1968
7. Govt. Circular No.MIA/1078/11422 1068 IMG (3) dated 15.9.1979
8. Govt.Letter No.MIA/1076/IMG-1 4519 dated 26.6.1980
9. Govt.D.O No.MMIA/1078/14422/1068 IMG.3 dated 28.11.1980
10. Government letter no. MIA-9084/1031/591/C. Action, dated 26.9.1984 A.Kr.
- 11 Government letter no. MIA-1092/1114/(200/92) C.V. (M.) Dated 12.2.1993
12. Government letter no. MIA-1096/ (2/96) C.V. (M.) d. 12.3.1996
13. Govt. Circular No.BIA/1077/42389/805/IMG.3 dated 25.7.1978
14. Order No. Asha/MIA/1092/ (35/92) Syn.V. (M.) dated 11.2.1992
- 15 Government letter no. BKM/1588/681/S.Vya (Gho.) Dated 30.7.1992
- 16 Government letter no. BKS/1596/ (178) C.V. (Wash.) Dated 14.5.98
- 17- consolidated Government Decision No. Narrow 1099/ (178/99) C.V. (M)Dt.27/9/2002

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Addendum-1 notification
Maharashtra Irrigation Act 1976

No

C.V. (m.)

WHEREAS, the Government of Maharashtra considers that.....the water from its source in the districtin the taluka of village and its tributaries in the catchment area upstream of the dam and the water supply area within the scheduled specified limits along with the canal in the taluka of the river/stream, for the purposes of the project and of the said river/stream. And it is desirable to use it for regulating and supplying water in the canal water supply.

Accordingly now in exercise of the power conferred under Section 11 of the Maharashtra Irrigation Act 1976 (Maharashtra Act No.38) and vide Government Notification Irrigation Department no. d..... (GAZETTE DATED... GOVERNMENT OF MAHARASHTRA hereby declares that the water shall be used and regulated for the aforesaid purpose by virtue of

By order and in the name of the Governor of Maharashtra,

Deputy Secretary to Govt

Schedule.

a)Notification about river

.....from its source near the village of this main river to the village of in the taluka district. In the district of the taluka

b) For catchment area.

B (1)..... Portions of the channel upstream of the dam on the right bank of the main river

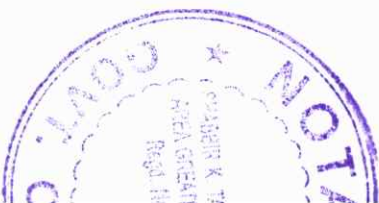
1) Drain No..... of the village.....From survey / group no to its confluence with the drain in village.....survey group no. Riverside/Main

2) Drain No..... Village Survey.....of the village.....From survey / group no.....to its confluence with the stream...../ in group no.....main river/main

3) Drain No.of the village.....From survey / group no to its confluence with the stream.....main river/main.....of Village in Survey / Group No

4) Drain No.....From Village Survey / Group No. 8 of the main village in Survey / Group No-----

5) (Like this further).



C- up to its confluence with the river/main drain.

C-1- Sections of the drain upstream of the dam on the left bank of this main river:-

fromSurvey / Group No. of village to its confluence with the main river / main village drain in Survey / Group No.

1) Drain No:-.....of Village..... from Survey / Group No. to Survey / Main River in Group No./ of Main Village..... to its confluence with the stream.

2) Drain no.of Village Village to Survey / Group No. from Survey / Group No. to main river/main

3) Drain No.-..... to its confluence with the stream.

(4) Drain No. :-.....Of Village Village Survey / Group No. From Survey / Group No. From Mainup to its confluence with the river/main drain.)

5) (similarly further).

C-2) Water supply area:-

of the right bank drains of the river in the water supply area of the right bank canal, from the point where it crosses the canal to the confluence in the water supply area. Its confluence with river/main drain

1) Drain No.of the village.....up to its confluence with the drain in village survey / group no. From Survey / Group No. to Main River / Main..... till its confluence with Nalla.

2) Drain No.....of Village Survey of Village / Survey from Group No. / Between Group No. to Main River/Main.....till its confluence with Nalla.

3) Drain No.Up to its confluence with the drain in the village cow survey / group no. From Survey / Group No. to Main River / Main..... till its confluence with Nalla.

4) Drain No.....up to its confluence with the village drain in village survey no. From Survey / Group No. ... to Main River / Main.....

5) (Similarly further).

Appendix-2

NOTIFICATION.

Water resources Department

Mantralaya, Mumbai-400 032

Dated:-

Maharashtra Irrigation Act 1976 No. IM (R)

Whereas, it appears expedient to the Government of Maharashtra that the waters of the Village upto village River/Nalla from its source near District Taluka and its tributaries laying in the catchment upstream of and in the Command of Dam canal] within the limits specified in the schedule hereto



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annexed, should be applied and used by the State Government for the purpose of Project and for regulation and supply of waters of the said River/Nalla and its tributaries in the command of the canal.

Now, therefore, in exercise of powers conferred by Section-11 of Maharashtra Irrigation Act. 1976 (Maharashtra XXXVIII) of 1976 and supersession/continuation of Government Notification, Irrigation and Power Department No. dated the Government of Maharashtra Declares that from the waters of the said River/Nallas will be applied and regulated for the aforesaid purpose=

By order and in the name of the Governor of Maharashtra.

**Deputy Secretary to the
Government**

SCHEDULE.

(A) Notification of River..... from its source near village...

Main riverDistrict..... Tal Taluka..... District. ...village

(B) For Catchment area portion

(B1) The nalla no..... portion upstream of Bank of main river..... Dam on right

1. Nalla No..... of village..... in survey No/Gat No.From Survey No/Gat No..... upto its confluence with main of village. river

2. Nalla No. of village..... in survey No/Gat No. From Survey No/Gat No..upto its confluence with main river of village.

3. Nalla No.....From Survey No/Gat No.....of village in survey No/Gat No. upto its confluence with main of village..... river

4. Nalla No.From Survey No/Gat No.....of village upto its confluence with in survey No/Gat No..... of main river village.

5..... (To be continued accordingly)

(B2) The Nalla portion upstream of of the main river. Dam on Left Bank

1. Nalla No. of village in survey No/Gat No. From Survey No/Gat No..... upto its confluence with main of village..... river

2. Nalla No. village... Survey No/Gat No....From Survey No/Gat No.. upto its confluence with main river of village. of in

3. Nalla No.....of village in survey No/Gat No..... From Survey No/Gat No..... upto its confluence with main of village river.....

4. Nalla No.....From Survey No/Gat No.....of village upto its confluence with main river village. in survey No/Gat No. of

5.(To be continued accordingly)



(C) Command Area :-

(C1) Nallas on the Right Bank of the river falling in the command Right Bank canal, from the point where they cross the canal and up to their confluence with river or main nalla in the command.....of village.....From Survey No/Gat No.....upto its confluence with main of village.

1. Nalla No.....river.....in survey No/Gat No.
2. Nalla No.of village.....river.....in survey No/Gat No.
3. Nalla No.....of village river in survey No/Gat No.....
4. Nalla No.of village upto its confluence with main river in survey No/Gat No. of village.....
5. (To be continued accordingly)

From Survey No/Gat No. upto its confluenc..From Survey No/Gat No. upto its confluence with main of village.

From Survey No/Gat No..

(C2) Nallas on the Left Bank of the river falling in the command of..... Left Bank canal, from the point where they accross the canal and up to their confluence with..... main nalla in the command river or

1. Nalla No.....of village.....river.....in survey No/Gat No.
2. Nalla No.....From Survey No/Gat No.....upto its confluence with main.....From Survey No/Gat No.. upto its confluence with main of village.
3. Nalla No.of village in survey No/Gat No.....river
4. Nalla No.....of village upto its confluence with in survey No/Gat No..... of From Survey No/Gat No..... upto its confluence with main of village.
5. (To be continued accordingly)

Maharashtra Irrigation Act, 1976 (Regarding notification of river channels under Sections 11 and 117

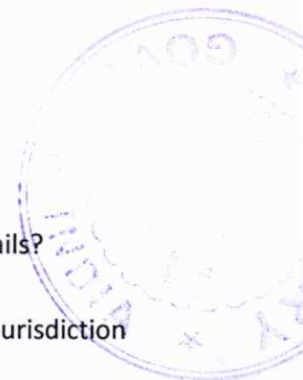
Name of the proposal

Scope of the proposal

CHECKLIST

Mark yes/no

- 1- Are the sources of rivers in the catchment area shown in the viewer map with details?
- 2- Are all rivers and streams in the catchment area notified from source?
- 3- Has it been ensured that all parts of rivers and streams falling within the project's jurisdiction (benefit area) have been included for notification?



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- 4- Is the previously notified section of project-related river channels in red (newly notified section in green with gazette reference and copy)?
- 5- Was a complete and flawless proposal for river / drain notification in the catchment area, stating the year when the full storage capacity of the project was created, submitted to the government 12 months before?
- 6- Was a perfect and faultless proposal for river and canal notification in this area submitted to the government 12 months before the concerned area came under irrigation mentioning when the first irrigation of the project started?
- 7- Are details unrelated to the notification (unnecessary) appearing in the map and proposal?
- 8- Is the wording of the proposal unambiguous and self-explanatory?
- 9- has the Executive Engineer completed the notification of the benefit area under section 3 of the Irrigation Act, 1976?
- 10- If not, reasons and current situation
- 11- Is there any inconsistency between the proposal and the map in terms of village name related survey number etc.?
- 12- Has the finalized proposal after scrutiny been submitted in English as well as in Marathi in the prescribed format with floppy / CD / (using ISM system)?
- 13- Are village boundaries and names clearly indicated on the map?
- 14- Are the relevant survey numbers shown in red circle?
- 15- Are rivers/streams included in the proposal and map with easy reference numbers?
- 16- Are the maps in a format that is easy for seniors to see and handle? Are the sizes comfortable?
- 17- Is the same nala divided into two maps? (must be shown consecutively in the same map)
- 18- Are maps showing essential details and omitting unnecessary details attached with the proposal along with reference list? Are these details consistent with the proposal schedule?
- 19- Government letter no. MIA 1000/(192/2000) C.V. (m) Whether the action to be taken as per paragraph 3 dated 5/3/2003 has been recorded? The dates of the last three revisions carried out by the Superintending Engineer should be mentioned
- 20- Has the details of the proposal been thoroughly checked in the board office? Is there a certificate attached stating that the details of the proposal have been 100% verified in the board office ...Is there a certificate attached stating that the details of the proposal have been 100% verified in the board office containing the name of the proposal?
- 21- Proposal Notification (Marathi) Schedule (Marathi) NOTIFICATION (English) and SCHEDULE (English) have dated signature of the Superintending Engineer?
- 22- Of a size that can be included in the proposal table? Is only one copy of the pages submitted to the Government?
- 23- Is the proposal map holder attached?

Note -- All points must be reported. Support with reasons where necessary.

signature

Superintending Engineer circle

TRUE COPY
ADVOCATE





GOVERNMENT OF MAHARASHTRA
LAW AND JUDICIARY DEPARTMENT

**MAHARASHTRA ACT No. XXXVIII OF
1976.**

THE MAHARASHTRA IRRIGATION ACT, 1976.

(As modified up to the 24th September 2012)



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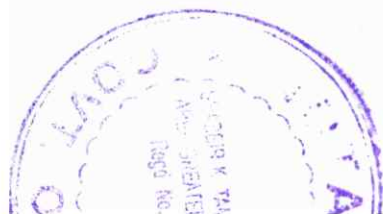
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Maharashtra Irrigation Act, 1976

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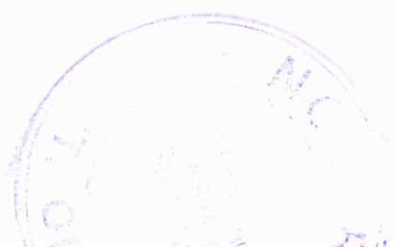
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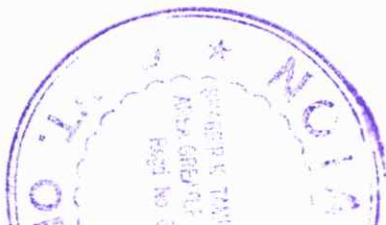
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MAHARASHTRA ACT No. XXXVIII OF 1976¹

[THE MAHARASHTRA IRRIGATION ACT, 1976.]

[This Act received assent of the President on the 26th July 1976 ;
assent was first published in the *Maharashtra Government Gazette*, Part-
IV, Extraordinary, on the 5th August 1976.]

Amended by Mah. 52 of 1981 *(19-9-1981)

Amended by Mah. 3 of 1984 *(11-1-1984)

Amended by Mah. 24 of 1989 *(13-7-1989)

Amended by Mah. 46 of 1997 *(29-12-1997)

Amended by Mah. 19 of 2005 *(4-5-2005)

An Act to unify and amend the Law relating to irrigation in the State of Maharashtra.

WHEREAS it is expedient to unify and amend the law relating to irrigation in the State of Maharashtra, to provide for charging water rates on lands under the irrigable command of canals and to provide for matters connected therewith ; It is hereby enacted in the Twenty-seventh Year of the Republic of India as follows :—

PART I

PRELIMINARY

1. (1) This Act may be called the Maharashtra Irrigation Act, 1976. Short title,
(2) It extends to the whole of the State of Maharashtra. extent and
(3) It shall come into force on such date² as the State Government commencement.
may, by notification in the *Official Gazette*, appoint.
2. In this Act, unless the context otherwise requires,— Definitions.
(1) "alienated" means transferred in so far as the rights of the State Government to payment of rent of land revenue are concerned, wholly or partially to the ownership of any person and the expressions "alienated land" and "unalienated land" shall be construed accordingly ;
(2) "Appropriate Authority", in relation to a canal constructed, maintained, controlled or managed by the State Government or the Company or a *Zilla Parishad*, means the State Government, the Company or the *Zilla Parishad* respectively ;
(3) "canal" includes—
(a) all canals, channels, pipes, tube-wells, domestic water-supply works and reservoirs constructed, maintained or controlled by the Appropriate Authority for the supply or storage of water ;
(b) all works, embankments, structures and supply and escape channels connected with such canals, channels, pipes, tube-wells, domestic water-supply works and reservoirs, and all roads constructed for the purpose of facilitating the construction or maintenance of such canals, channels, pipes, tube-wells domestic water-supply works and reservoirs ;
(c) all fields-channels, water courses, drainage-works and flood embankments as hereinafter respectively defined or explained in this Act ;
(d) any part of a river (including its tributaries), stream, lake, natural collection of water or natural drainage-channel, to which the State Government may apply the provisions of section 11, or of which the water has been applied or used before the commencement of this Act for the purpose of any existing canal ;

¹ For Statement of Objects and Reasons, see *Maharashtra Government Gazette*, 1976. Part V., Pages 115-123.

² 1st January 1977, vide G.N.,I.D., No. MIA. 1076-MIG-1, dated 1st January 1977.

* This indicates the date of commencement of the Act.



(e) all land belonging to, or held by, or entrusted to, the Appropriate Authority which is situate on a bank of any canal as hereinbefore defined, and which has been appropriated under the orders of such Appropriate Authority for the purposes of such canal ;

(f) all lift irrigation works constructed, maintained or controlled by the Appropriate Authority ;

(4) "Canal Officer" means any officer duly appointed by the State Government by an order in writing for all or any of the purposes of this Act specified in the order, and includes in relation to a canal constructed, maintained, controlled or managed by the Company, a Company Officer, and by a *Zilla Parishad*, a Parishad Officer ; and the expression "Canal Officer duly empowered in this behalf" or any like expression means a Canal Officer empowered by the Appropriate Authority by an order in writing for all or any of the purposes of this Act specified in the order and also includes a person acting under the general or special order of such Canal Officer ;

(5) "canal revenue" includes all sums payable to the Appropriate Authority for the use, right to use, or waste, of water from a canal ;

(6) "Collector" includes any officer appointed by the State Government to exercise all or any of the powers of a Collector under this Act ;

(7) "Company" means a company owned or controlled by the State which is set up for the purpose among other things of promoting, investigating, establishing, executing, installing, maintaining, managing or administering schemes for the purpose of irrigation or in relation to any irrigation project, in order to effect increase in irrigation potential and agricultural production in the State ¹[and shall also include a private developer or a co-operative society registered under the Maharashtra Mah. Co-operative Societies Act 1960, who has entered into an agreement XXIV of with the State Government, for any of the said purposes] ; and the of Company shall, for the purposes of this Act, function as the agent of the 1961. State Government ;

(8) "Company Officer" means any Officer of the Company duly appointed by the Company by an order in writing for all or any of the purposes of this Act specified in the order ;

(9) "drainage work" includes—

(a) channels, either natural or artificial, for all the discharge of waste or surplus water and all works connected with or auxiliary to such channels ;

(b) escape channels from a canal dams, weirs, embankments, sluices, groins and other works connected therewith ; and

(c) any work in connection with a system of irrigation or reclamation made or improved by the Appropriate Authority for the purpose of drainage of any area including works for the disposal of effluent from the sewage disposal schemes within the command of a canal undertaken by any person duly authorised in this behalf, but does not include works for the removal of sewage from any area within the limits of any local authority ;

(10) "field-channel" means a channel beyond an outlet from a point from where it runs in its own command, either constructed by the holders or occupiers or constructed by the Appropriate Authority on their behalf and maintained by such holders or occupiers beyond the outlet ;

¹ These words, figure and letters were inserted by Mah. 19 of 2005, s. 2.

(11) "flood embankment" means any embankment constructed or maintained by an Appropriate Authority in connection with any system of irrigation or reclamation works for the protection of lands from inundation or which may be declared by the Appropriate Authority to be maintained in connection with any such system, and includes all groins, spurs, dams and other protective works connected with such embankments ;

(12) "holder", in relation to land, means the person who is lawfully in actual possession of land as owner or tenant and includes a Government lessee ;

(13) "irrigation agreement" has the meaning assigned to it by section 61 ;

(14) "land under the irrigable command of a canal" has the meaning assigned to it by section 3 ;

(15) "occupant" means a holder in actual possession of unalienated land, other than a tenant or Government lessee; provided that, where a holder in actual possession is a tenant, the land holder or the superior landlord, as the case may be, shall be deemed to be occupant ;

(16) "occupier" in relation to land, means any person holding or professing to hold the right to cultivate such land for the time being ;

(17) "outlet" means an opening of a capacity not exceeding 30 litres per second to serve a block of land of approximately 40 hectares and which is constructed by the Appropriate Authority in a canal through which water is delivered into a field-channel or directly on to any land ;

(18) "owner" includes every person having a joint interest in the ownership of the thing specified, and all rights and obligations which attach to an owner under the provisions of this Act shall attach jointly and severally to every person having such joint interest in the ownership ;

(19) "Parishad Officer" means any officer of *Zilla Parishad* duly appointed with the previous approval of State Government by the *Zilla Parishad* by an order in writing for all or any of the purposes of this Act specified in the order ;

(20) "prescribed" means prescribed by rules made by the State Government under this Act ;

(21) "Second Class Irrigation Works" means the canals, channels, streams, rivers, wells, tube-wells, artesian wells, pipes, reservoirs, artificial or natural, or *bandharas* or any part thereof which have been Bom. VII of 1879. Irrigation Works before the commencement of this Act ;

(22) "Superior holder" means a land-holder entitled to receive rent or land revenue from other land-holders (called "Inferior holders") whether he is accountable or not for such rent or land revenue, or any part thereof, to the State Government :

Provided that, where land has been granted free of rent or revenue, subject to the right of resumption in certain specified contingencies by a holder of alienated land whose name is authorisedly entered as such in the land records, such holder shall, with reference to the grantee, be deemed to the superior holder of land so granted by him, and the grantee shall, with reference to the grantor be deemed to be the inferior holder of such land ;

(23) the expression "supply of water" with its grammatical variations includes the expression "water made available from any canal" with its grammatical variations ;



(24) "water rate" means payment to be made in the prescribed manner for a supply of facility of water from a canal for irrigation or any purpose provided by or under this Act at the rate determined under this Act ;

(25) "wet land" has the meaning assigned to it by section 4 ;

(26) "Zilla Parishad" means a Zilla Parishad constituted under the Maharashtra Zilla Parishad and Panchayat Samitis Act, 1961 ;

Mah.
V of
1962.

(27) words and expressions used in this Act but not defined shall have the meanings respectively assigned to them in the Maharashtra Land Revenue Code, 1966.

Mah.
XLI
of
1966.

Lands
under
irrigable
command
of canal.

3. (1) Lands under the irrigable command of canal means all those cultivable lands which are or can be irrigated from a canal by the flow of water under gravity without the need of lifting or pumping water (or in case of lift irrigation work, which after water is lifted, are or can be irrigated by the flow of water under gravity), and which a Canal Officer not below the rank of an Executive Engineer may, by notification in the *Official Gazette*, declare to be so in relation to such canal. Such lands may include lands as are or may be deemed to be irrigated from a canal within the meaning of section 55. The lands may be specified or described in the notification in such manner as the Canal Officer may think fit.

(2) The notification may also be published in such other manner in or in the vicinity of such lands as the Canal Officer may think fit. The Canal Officer shall also serve individual notices on all the holders and occupiers of lands situated within the irrigable command of the canal declared under sub-section (1).

(3) A Canal Officer not below the rank of an Executive Engineer may, with the previous sanction of a Canal Officer not below the rank of a Superintending Engineer, declare any land to be "not commanded" if it can be irrigated only by such use of water which in the opinion of the Canal Officer is excessive or by means of a field channel which passes through an area which the Canal Officer considers it desirable to avoid.

(4) Land which would otherwise be not under the irrigable command of a canal may come under the irrigable command of such canal by construction of a crossing for the passage of water across a natural drainage channel or ridge.

(5) Any person aggrieved by any notification or part thereof under sub-section (1), may, within thirty days from the date of publication of such notification in the *Official Gazette*, file an appeal before such Officer not below the rank of a Chief Engineer as the Appropriate Authority may appoint. The Appellate Officer may pass such order in the appeal as he thinks fit, and thereupon, the notification shall stand unmodified or modified to the extent and from the date specified in the order :

Provided that, no order varying or revising any such notification or part thereof, affecting the lands of any person shall be made without giving that person a reasonable opportunity of being heard.

Wet land.

4. Land is said to be wet,—

(a) when it is classed in the village record under any description which the State Government may, by rules made under this Act, declare to have the meaning of 'wet' for the purposes of this section ; or

(b) when it has been declared by a Canal Officer, duly empowered by the Appropriate Authority, to be wet.



Irrigation areas

5. For the purposes of this Act, the Appropriate Authority may divide the area within its jurisdiction into regions, circles, division, sub-divisions and sections in such manner as it deems fit and may, from time to time, alter their limits.

Divisions of State into irrigation areas.

PART II

CANAL OFFICERS, THEIR CHARGES AND POWERS

6. (1) There may be the following classes of Canal Officers appointed by the State Government, with the following designations, or such other designations as the State Government may, by an order in writing from time to time, determine, namely :—

Canal Officers.

- (1) The Chief Engineers,
- (2) Additional Chief Engineers,
- (3) Superintending Engineers,
- (4) Executive Engineers,
- (5) Sub-divisional Officers, that is to say, the following officers holding charge of a sub-division :—
 - (a) Assistant Engineer, Class I ;
 - (b) Assistant Engineer, Class II ;
 - (c) Deputy Engineer ;
 - (d) Sub-Divisional Engineer ;
 - (e) Sub-divisional Officer ;
- (6) Sectional Officers.

(2) For the purposes of Part XIII of this Act, the Canal Officer shall be a Revenue Officer not below the rank of a Tahsildar.

(3) The Canal Officers appointed by the Company or a Zilla Parishad may bear such designations referred to in sub-section (1) as it thinks fit, and in doing so, their rank corresponding to the rank of Canal Officers appointed by the State Government shall be indicated in their order of appointment, and the provisions of this Part shall be construed accordingly.

7. The chief controlling authority in all matters connected with the construction, maintenance and managements of canal and matters incidental or supplemental thereto, in his region or regions, shall, in relation to canals of the State Government vest in the Additional Chief Engineer or an officer bearing any other designation, if any, specified in this behalf, and in relation to canals of the Company or a Zilla Parishad vest in such Canal Officer appointed by it as may be specified by it ; subject to the superintendance, direction and control of the Chief Engineer and the State Government.

Chief controlling authority in irrigation matters.

8. (1) The Appropriate Authority may, by notification in the Official Gazette, either prospectively or retrospectively, appoint the Chief Engineer to be in-charge of the irrigation generally, an Additional Chief Engineer to be in-charge of a region or regions, a Superintending Engineer to be in-charge of a circle, an Executive Engineer to be in-charge of a division, a Sub-Divisional Officer to be in-charge of a sub-division, and a Sectional Officer to be in-charge of a section, specified in the notification.

Appointment of Canal Officers.

(2) The Appropriate Authority may, by notification in the Official Gazette, either prospectively or retrospectively, appoint persons to be additional Canal Officers in any section, sub-division, circle or region and may invest them with all any of the powers of a Sectional Officer, Sub-Divisional Officer, Executive Engineer or Superintending Engineer, respectively, specified in the notification.



Subordina-
tion of
Canal
Officers.

9. (1) All Canal Officers shall be subordinate to the Appropriate Authority and all Canal Officers (other than the Chief Engineer) shall be subordinate to the Chief Engineer.

(2) All Canal Officers in a region shall be subordinate to the Additional Chief Engineer.

(3) All Canal Officers in a circle shall be subordinate to the Superintending Engineer.

(4) All Canal Officers in a division shall be subordinate to the Executive Engineer.

(5) All Canal Officers in a sub-division shall be subordinate to the Sub-divisional Officer.

(6) All employees below the rank of Sectional Officer shall be subordinate to the Sectional Officer.

Power to
allot duties
among
Canal
Officers.

10. (1) When under this Act, any duty is to be performed or power is to be exercised by a Canal Officer, and the class of Canal Officer is not specified, rules made under this Act regulating the performance of such duty or exercise of such power may specify the class of Canal Officers by which it is to be performed or exercised.

(2) Rules may also be made under this Act prescribing generally the class of Canal Officers which is to perform any duty or exercise any power which, under this Act, is to be performed or exercised by a Canal Officer.

(3) When the class of Canal Officers which is to perform any duty or exercise any power under this Act is not prescribed under sub-section (1) or sub-section (2), such duty shall be performed or such power shall be exercised by the Sub-divisional Officer.

PART III

CONSTRUCTION AND MAINTENANCE OF CANALS

Application of water for purposes of canal.

Notifica-
tion when
water-
supply to
be applied
for
purposes
of canal or
for
regulation,
supply or
storage of
water.

11. (1) Whenever it appears expedient to the Appropriate Authority that the water of any river (including its tributaries) or stream flowing in a natural channel or of any lake or any other natural collection of still water or water flowing in a channel where such water or part thereof, is received from any canal constructed by the Appropriate Authority or by any person who has been duly authorised by the State Government, whether by percolation, regeneration, release or otherwise should be applied or used by the Appropriate Authority for the purpose of any existing or projected canal, or for the regulation, supply or storage of water, the State Government may, by notification in the *Official Gazette*, declare that the said water will be so applied or used after a day to be named in the said notification, not being earlier than three months from the date thereof ; and thereupon the Collector shall cause notice to be given as provided in section 80.



(2) The application or use of the said water or the application or use of water of any canal under the management or control of any Appropriate Authority shall be regulated according to the provisions of this Act.

(3) Save as provided by sub-sections (1) and (2), no person (other than the State Government) shall apply or use the water of any river (including its tributaries) or stream flowing in a natural channel or of any lake or any other natural collection of still water or water flowing in a channel for any projected canal to be constructed by him, except with the previous permission in writing of the State Government and it shall be lawful for the State Government to grant such permission subject to such terms and conditions as it may deem fit in the circumstances of each case.

Powers of entry on land, etc.

12. At any time after the day named in the notification under section 11, any Canal Officer duly empowered in this behalf, may enter on any land, remove any obstruction, close any channel and do any other thing necessary for such application or use of the said water and for such purpose may take with him, or depute or employ, such subordinates and other persons including Police Officers as he thinks fit.

Powers of Canal Officers for purpose of so applying water.

13. Whenever it shall be necessary to make an enquiry or examination in connection with a projected canal, or with the maintenance of an existing canal or with the application or use of the water of any canal for the purpose of regulation, supply or storage of water, any Canal Officer duly empowered in this behalf may—

Entry for enquiry.

(a) enter upon such land as he may think necessary for the purpose,

(b) undertake surveys or take levels thereon,

(c) dig and bore into the sub-soil,

(d) where otherwise such inquiry cannot be completed, cut down and clear away any part of any standing crop, fence or jungle,

(e) exercise all powers and do all things in respect of such land as he might exercise and do if the State Government had issued a notification under the provisions of section 4 of the Land Acquisition Act, 1894, to the effect that land in that locality is likely to be needed for a public purpose, and

1 of
1894.

(f) set up and maintain water-gauges and do all other things necessary for the prosecution of such inquiry and examination.

14. (1) Any Canal Officer duly empowered in this behalf may enter upon any land, building or field-channel on account of which any water rate is chargeable, for the purpose of inspecting or regulating the use of the water supplied, or of measuring the land irrigated thereby or chargeable with a water rate, and of doing all things necessary for the proper regulation and management of the canal from which such water is supplied.

Power to inspect and regulate water supply.



(2) Where the flow of water supplied to any land from a canal from field to field is obstructed, then with a view to regulating supply of water, the Canal Officer may require such obstruction to be removed and for that purpose he shall, if necessary, take or cause to be taken such steps or use or cause to be used such force as may be reasonably necessary for securing the removal of such obstruction from the supply of water.

Power to enter for repairs and to prevent accidents.

15. In case of any accident being apprehended or happening to a canal, any Canal Officer duly empowered in this behalf may enter upon any land adjacent to such canal, and may take trees and other materials, and execute all works which may be necessary for the purpose of preventing such accident or repairing any damage done.

Power to Canal Officer to operate gates in order to regulate floods.

16. Where any dam is being damaged or damage to any dam is apprehended due to floods, any Canal Officer duly empowered in this behalf may, in the interest of the safety of the dam, regulate the floods by operating gates or gated waste weir on the dam.

Notice to occupier of building, etc.

17. Where a Canal Officer proposes under the provisions of section 13, 14 or 15 to enter into any building or enclosed court or garden attached to a dwelling house, not supplied with water from a canal, and not adjacent to a flood embankment, he shall give to the occupier of such building, court or garden such reasonable prior notice as the urgency of the case will allow.

Canal crossings

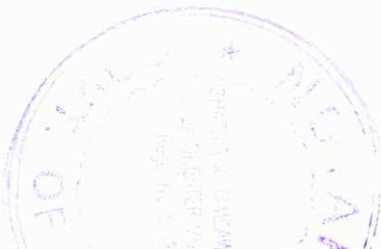
Means of crossing canals to be provided and obstruction to drainage to be avoided.

18. Suitable means of crossing canal shall be provided at such places as the Appropriate Authority thinks necessary for the reasonable convenience of the inhabitants of the adjacent land ; and suitable bridges, culverts or other works shall be constructed to prevent the drainage of the adjacent land being obstructed by any canal. Road bridges shall, as far as possible, be provided on all roads crossing a canal, including certified village roads shown by two dotted lines on a village plan. In case of dispute on the question of providing such crossing and of constructing bridges, culverts and other works the matter shall be referred to the State Government and the decision of the State Government on the question shall be final and conclusive, and shall not be called in question in any civil court.

Removal of obstructions to drainage

Appropriate Authority may prohibit formation of obstructions of rivers, etc. within certain limits.

19. Whenever it appears to the Appropriate Authority that injury to the public health or public convenience or to any canal or to any land for which irrigation from a canal is available, has arisen or may arise from the obstruction of any river, stream or natural drainage-course, the Appropriate Authority may, by notification in the *Official Gazette*, prohibit within limits to be defined in such notification, the formation of any such obstruction, or may, within such limits, order the removal or other modification of such obstruction. The contents of the notification shall also be published in a newspaper having wide circulation within such limits.



Thereupon, so much of the said river, stream or natural drainage-channel, as is comprised within such limits, shall be held to be a drainage work as defined in section 2.

20. Any Canal Officer duly empowered in this behalf may, after such publication of the notification under section 19, issue an order to any person causing or having control over any such obstruction to remove or modify the same within a time to be fixed in such order.

Canal Officer may issue order to any person causing obstruction.

21. (1) If, within the time so fixed, such person does not comply with the order, the Canal Officer may cause the obstruction to be removed or modified, and if the person to whom the order is issued does not, when called upon, pay the expenses of such removal or modification, such expenses shall be recoverable as an arrear of land revenue.

Canal Officer may cause obstruction to be removed.

(2) The Canal Officer may, in cases of emergency, after recording his reasons in writing, remove the obstruction before the publication of the notification under section 19, and the expenses incurred for such removal shall be recoverable in the same manner. The judgement of the Canal Officer whether or not there is an emergency shall be final, and shall not be called in question in any civil court.

Construction of drainage works

22. Wherever it appears to the Appropriate Authority that any drainage work is necessary for the public health or for reclamation of land, or for the improvement of the proper cultivation or irrigation of any land, or that protection from floods or other accumulations of water, or from erosion by any river, is required for any land (or that a sewage disposal scheme is required for disposal of effluent from any sewage scheme), the Appropriate Authority may cause a scheme for such work to be drawn up and carried into execution ; and the person authorised by the Appropriate Authority may exercise in connection therewith the powers conferred on Canal Officers by sections 13, 14 and 15 and shall be liable to the obligations imposed upon Canal Officers by section 17 and section 77.

When drainage works are necessary Appropriate Authority may order scheme to be carried out.

PART IV

FIELD- CHANNELS

Construction of field- channels

23. Field-channels (except the water-course) shall be constructed by the holders or occupiers of land at their cost but subject to the direction of a Canal Officer. The water-course shall be constructed by the Appropriate Authority, but maintained by such holders or occupiers of land ; and the provisions of this Act in so far as they relate to maintenance of field-channels shall *mutais mutandis* apply in relation to such water-course.

Construction of field-channels.

Explanation.—(1) For the purposes of this Act, water-course means the idle length of a channel between an outlet and a field-channel.



(2) If any question arises as to what is the idle length of any channel constituting a water-course, the question shall be referred to the Canal Officer duly empowered in this behalf, and his decision on the question shall be final and conclusive.

Applica-
tion to
Canal
Officer for
construc-
tion of
new field-
channels.

24. Any person desiring to construct a new field-channel, but being unable or unwilling to construct it under a private arrangement with the holder of the land required for the same, may apply in writing to any Canal Officer duly empowered to receive such applications, stating—

(1) that he is ready to defray all the expenses necessary for acquiring the land and constructing such field-channel ;

(2) that he desires the said Canal Officer on his behalf and at his cost to do all things necessary for constructing such field-channel.

Procedure
for con-
structing
field-
channels.

25. (1) If the Canal Officer considers the construction of such field-channel expedient, he may call upon the applicant to deposit any part of the expense, such officer may consider necessary.

(2) Upon such deposit being made, the Canal Officer shall cause inquiry to be made into the most suitable alignment for the field-channel and shall mark out the land, which in his opinion, it will be necessary to occupy for the construction thereof. Thereafter, he shall forthwith publish a notification in every village through which the field-channel is proposed to be taken, that so much of such land as is situated, within such village has been so marked out. Such notification shall state that suggestions or objections received by the Canal Officer within thirty days of the publication of such notification shall be duly considered after hearing the parties, if necessary.

(3) The Canal Officer shall send a copy of such notification to the Collector of every district in which such land is situated for publication on such land.

(4) Such notification shall also call upon any person who wishes to share in the ownership of such field-channel to make his application in that respect to the Canal Officer within thirty days of the publication of such notification.

(5) If any such applicant appears, and his application is admitted, he shall be liable to pay his share in the construction of such field-channel and his share in the cost of acquiring the land for such field-channel. The applicant shall be owner of such field-channel when it is constructed.

Procedure
after
construction
of field-
channels.

26. On being put in possession of the land acquired under Part V of this Act, the Canal Officer shall construct the required field-channel ; and on its completion, shall give to the owner notice thereof, and of any sum payable by him on account of the cost of acquiring the land and constructing the field-channel. On such notice being given, such sum shall be due from the owner to the Canal Officer. On receipt of payment in full of expenses incurred, the Canal Officer shall make over possession of such field-channel to such owner.

Rights and obligations of owners of field-channels

27. (1) Every owner of a field-channel shall be bound—

(a) to maintain all works necessary of the passages across such field-channel existing at the time of its construction, and of the drainage intercepted by it and for affording proper communications across it for the convenience of the occupants of neighbouring lands ;

(b) to maintain such field-channel in a fit state of repair for the conveyance of water ;

(c) to allow the use of it to others or to admit other persons as joint owners thereof, on such conditions, as may be provided under the provisions of section 29.

(2) Every owner of a field-channel and every person duly authorised under the provisions hereinafter contained to use a field-channel shall be entitled to have a supply of water by such field-channel at such rates and on such terms as may from time to time be provided under section 59, section 60, section 67 or section 72, as the case may be :

Provided that any owner of field-channel and, subject to the terms of any agreement between the parties, or to any condition imposed under section 29, any such person as aforesaid may, at any time by giving three months' previous notice in writing in this behalf to a Canal Officer duly empowered to receive such notice resign his interest in such field-channel.

28. Any person desiring to have a supply of water through a field-channel of which he is not an owner may make a private arrangement with the owner for permitting the conveyance of water thereby, or may apply to a Canal Officer duly empowered to receive such applications for authority to use such field-channel or to be declared a joint owner thereof.

29. On receipt of any such application, the Canal Officer shall serve notice on the owner to show cause why such authority should not be granted, or such declaration should not be made, and, if no objection is raised or if any objection is raised and is found to be insufficient or invalid shall, subject to the approval of the next superior Canal Officer, either authorise the applicant to use the field-channel or declare him to be a joint owner thereof on such conditions as to the payment of compensation or rent or otherwise as may appear to him equitable.

30. (1) No land acquired for a field-channel shall be used for any other purpose without the previous consent of a Canal Officer duly empowered to grant such permission.

(2) No field-channel shall be altered except with the permission in writing of the Canal Officer especially empowered in this behalf.

Obligation of owner of field-channel.

Arrangement with owner by other person.

Canal Officer after enquiry may authorise supply or declare applicant to be joint owner.

Prohibition of land acquired for field-channel for other purpose; and prohibition against alteration of field-channel.



If owner fails to execute work or to repair field-channel, Canal Officer may execute the same.

31. If any owner of a field-channel fails to fulfil any obligation imposed upon him by clause (a) or (b) of sub-section (1) of section 27, any Canal Officer duly empowered in this behalf may require him by notice to execute the necessary work or repair within a period, to be specified in such notice, of not less than fifteen days, and, in the event of failure, may execute the same on his behalf, and, except as hereinafter provided in section 33, all expenses incurred in the execution of such work or repair shall be a sum due by such owner to the Appropriate Authority.

Cancellation of sanction to supply of water for failure to maintain field-channels.

32. If a Canal Officer duly empowered in this behalf is satisfied that the owner of a field-channel has persistently failed to repair the field-channel and the Canal Officer accordingly was required to carry out the repairs under section 31, the Canal Officer may by an order in writing with the previous approval of the Officer who is next higher in rank revoke the sanction for the supply of water to the owner of that field-channel :

Provided that no such order shall be made without giving to the owner of the field-channel a reasonable opportunity of being heard.

Person using field-channel to pay share of expenses of repair.

33. Every person other than an owner who uses any field-channel in respect of which any repair has been executed by a Canal Officer under section 31 shall, in the absence of any agreement between the parties or of any condition imposed under section 29, at the time such person was authorised to use such field-channel to the contrary, be liable to pay to the Appropriate Authority such proportion of the expenses incurred in the execution of such repairs as shall be determined by the said Canal Officer.

Schemes for compulsory construction of field-channels

Schemes for compulsory construction of field-channels.

34. (1) Where a Canal Officer especially authorised in this behalf by the Appropriate Authority (hereinafter referred to as the authorised Canal Officer) is of opinion that although water for irrigation is available in any area, but nevertheless lands capable of being irrigated therefrom, are not being irrigated, or are being prevented from being irrigated for any reason, and he is further of opinion that in the interest of the general public it is necessary so to do, he may prepare a draft scheme providing for the construction of field-channels for the supply of irrigation water to the best advantage in such area :

Provided that, no scheme shall be prepared unless at least fifty-one per cent. of the holders or occupiers of the land or holders or occupiers of at least fifty-one per cent. of the land give a consent in writing to the preparation of such a scheme.

(2) The draft scheme shall contain the following particulars, that is to say—

(i) the area to which scheme applies ;

(ii) the proposed field-channels, and the most suitable alignment thereof ;

(iii) the approximate area which is likely to be needed for the construction of the field-channel and appurtenant works, the land which it is necessary to occupy for the construction of the field-channel and the area mentioned in clause (i) ;

- (iv) the survey numbers and the area of each of the lands to be benefited by the field-channel ; and the names of the holders or occupiers thereof ;
- (v) the canal from which water is to be carried to the field-channel ;
- (vi) the period within which each holder or occupier of land in the area mentioned in clause (iv) may construct either jointly or severally a field-channel for carrying water from the canal to his land ;
- (vii) the approximate cost of construction of the field-channel ;
- (viii) the extent of the liability of each holder or occupier of land for the construction of the field-channel ;
- (ix) such other particulars as may be prescribed.

(3) The authorised Canal Officer shall publish the draft scheme in the *Official Gazette*, and shall also publish it in the manner prescribed in every village through which the field-channel is proposed to be taken together with a notice calling upon the holders or occupiers of the lands, and all persons affected by the scheme, to submit to him in writing their suggestions or objections within such period as may be specified in the notice.

(4) As soon as may be after the expiry of the period specified in the notice, the authorised Canal Officer shall, after considering the suggestions and objections, if any, received under sub-section (3)—

- (a) sanction the draft scheme with or without modifications ;
- (b) publish the sanctioned scheme (to be called the "final scheme") by notification in the *Official Gazette* and in such other manner as may be prescribed ; and
- (c) send a copy of the notification so published to the Appropriate Authority.

35. Upon the publication of the final scheme, it shall be binding on all the holders and occupiers of lands mentioned therein, and it shall be their duty to construct in the prescribed manner the field-channels under the scheme.

Obligation on holders to construct field-channels under final scheme.

36. Whenever it shall be necessary to make any inquiry or examination in connection with the construction of a field-channel under section 34, the provisions of section 13 shall apply in relation to such inquiry or examination in connection with the field-channel.

Provisions of section 13 to apply.

37. (1) The authorised Canal Officer shall by notice in writing require each holder and occupier to construct the field-channel as provided by the final scheme.

Notice to holders and occupiers of land to construct field-channels.

(2) The notice under sub-section (1) shall be given in such form and in such manner as may be prescribed.

38. If any holder or occupier of land fails to construct the field-channel as required by notice aforesaid within the period specified in the final scheme, the authorised Canal Officer may construct the same at the cost of that holder or occupier or of both, as the case may be.

Power to authorise Canal Officer to construct field-channels.

Consequences of completion of construction of field-channels.

39. (1) When the construction of a field-channel as provided in the final scheme is duly completed,—

(a) the authorised Canal Officer shall issue a certificate to that effect in the prescribed form, and

(b) the Appropriate Authority or the authorised Canal Officer, if so empowered by the Appropriate Authority, shall by order in writing transfer the land occupied by the field-channel to all holders or occupiers of land benefitted by the field-channel ; and thereupon, the land so transferred together with the field-channel shall vest in such holders or occupiers and the provisions of sections 27 to 33 (both inclusive) shall apply to such holders or occupiers as they apply in relation to an owner of a field-channel.

(2) Nothing in sub-section (1) shall affect the right of the Appropriate Authority to recover the cost of land and the cost of the construction of the field-channel payable by any holder or occupier of land under the final scheme.

Mode of payment of cost of construction of field channels, etc.

40. (1) Subject to the provisions of sub-section (2), the cost of any land and of the construction of the field-channel payable under the final scheme shall be paid by each holder either in lump sum within such period, or in such instalments not exceeding five with simple interest at such rate as may be fixed by the Appropriate Authority from time to time.

(2) Where any holder or occupier of land has constructed a field-channel at his own cost or made available any part of his land for its construction, the authorised Canal Officer shall determine the value of the construction, or as the case may be, the value of the land so made available, and the value so determined shall be deducted from the cost payable by the holder or occupier under sub-section (1).

Power of Appropriate Authority to direct preparation of scheme in public interest.

41. Notwithstanding anything contained in section 34, the Appropriate Authority may direct a Canal Officer to prepare a scheme providing for the construction of field-channels for the supply of irrigation water to the best of advantage of any area specified in the direction, if in the opinion of the Appropriate Authority such scheme is necessary in the interest of the public ; and thereupon, the provisions of sections 34 to 40 (both inclusive) shall apply as they apply in relation to a scheme prepared under section 34.

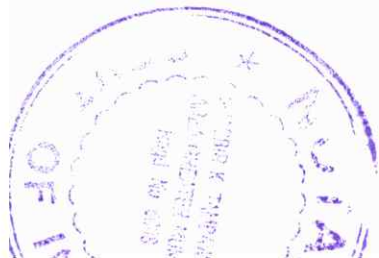
Settlement of disputes concerning field-channels

Settlement of disputes as to mutual rights and liabilities of persons interested in field-channels.

42. (1) Whenever a dispute arises between two or more persons in regard to their mutual rights or liabilities in respect of the use, construction or maintenance of a field-channel, or among joint owners of a field-channel, as to their respective shares of the expense of constructing or maintaining such field-channel, or as to the amounts severally contributed by them towards such expense, or as to failure on the part of any owner to contribute his share, a person interested in the matter of such dispute may apply in writing to a Canal Officer duly empowered to receive such application, stating the matter in dispute.

(2) The Canal Officer shall thereupon give notice to the other persons interested that on a day to be named in such, he will proceed to inquire into the said matter.

(3) If all the persons interested consent in writing to his being the arbitrator, the Canal Officer may pass such order thereon as he thinks fit.



(4) Failing such consent, the Canal Officer shall transfer the matter to the next superior Canal Officer who shall enquire into it and pass such order thereon as he thinks fit.

(5) No order which adversely affects the interests of any party to the dispute shall be made unless such party is given a reasonable opportunity of being heard.

Bom. XXVIII of 1942.

43. Except as otherwise provided in the Bombay Land Improvement Schemes Act, 1942, nothing in this Part shall apply to field-channels constructed in pursuance of the provisions of that Act.

Provisions of this Part not to apply to field-channels constructed under Bom. XXVIII of 1942.

PART V

ACQUISITION OF LAND

I of 1894.

44. (1) If at any time on an application of a Canal Officer not lower in rank than an Executive Engineer, the Appropriate Authority is satisfied that any land, or any right or interest of any person in any land required for the construction of a new canal, or a new field-channel under section 24, or for the maintenance, improvement or extension of an existing canal should be compulsorily acquired or extinguished, the Appropriate Authority may acquire the land, right or interest by agreement or the State Government may acquire the land under the Land Acquisition Act, 1894, or the Zilla Parishad or the Company may make an application to the State Government for acquiring such land under that Act.

Acquisition of land for canals and field-channels.

I of 1894.

(2) On receipt of such application from the Zilla Parishad or Company, if the State Government is satisfied that the land specified in the application is needed for the public purpose therein specified or if the State Government decides to acquire the land under sub-section (1), it may make a declaration to that effect in the Official Gazette, in the manner provided in section 6 of the Land Acquisition Act, 1894, in respect of the said land, right or interest. The declaration so published shall, notwithstanding anything contained in the said Act, be deemed to be a declaration duly made under the said section :

¹Provided that, if the land proposed to be acquired falls within the Scheduled Area then the State Government shall, before such acquisition or before re-settling or rehabilitating the persons affected by such projects in such Scheduled Areas consult,—

(i) the Gram Sabha and Panchayat concerned, if the land is falling within the area of one Panchayat ;

(ii) the concered Gram Sabhas and Panchayat Samitti , if the land is falling within the area of more than one Panchayats in the Block concerned ;

(iii) concered Gram Sabhas and Zilla Parishad , if the land is falling within the area of more than one Blocks in the District concerned ;

Such consultation shall be done in the manner as may be laid down by the State Government, by issuing a general or a special order in this behalf :

Provided that, the decision taken by majority of Gram Sabhas concerned by passing a resolution in the above matter shall be binding on the concerned Panchayat Samiti or the Zilla Parishad, as the case may be.

1. These provisos were added by Mah. 46 of 1997, s. 11.



Explanation.—For the purpose of this proviso,—

(i) the expressions 'Gram Sabha', 'Panchayat' and 'Scheduled Areas' shall have the meanings respectively, assigned to them in the Bombay Village Panchayats Act, 1958 ; Bom.
III of
1959.

(ii) the expression "Panchayat Samiti", and "Zilla Parishad" shall have the meaning respectively, assigned to them in the Maharashtra Zilla Parishads and Panchayat Samitis Act, 1961.] Mah.
V of
1962.

(3) On the publication of a declaration under the said section 6, the Collector shall proceed to take order for the acquisition of land under the said Act ; and the provisions of the said Act shall apply to the determination of the amount of compensation, appointment of the compensation and other matters relating to the acquisition of the said land, right or interest. The State Government may make rules in all matters connected with the enforcement of the said provisions in so far as they are applicable to the acquisition of such land or the extinguishment of such right or interest.

(4) Notwithstanding anything to the contrary in this Act or in the Land Acquisition Act, 1894 within not less than fifteen days (excepts by private negotiations) after the publication of the declaration under sub-section (2) or the publication of the notification under sub-section (2) of section 25, the State Government may direct that any land in respect of which a notification has been issued shall be taken possession of by the Canal Officer, duly authorised in this behalf by it, and the right, and interest in land specified in the notification shall be extinguished from the date specified in the direction, and on such possession being taken, the said land shall vest absolutely in the State Government free from all encumbrances: I of
1894.

Provided that, before or at the time of taking possession of any land under this sub-section, the Collector shall offer to the person interested compensation for the standing crops, trees and structures, if any, on such land and for any damage sustained by him which is caused by such sudden dispossession, and not except in section 24 of the Land Acquisition Act, 1894, and if such offer is not accepted, the value of such crops, trees and structures and the amount of such other damage shall be allowed in awarding compensation for the land under the provisions of the said Act. I of
1894.

(5) For the purposes of acquisition of any land, right or interest under this section the Land Acquisition Act, 1894, shall have effect subject to the modification that the market value of the land shall be deemed to be the market value on the date on which the declaration is published under sub-section (2) of this section or the notification is published under sub-section (2) of section 25, as the case may be. I of
1894.

PART VI

SUPPLY OF WATER

CHAPTER I

GENERAL PROVISIONS FOR SUPPLY OF WATER

Application
of this
Chapter for
supply of
water under
Chapters II
to V.

45. The provisions of this Chapter shall apply in respect of water from a canal supplied under Chapters II, III, IV and V of this Part.



46. (1) Water from a canal may be supplied,—

(a) on an application for irrigation or non-irrigation purposes as provided in Chapter II of this Part;

(b) on volumetric basis as provided in Chapter III of this Part;

(c) under an irrigation agreement as provided in Chapter IV of this Part; or

(d) under scheme in accordance with the provisions of Chapter V of this Part.

(2) Water rates for the supply of water under clause (a), (b), (c) or (d) of sub-section (1), shall be paid according to the rates provided in Chapter II, III, IV or V of this Part.

(3) Notwithstanding anything contained in sub-section (2), there shall be levied on all those holders or occupiers of lands within the irrigable command of a canal (not being land irrigated on wells within irrigable command) who do not avail of the facility of water supply during *kharif* and *rabi* seasons (being seasons determined as such by an order of the State Government) from such canal a water rate equal to fifty per cent. of the seasonal water rate applicable and in force in that season :

Provided that no such water rate shall be levied if on demand water is not made available.

47. (1) Where the Appropriate Authority is satisfied that, for the better cultivation of lands, and production of crops and due preservation and proper utilisation of water resources of any canal, it is expedient in the public interest to regulate the kind of crops that should be sown, planted or grown on lands under the irrigable command of a canal or any part thereof (not being lands irrigated on wells within such irrigable command), and the period during which such crops should be sown, planted or grown on such lands, the Appropriate Authority may, having regard to the soil characteristics, climate, rainfall and water available, by order in writing, make a declaration to that effect. Such order shall be given wide publicity in such manner as the Appropriate Authority may think fit.

(2) On making such declaration, the Canal Officer, with the previous approval of the superior officer authorised by the Appropriate Authority, may specify by notice published in such manner as may be determined by him, the kind of crops that shall be sown, planted or grown on the lands under the irrigable command of the canal or any part thereof, specified in such notice, and the period or periods during which such crops shall be sown, planted and grown. The Canal Officer shall, subject to the provisions of section 50 and of sub-section (3) of this section, thereupon by order regulate the supply of water from the canal for sowing, planting and growing such crops during the period or periods specified in the order.

(3) The State Government may, in consultation with the Company, and the *Zilla Parishads* concerned, by notification in the *Official Gazette*, make rules for determining the crops, and the period or periods during which such crops may be sown, planted and grown and for regulating supply of water for the purpose. Such rules may provide for fixing the extent of irrigation and for sowing, planting or growing different crops on the land under the irrigable command of a canal and the factors which may be considered for fixing such extent, for giving publicity to such scheme and for inviting objections and suggestions including provision for calling a meeting of the persons affected by the scheme, and all matters incidental or supplemental as may be necessary for giving effect to the provisions of this section.

Modes of supply of canal water, power to charge minimum rate.

Power of Appropriate Authority to regulate sowing, planting or growing of crops during specified period on lands under irrigable command of canal.



(4) On the publication of the notice under sub-section (2) of this section, no person shall sow, plant or grow or allow any crop (other than the crop or crops specified in such notice) to be sown, planted or grown on any land under the irrigable command of the canal or any part thereof, specified in such notice and during the period specified therein.

(5) Any person aggrieved by any notice given under sub-section (2) of this section may, within thirty days from the date of publication of such notice, file an appeal before such officer not below the rank of Superintending Engineer (or such officer of the Company or *Zilla Parishad* declared to be of equivalent rank) as the Appropriate Authority may appoint. The appellate officer may on hearing the parties pass such order as he thinks fit and thereupon, the notice shall stand unmodified or modified to such extent as may be specified in the order.

Power to
fix ceiling
on area of
crops.

48. The Appropriate Authority may by an order in writing fix a ceiling on the area of crops which may be grown in the lands under the irrigable command of a canal with water from such canal, and on the area of cash crops specified in such order which may be grown with water from wells situated under the irrigable command of such canal.

Explanation.—In this section “cash crops” means sugarcane, irrigated cotton, irrigated ground-nut, betel leaves, citrus fruits, bananas, grapes, chikus, turmeric, arcanut, tobacco (irrigated) and such other crop as the State Government may, by notification in the *Official Gazette*, from time to time specify.

Provisions as to supply

Power to
stop
water.

49. The supply of water to any field-channel or to any person who is entitled to such supply shall not be stopped except—

(a) whenever and so long as it is necessary to stop supply for the purpose of executing any work ordered by the Canal Officer duly empowered by the Appropriate Authority in this behalf ;

(b) whenever and so long as any field-channel by which such supply is received is not maintained in such repair as to prevent the wasteful escape of water therefrom ;

(c) whenever and so long as it is necessary to do so in order to supply in rotation the legitimate demands of other persons entitled to water ;

(d) whenever and so long as it may be necessary to do so in order to prevent the wastage or misuse of water ;

(e) within periods fixed from time to time by a Canal Officer duly empowered in this behalf, of which due notice shall be given ;

(f) whenever and so long as it is necessary to stop such supply pending a change in source thereof by a Canal Officer ;

(g) whenever and so long as it is necessary to stop or regulate such supply for the purpose of conservation of the canal water ;

(h) whenever and so long as canal water is used for sowing, planting or growing crops in contravention of the provisions of the notice under sub-section (2) of section 47 ;

(i) whenever and so long as stoppage is necessitated due to any cause beyond the control of the Appropriate Authority ;

(j) whenever and so long as such person does not pay arrears of water rate even after requiring him to pay such arrears by a notice duly served on him.



50. When canal water is supplied for the irrigation of one or more crops only, the permission to use such water shall be held to continue only until such crop or crops shall come to maturity, and to apply only to such crop or crops.

Duration of supply.

51. (1) Every agreement for the supply of canal water to any land, building or other immovable property shall be transferable therewith and shall be presumed to have been so transferred whenever a transfer of such land, building or other immovable property takes place :

Agreement for supply of water transferable with property in respect of which supply is given, etc.

Provided that an agreement for the supply of canal water to any leased land made in favour of a lessee after the land is leased to him shall, on transfer of such land, not be so transferable therewith, and shall stand revoked; and the Appropriate Authority may thereafter sanction supply of such canal water either in full or in part to any land or lands as the circumstances of the case may require.

(2) No person entitled to the use of any work or land appertaining to any canal, and except in the case of any agreement referred to in such-section (1), no person entitled to use the water of any canal, shall sell or sublet or otherwise transfer, his right to such use without the permission in writing of a Canal Officer duly empowered to grant such permission.

¹[(3) (a) Notwithstanding anything contained in this Act or in any agreement for the supply of canal water to any land, building or other immovable property or in any law for the time being in force or in any agreement for the supply of electricity for operating any machine, contrivance or equipment or other apparatus whatsoever for lifting water, in the public interest, for reasons to be recorded in writing, it shall be lawful for the Appropriate Authority to stop the supply of water, or reduce the area of such supply to such extent, as the circumstances of the case may require, and for the purpose, it shall be lawful for the Canal Officer duly empowered in that behalf to remove or cause to be removed any machine, contrivance, equipment or apparatus used or likely to be used for lifting water and to stop or reduce supply of electricity himself or by order direct the licensee or other authority to stop or reduce the supply of electricity to the consumer to such extent as may be specified in the direction. It shall be obligatory on the licensee or other authority to comply forthwith with any direction issued by the Canal Officer under this sub-section.

(b) The Appropriate Authority and the Canal Officer shall give publicity to such stoppage or reduction in supply of water or electricity, as the case may be, in such manner as they, in the circumstances of each case, may think fit.]

Occasional rates

52. If water supplied through a field-channel is used in an unauthorised manner, and if the person by whose act or neglect such use has occurred cannot be identified—

Liability when person using water unauthorisedly cannot be identified.

(a) the person or all the persons on whose land such water has flowed, if such land has derived benefit therefrom, or

(b) the person or all the persons chargeable in respect of the water supplied through such field-channel, if no land derived benefit therefrom,

shall be liable, or jointly liable, as the case may be, for the charges which shall be made for such use under the rules made in that behalf.

¹ This sub-section was substituted for the original by Mah. 3 of 1984, s. 2.



Liability when water runs to waste. **53.** (1) If water supplied through a canal is suffered to run to waste, and if, after inquiry, the person through whose act or neglect such water is suffered to run to waste cannot be discovered, the person or all the persons chargeable in respect of the water supplied through such canal shall be liable or jointly liable, as the case may be, for the charges which shall be made in respect of the water so wasted, under a rule made in that behalf under section 114.

(2) All questions arising under this and the last preceding section shall, subject to the provisions of section 104, be decided by a Canal Officer duly empowered in this behalf.

Charges recoverable in addition to penalties. **54.** All charges for the unauthorised use or for waste of water may be recovered as water rates, in addition to any penalty incurred on account of such use or waste.

Percolation and leakage rates

Land deriving benefit from percolation liable to water rate. **55.** (a) Any cultivated land receiving by percolation or leakage from a canal or deriving by surface flow, an advantage equivalent to that which would be given by a direct supply of canal water for irrigation, or

(b) any cultivated land irrigated by means of ¹[a well situated on either side of a canal, within a distance of 35 metres from the nearest boundary of the canal], shall be charged in respect of cultivated land falling under clause (a) a water rate not exceeding that which would ordinarily have been charged for a similar direct supply for the crop or the season during which the water is admitted in the canal, and in respect of cultivated land falling under clause (b), a water rate not exceeding one-half of such rate as may be determined by the Appropriate Authority.

Explanation.—For the purposes of this section, land charged under this section shall be deemed to be land irrigated from a canal.

Levy of water rate for use of percolation water for non-irrigation purposes. **56.** (1) Water used for purposes other than those of irrigation from any natural stream or artificial drain receiving percolation water from a canal shall be charged a water-rate not exceeding that as would ordinarily have been charged if the supply had been made from the canal for such purposes; and water used for such purposes from ²[a well situated on either side of a canal, within a distance of 35 metres from the nearest boundary canal] shall be charged a water rate not exceeding one-half of such rate, as may be determined by the Appropriate Authority.

(2) The provisions of sub-section (1) shall not apply to water from such stream, drain or well used exclusively for domestic purposes by the residents of any village.

CHAPTER II

Supply of Water on an Application

Regulation of supply of water. **57.** (1) Supply of water from any canal shall be regulated according to rules made in that behalf. Such rules may provide for calling for application for supply of water before the prescribed dates and for sanctioning supply, regard being had to the availability of water, the total area of the land for which water is to be supplied, the regularity in pay-

¹ Substituted for the words "a well sunk within the irrigable command of a canal or within 35 metres on either side of the canal" by Mah. 52 of 1981, s. 2.

² Substituted for the words "any well sunk within the irrigable command of a canal" *ibid.*, s. 3.



ment of water rates by the applicants, the crops to be grown on the lands from canals and other relevant factors, if any, which may be prescribed.

(2) The sanctioned supply may either be on area basis as provided in this Chapter or on volumetric basis as provided in Chapter III of this Part.

58. (1) Every person desiring to have a supply of water from a canal shall submit a written application to that effect to a Canal Officer duly empowered in this behalf to receive such applications in such form as shall from time to time be prescribed by the State Government in this behalf. Such applications shall be submitted before such date as the Canal Officer shall duly notify in such manner as he thinks best for the information of all such persons interested in making such applications.

Applica-
tion for
supply of
water.

(2) On receipt of an application for supply of water on yearly or seasonal basis under sub-section (1), a Canal Officer shall acknowledge the same forthwith. If the application is not in accordance with the prescribed form, the Canal Officer may return it to the applicant and direct the applicant to submit it again in the prescribed form duly completed before the date notified under sub-section (1). The application duly completed which is submitted before the date aforesaid shall also be duly acknowledged.

(3) Every such application shall be disposed of by the Canal Officer within fifteen days from the last date notified as aforesaid and the decision of the Canal Officer notified on the notice board in the office of the Canal Officer and at such other place or places as the Canal Officer may direct and the decision so notified shall be deemed to be notice of such decision to all the applicants.

(4) If the Canal Officer fails to notify his decision on the notice board in his office as aforesaid, then the applicant shall be deemed to have been permitted to take water from the canal specified in the application, but subject to the same conditions on which supply of water from the canal is sanctioned to other applicants.

(5) On receipt of an application for supply of water otherwise than on yearly or seasonal basis, the Canal Officer shall deal with the application in such manner as may be prescribed.

(6) Where an application is made for a supply of water to be used for purposes other than those of irrigation, the Canal Officer may, with the sanction of the Appropriate Authority, give permission for water to be taken for such purposes under such special conditions and restrictions, as to the limitation, control and measurement of the supply, as he may be empowered by the Appropriate Authority to impose in each case.

Supply rates

59. (1) Such rates shall be livable for canal water supplied for purposes of irrigation, or for any other purpose under this Chapter as shall from time to time be determined by the Appropriate Authority :

Determina-
tion of
rates for
supply of
canal
water.

Provided that the water rates levied by the Company or the *Zilla Parishad* shall be determined with the previous approval of the State Government.

(2) The rates shall be payable by the person on whose application the supply is granted, or by any person who uses the water so supplied.



CHAPTER III

SUPPLY OF WATER ON VOLUMETRIC BASIS

Supply of water on volumetric basis and formation of water Committee.

60. (1) Where the holders or occupiers of not less than fifty-one per cent of the lands or not less than fifty-one per cent of the holders or occupiers of the lands to which supply of water under Chapter II is sanctioned from a canal which is provided with a device for measuring water distributed therefrom give their consent in writing to the Canal Officer duly empowered in this behalf to take water on payment on volumetric basis and to form a Water Committee of all such holders or occupiers for distribution of water on that canal in accordance with the provisions of this Chapter. Such consent shall be binding on all the holders or occupiers who will be supplied with water on that canal.

(2) The Canal Officer shall, thereupon by order in writing, require all the holders and occupiers of such lands to take water from such canal on payment on volumetric basis, and direct such holders and occupiers to form the Water Committee within the period specified in the order.

(3) If the holders and occupiers fail to form the Water Committee, the Canal Officer shall, after consulting such holders and occupiers, form the Water committee.

(4) The Water Committee shall consist of five persons, one of whom shall be a Sectional Officer or his nominee and the remaining four may be appointed from time to time by the holders and occupiers of the lands referred to in sub-section (1) from amongst themselves. The Sectional Officer or his nominee shall give guidance or assistance—technical or otherwise—to the Committee, and guide it in its deliberations with a view to securing proper apportionment and distribution of water to all the holders and occupiers.

(5) The Water Committee may meet from time to time and may follow such procedure as it deems fit for the transaction of the business.

(6) Such water rates shall be levied for canal water supplied to the holders and occupiers for the purposes of irrigation as may be determined by the Appropriate Authority :

Provided that, no such water rates shall be determined by any *Zilla Parishad* or by the Company except with the previous approval of the State Government.

(7) The functions of the Water Committee shall be—

(i) to measure and receive the quantity of water at measuring device and to ensure proper apportionment and distribution of the same among its members ;

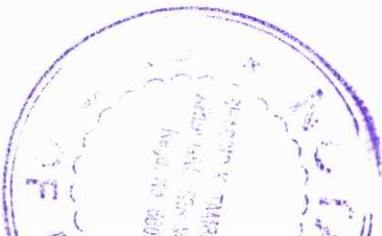
(ii) to receive and enquire into complaints regarding distribution of water and take immediate necessary action to set them right ;

(iii) to make all efforts to prevent unauthorised use or waste of water;

(iv) to assist the Canal Officer in discharging his duties and in detecting unauthorised use of water ;

(v) to ensure that only sanctioned crops and areas are brought under irrigation according to the provisions of this Act.

(8) If any holder or occupier is aggrieved by any order or decision of the Water Committee, then such holder or occupier may submit an appeal to the Executive Engineer within thirty days from the date of receipt of such order or decision. The decision of the Executive Engineer in such appeal shall be final and conclusive, and shall not be called in question in any court.



CHAPTER IV

SUPPLY OF WATER UNDER IRRIGATION AGREEMENTS

61. Subject to the provisions of Chapter I of Part VI, agreements may be made in accordance with the provisions of this Chapter, between the Appropriate Authority and the holders and occupiers for the supply of water for irrigation for a period of years specified in the agreements.

Power to make irrigation agreements.

Such agreements are called "irrigation agreement".

62. An irrigation agreement—

Scope of irrigation agreement.

(a) shall be for the irrigation of one or more specified crops which are called "crops under agreement" ;

(b) shall be made with the holders and occupiers of all the lands under the irrigable command of a canal in a village or in any other specified area cultivated with the crops under agreement ; and

(c) when duly made in accordance with the provisions of this Chapter shall be binding according to the terms of the agreement, on the holders and occupiers of—

(i) all the lands within the irrigable command of a canal (including wet lands) in the village or in other specified area cultivated with the crops under agreement at the time from which the agreement has effect :

Provided that, where a scheme of consolidation has been confirmed in respect of any land under the provisions of the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947, the irrigation agreement shall, from the year in which the holders and occupiers, if any, are put into possession of the holdings,—

Bom. LXII of 1947.

(a) be binding on the holders and occupiers, if any, of all cultivable land newly received in exchange for land which has ceased to be under cultivation ;

(b) cease to be binding on the holders and occupiers, if any, of all land which has ceased to be under cultivation ;

(ii) all the lands described in sub-clause (i) together with such lands as may be cultivated with the crops under agreement at any time during the period of the agreement.

Explanation.—The land of the holders and occupiers whereof an agreement is binding is called "land under agreement".

63. Where either the holders and occupiers of not less than two-thirds of, or not less than ninety-five per cent. of the holders and occupiers of, all the land under the irrigable command of a canal in village or in any other specified area cultivated with crops under agreement have given their consent to a proposed irrigation agreement in accordance with the provisions of this Chapter, then the proposed agreement, if accepted by a Canal Officer duly empowered in this behalf, shall be deemed to be an irrigation agreement binding on the holders and occupiers of all land in the irrigable command of a canal in such village or in any other specified area cultivated with the crops under agreement.

When agreement can be made.



Consent to agreement necessary where land is in possession of occupier other than holder.

64. (1) Where the title of an occupier of any land who is not holder thereof, is such that it will lapse on or before the expiry of the agricultural year next following the date of an irrigation agreement applicable to such land, the consent of the holder to such agreement shall be binding on such occupier in respect of such land.

(2) Where the title of an occupier of any land who is not the holder thereof, is such that will continue after the expiry of the agricultural year next following the date of an irrigation agreement applicable to such land, the consent of such occupier shall be necessary to the validity of the consent of the holder.

Publication of notice before agreement is made.

65. (1) The provisions of section 63 shall not apply unless a notice has been published in the village or in any other specified area concerned by a Canal Officer that he proposes to take an irrigation agreement in that village.

(2) Such notice shall be published in writing in some prominent place in the village, or as the case may be, in such specified area, and shall be proclaimed by beat of drum at least fourteen clear days before the agreement is finally made.

Inclusion of land irrigated by lift.

66. The holder of a land which is not under the irrigable command of a canal but is capable of being irrigated from a canal or field-channel by means of any mechanical contrivance designed to lift the water therein may apply to a Canal Officer to have such land included in an irrigation agreement, and if his application is granted, he shall be entitled to the supply of water in accordance with the terms of such agreement in so far as they may be applicable.

Charges for supply of water.

67. The charges for the supply of water under irrigation agreement shall be levied at such water rates as may be fixed by the Appropriate Authority:

Provided that, no such water rates shall be fixed by any *Zilla Parishad* or the company except with the previous approval of the State Government.

Liability due to irrigation agreement.

68. In addition to any incident applying generally to liability for payment of water rates, all irrigation agreement shall be subject to the following incidents, namely :—

(a) the canal revenue payable thereunder shall be payable—

(i) if the case falls under clause (c) (i) of section 62 for every year on all land under agreement, whether it has been sown or not and irrigated or not, and

(ii) if the case falls under clause (c) (ii) of section 62 for any year on all land under agreement, which has been sown that year with any of the crops under agreement, whether it has been irrigated or not;



(b) the canal revenue payable on any land for any year shall be collected from the occupier or on his default, from the holder of such land;

(c) at any time when the amount of water available is deficient, or when damage is anticipated to the canal if a full discharge of water is delivered, its supply may be regulated in such manner as any Canal Officer duly empowered in this behalf may determine;

(d) no claim shall arise against the Appropriate Authority for compensation for any loss arising from a failure or shortage in the supply of water for irrigation or from an excess of such supply :

Provided that, rules may be made under this Act providing for remission of rates charged for supply of water under an irrigation agreement where there has been a failure of crops or a failure to deliver water owing to a defect in the head works or distribution system of a canal; and

(e) the holder of wet land under the irrigable command of a canal in an irrigation agreement relating to the village or any other specified area in which such land is situated shall be entitled to such deduction, if any, from the rates charged for the supply of water under an irrigation agreement as may be provided by rules made under this Act.

69. (1) An irrigation agreement may be cancelled by mutual consent between the Appropriate Authority and holders and occupiers of not less than two-thirds of, or not less than ninety-five per cent. of the holders and occupiers of, the land under agreement at the time of such cancellation. Cancellation of agreement by mutual consent.

(2) The provisions of sections 64 and 65 shall apply to the cancellation of an irrigation agreement as if consent to the cancellation were consent to the making of such agreement.

70. (1) If, in the opinion of a Canal Officer duly empowered in that behalf, the holders and occupiers, under an irrigation agreement, fail to maintain their field-channels, then provisions of section 31 shall apply as they apply in relation to a field-channel under that section. If the holders and occupiers fail to maintain their field-channels on two or more such occasions, the Canal Officer duly empowered in this behalf may, at any time after giving notice, cancel, with the previous approval of the Appropriate Authority, the irrigation agreement. Cancellation of agreement for failure to maintain field-channels.

(2) An order of the Canal Officer under this section shall be in writing and shall be published in some prominent place in the village or in any specified area concerned and shall be proclaimed by beat of drum; and thereupon the irrigation agreement shall cease to have effect.

71. With the previous sanction of the Appropriate Authority, a Canal Officer duly empowered in this behalf may at any time cancel any irrigation agreement and in such case, the compensation for damages in respect of any land under agreement shall be equal to the amount of the canal revenue which would have been payable in respect of such land for the remainder of the period of the agreement. The distribution and payment of such compensation shall be made according to rules made under section 114. General power to cancel agreement.



CHAPTER V

SUPPLY OF WATER UNDER SCHEME

Supply of
water
under
scheme.

72. (1) Where, in the opinion of the Appropriate Authority, a canal is likely to irrigate lands not exceeding 200 hectares (500 acres) in area, then with a view to providing supply of water from such canal more economically in the public interest, the Appropriate Authority may, by notification in the *Official Gazette*, prepare a draft scheme for supply of water from such canal to such lands. The draft scheme shall provide for handing over the management of the canal and distribution of water therefrom to the Water Committee appointed under section 74.

(2) The draft scheme shall contain the following particulars, that is to say :—

- (a) the area to which the scheme applies ;
- (b) the survey numbers of lands included in such area and the names of holders and occupiers thereof ;
- (c) the period or periods during which water will be supplied to such lands ;
- (d) the crop or crops which will be permitted to be grown thereon ;
- (e) the water rate at which water may be supplied to each land included in the scheme :

Provided that, no water rate shall be determined by any *Zilla Parishad* or the company except with the previous approval of the State Government ;

(f) the amount to be paid by the Appropriate Authority for the management of the canal to the Water Committee ;

(g) for the publication of the scheme in the *Official Gazette*; and

(h) fixing the period of not less than three months from the date of receipt of the individual notice under sub-section (3) for submission of objections or suggestions to such scheme.

(3) After the publication of such notification in the *Official Gazette*, the Canal Officer shall as soon as practicable serve individual notice on the holders and occupiers who are likely to be affected by such notification.

(4) After considering such objections and suggestions, if any, as may have been received within the period fixed as aforesaid, the Appropriate Authority may, after making due inquiries, sanction the draft scheme with or without any modifications or may reject it.

(5) The scheme as sanctioned under sub-section (4) shall be published in the *Official Gazette*, and in the village and at the headquarters of the taluka and of the district in which the lands included in the scheme are situate and shall, on such publication, be final.

Effect of
scheme ;
power to
vary
scheme.

73. (1) The Scheme shall come into force on such date as the Appropriate Authority may, by notification in the *Official Gazette*, appoint and shall have effect as if it were enacted in this Act.

(2) Notwithstanding anything contained in sub-section (1), the scheme may at any time be varied by a subsequent scheme made, published and sanctioned in accordance with the provisions of section 72; and the provisions of this Part shall apply in relation to such varied scheme.



74. (1) After a scheme has come into force under section 73, the Appropriate Authority shall appoint a Water Committee to execute the scheme, subject to the superintendence, direction and control of the Canal Officer appointed by the Appropriate Authority for the purpose.

(2) The Water Committee shall consist of five persons of whom one shall be the Sectional Officer or his nominee and the remaining four persons may be appointed from amongst the holders or occupiers of land included in the scheme by the Appropriate Authority or any officer thereof duly empowered in that behalf.

The members of the Committee shall hold office for a period of two years from the date of their appointment. It shall be lawful for the Appropriate Authority to terminate the appointment of all or any members of the Committee at any time by an order in writing without assigning any reasons.

The Water Committee may meet from time to time, and may follow such procedure as it deems fit for the transaction of its business. The Sectional Officer or his nominee shall give all assistance, technical or otherwise, to the Committee, and guide it in its deliberations with a view to securing proper apportionment and distribution of water to all the holders and occupiers.

(3) The Water Committee shall—

(a) manage the canal and ensure proper distribution of water to the lands included in the scheme ;

(b) decide the crops to be grown during any period or periods according to the provisions of the scheme ;

(c) carry out day-to-day maintenance and repairs of the canal ;

(d) maintain the irrigation system of the canal beyond the outlet in a fit state of supply of water ;

(e) assist the Canal Officer—

(i) in detecting and preventing encroachment on the canal and on the lands appertaining thereto ;

(ii) for preventing damage to the canal ; and

(iii) for repairing any damage caused to the canal ;

(f) have power to impose a penalty for unauthorised use of water, or use of water out of turn or for growing crops contrary to the provisions of the scheme ;

(g) maintain accounts of the amount paid to it in such manner as may be prescribed.

(4) The penalty may consist of a fine not exceeding two hundred rupees, and it shall be liable to be recovered as an arrear of land revenue.

(5) Any person aggrieved by the decision of the Water Committee may within forty-five days from the date of receipt of the decision of the Water Committee make an appeal to the Canal Officer or any officer duly empowered by the Appropriate Authority for the purpose.

(6) The Appropriate Authority may, not later than two years from the date of the order, call for and examine the record of any inquiry or proceeding underlying such order of the Water Committee, or of the officer appointed by it, for the purpose of satisfying itself as to the legality or propriety of any decision or order, passed or as to the regularity of the proceeding, and it may pass any order upholding, annulling, modifying or reversing the order of the Water Committee or of any such officer :

Provided that, no order affecting any person shall be made unless such person is given a reasonable opportunity of being heard.

Appoint-
ment of
Water
Commit-
tee to
execute
scheme
and its
powers.



PART VII**AWARD OF COMPENSATION***Compensation when claimable*

Compensation in cases of ascertainable substantial damage.

75. (1) Compensation may be awarded in respect of any substantial damage caused by the exercise of any of the powers conferred by this Act, which is capable of being ascertained before exercising of such powers, and in all other cases, ascertained and estimated at the time when the damage is caused :

Provided that, no compensation shall be so awarded in respect of any damage arising from—

- (a) deterioration of climate, or
- (b) stoppage of navigation or the means of rafting timber or of watering cattle, or
- (c) stoppage or diminution of any supply of water in consequence of the exercise of the power conferred by section 11, if no use have been made of such supply, within the five years next before the date of issue of the notice under section 80, or
- (d) failure or stoppage or diminution of the water in a canal when such failure or stoppage or diminution is due to—
 - (i) any cause beyond the control of the Appropriate Authority ;
 - (ii) the execution of repairs, alterations or additions to the canal ; or
 - (iii) any measures considered necessary by any Canal Officer duly empowered in this behalf for regulating the proper flow of water in the canal, or for maintaining the established course of irrigation or for conserving supply of water under clause (g) of section 49.

(2) Any person, who suffers loss from any stoppage or diminution of his water-supply due to any of the causes specified in clause (d) of the proviso to sub-section (1), shall be entitled to such remission of the water rate payable by him as may be authorised by the Appropriate Authority.

Limitation of claims.

76. No claim for compensation under this Act shall be entertained after the expiration of twelve months from the time when the damage complained of commenced, unless the Collector is satisfied that the claimant had sufficient cause for not making the claim within such period.

Summary decisions

Compensation for damage caused by entry on land, etc.

77. (1) In every case of entry upon any land or building under section 12, section 13, section 14 or section 15 or section 22 or section 36, the Canal Officer or person making the entry shall ascertain and record the extent of the damage, if any, caused by the entry, or in the execution of any work, to any crop, tree, building or other property.

(2) Within one month from the date of such entry referred to in sub-section (1), compensation shall be tendered by a Canal Officer duly empowered in this behalf to the holder or owner of the property damaged.

(3) If such tender is not accepted, the Canal Officer shall forthwith refer the matter to the Collector for the purpose of making inquiry as to the amount of compensation and deciding the same.



78. If the supply of water to any land irrigated from the canal is interrupted otherwise than in the manner described in clause (d) of the proviso to sub-section (1) of section 75, the holder of such land may present a petition for compensation to the Collector, for any loss arising from such interruption, and the Collector, after consulting the Canal Officer, shall award to the petitioner reasonable compensation for such loss.

Compensation on account of interruption of water-supply.

79. The decision of the Collector under either of the last two preceding sections as to the amount of compensation to be awarded shall, subject to an appeal which may be provided by rules made under section 114, be conclusive. Where any such appeal is provided, then the decision of the Appellate Authority shall also be conclusive.

Decision as to amount of compensation under either of last two sections to be conclusive.

Formal adjudications

80. As soon as practicable after the issue of a notification under section 11, the Collector shall cause public notice to be given at convenient places, stating that the Appropriate Authority intends to apply or use the water referred to in that section, that the claims for compensation may be made before him.

Notice as to claims for compensation in certain cases.

A copy of sections 75 and 76 shall be annexed to every such notice.

81. All claims for compensation under this Act, other than claims of the nature provided for in section 77 and section 78 shall be made before the Collector of the district in which such claim arises.

Claims to be preferred to Collector.

82. The Collector shall inquire into every such claim and determine the amount of compensation, if any, which should in his opinion be given to the claimant ; and sections 11, 12, 12A, 13, 14, 15, 15A, 18 to 31, 45 and 52 of the Land Acquisition Act, 1894 shall apply to such inquiries.

Collector to be guided by provisions of Land Acquisition Act, 1894.

83. (1) In determining the amount of compensation under the last preceding section, regard shall be had to the diminution in the market value, at the time of awarding compensation, of the property in respect of which compensation is claimed.

Diminution in market value to be considered in fixing compensation.

(2) Where such market value is not ascertainable, the amount shall be reckoned at twelve times the amount of the diminution of the annual net profits of such property, caused by the exercise of the powers conferred by this Act.

84. All sums of money payable for compensation awarded under section 82 shall become due three months after the claim for such compensation is made ; and simple interest at such rate as may be fixed from time to time shall be allowed on any such sum remaining unpaid after the said three months, except when the non-payment of such sum is caused by the neglect or refusal of the claimant to receive the same.

Compensation when due.



Abatement of land revenue and rent

Abatement of revenue demand on interruption of water supply. **85.** If compensation is awarded under section 82 on account of a stoppage or diminution of supply of water in respect of any land paying revenue to the State Government, and the amount of the revenue payable on account of such land has been fixed with reference to the water advantages appertaining thereto, the holder of the said land shall be entitled to an abatement of the amount of revenue payable to such extent as shall be determined by the Collector.

Abatement of inferior holder's rent on interruption of water supply ; and enhancement of such rent on restoration of supply. **86.** (1) Every inferior holder of any land in respect of which such compensation has been paid shall, if he receives no part of the said compensation, be entitled to an abatement of the rent previously payable by him to the superior holder thereof in proportion to the reduced value of the holding.

(2) But if water supply which increases the value of the holding is afterwards restored to the said land otherwise than at the cost of the inferior holder, the superior holder shall be entitled to enhance the rent in proportion to such increased value :

Provided that the enhanced rent shall not in any case exceed the rent payable by the inferior holder before the abatement, unless the superior holder shall, independently of the provisions of this section, be entitled so to enhance the previous rent.

Provisions of this part not to apply to acquisition under section 44. **87.** The provisions in relation to compensation in this Part shall not apply to compensation claimed or awarded under the provisions of section 44.

PART VIII**RECOVERY OF WATER RATE**

Payment and recovery of water rate. **88.** (1) Every water rate leviable or charged under this Act shall be payable on such dates and to such officers as shall from time to time be determined under the orders of the Appropriate Authority. If the water rate is not paid on or before the due date, then there shall be paid an extra charge not exceeding ten per cent. of the amount due as may be prescribed.

(2) Any such water rate or instalment thereof which is not paid on the date when it becomes due shall be deemed an arrear of land revenue due on account of the land, being either land under the irrigable command of a canal or land for the use of which canal water was supplied or which is benefited by percolation or leakage from any canal and shall be recoverable as such arrear by any of the process specified in section 176 of the Maharashtra Land Revenue Code, 1966, including the forfeiture of the said land.

(3) Any rent payable to the owner of a field-channel by a person authorised to use such field-channel may be paid in such instalments and on such dates as the Canal Officer duly empowered to act under section 29 shall direct and no more of such rent shall at any time be payable to the owner thereof than is actually recovered from the person liable to pay.

(4) (a) Any other sum due to the State Government or to Canal Officer under the provisions of this Act whether on behalf of the State Government or any other person under Part IV of this Act which is not paid when demanded shall, and

(b) any rent or instalment thereof payable to the owner of the field-channel which is not paid when it becomes due may, on behalf of the owner,

Mah. XLI of 1966. be recoverable as an arrear of land revenue in accordance with the provisions of the Maharashtra Land Revenue Code, 1966.

89. (1) When the amount of water rate or instalment thereof or any other sum due in respect of any land payable to the Company or *Zilla Parishad* or to the Canal Officer on behalf of the Company or *Zilla Parishad* under the provisions of this Act is not paid to the Company or *Zilla Parishad* or to such Canal Officer on the date when it becomes due or when demanded after it has become due, such amount or sum may be recovered according to the provisions of sub-section (2) of this section.

Recovery of water rate etc., payable to Company, *Zilla Parishad*, etc.

(2) Where any amount or sum or any instalment thereof payable to the Company, *Zilla Parishad* or to any Canal Officer on behalf of the Company or *Zilla Parishad* by or under this Act is not paid on the date when it becomes due—

(a) and the claim is not disputed, or the amount in dispute does not exceed Rs. 100, the Canal Officer duly empowered to enforce the provisions of this section may send to the Collector a certificate under his hand indicating therein the sum which is due to, or claimed by, the Company, *Zilla Parishad* or Canal Officer, as the case may be, and thereupon, the Collector shall recover the sum due or claimed as arrear of land revenue ;

(b) and the claim is disputed, and the amount in dispute exceeds Rs. 100, then it shall be referred to the Tribunal consisting of one person constituted by the State Government for the purpose ; and the Tribunal shall, after making such inquiry as it deems fit, and after giving to the persons by whom the amount is alleged to be payable, an opportunity of being heard, decide the question. The decision of the Tribunal shall be final, and thereupon, the Collector shall recover the amount determined to be due as an arrear of land revenue.

(3) Subject to the provisions of this Act and to the previous approval of the State Government, the President of the Tribunal may make regulations for regulating the practice and procedure of the Tribunal, including the award of costs by the Tribunal, the levy of any process fee, provisions for recovery thereof in the form of court-fee stamps, the right of appearance before the Tribunal, the place or places of its sitting, the disposal by the Tribunal of any proceedings before it notwithstanding that in the course thereof there has been a change in the person sitting as member of the Tribunal and generally, for the effective exercise of its powers and discharge of its functions under this Act.

(4) The regulations made under this section shall be published in the *Official Gazette*.

PART IX

OBTAINING LABOUR FOR CANALS ON EMERGENCIES

Procedure for obtaining labour for works or repairs urgently required.

90. (1) Whenever it appears to a Canal Officer duly empowered to Act under this section that—

(a) unless some work or repair is immediately executed such serious damage will happen to any canal as to cause sudden and extensive public injury ;

(b) unless some clearance of a canal or other work which is necessary in order to maintain the established course of irrigation is immediately executed, serious public loss will occur ; and

(c) the labourers necessary for the proper execution of such repair, clearance or work cannot be obtained in the ordinary manner within the time that can be allowed for the execution of the same so as to prevent such injury or loss ;

the said Canal Officer may, by order under his hand, direct that the provisions of this section shall be put into operation for the execution of such repairs, clearance or work ; and thereupon every able-bodied person, who holds land or resides in the vicinity of the locality where such repair, clearance or work has to be executed and whose name appears in the list hereinafter mentioned shall, if required to do so by such officer or by any person authorised by him in this behalf, be bound to assist in the execution of such repair, clearance or work by labouring thereat as such officer or any person authorised by him in this behalf may direct.

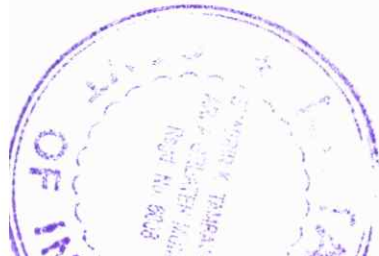
(2) All persons so labouring shall be entitled to payment at rates which shall not be less than the highest rates for the time being paid in the neighbourhood for similar labour.

List of Labourers.

91. Subject to such rules as may from time to time be prescribed under section 114 in this behalf, the Collector shall prepare a list of persons liable to be required to assist as aforesaid, and may from time to time add to or alter such list or any part thereof.

Reports to be made by Canal Officer.

92. All orders made under section 90 shall forthwith be reported to the Collector and the Appropriate Authority.



PART X

PENALTIES

93. (1) Whoever voluntarily and without proper authority—

Penalty for
damaging
canal, etc.

(a) damages, alters, enlarges or obstructs any canal ;

(b) interferes with, or increases or diminishes the supply of water in, or the flow of water from, through, over or under any canal, or by any means raises or lowers the level of the water in any canal ;

(c) pollutes or fouls the water of any canal so as to render it less fit for the purposes of which it is ordinarily used ;

(d) destroys, defaces or removes any land or level mark or water gauge fixed by the authority of a public servant;

(e) destroys, tampers with, or removes, any apparatus, or part of any apparatus, for controlling, regulating or measuring the flow of water in any canal ;

(f) passes, or causes animals or vehicles to pass in or across any of the works, banks or channels of a canal contrary to rules made under section 114 after he has been directed to desist therefrom ;

(g) causes or knowingly and wilfully permits cattle to graze upon any canal or flood embankment, or tethers or causes, or knowingly and wilfully permits cattle to be tethered, upon any such canal or embankment, or roots up any grass or other vegetation growing on any such canal or embankment, or removes, cuts or in any way injures or causes to be removed, cut, or otherwise injured any tree, bush, grass or hedge intended for the protection of such canal or embankment ;

(h) neglects, without reasonable cause, to assist or to continue to assist in the execution of any repair, clearance or work, when lawfully bound so to do under section 90 ;

(i) eases oneself on the banks, or in the channel, of a canal ;

(j) damages, alters or obliterates boundaries of areas in which irrigation from a canal is authorised by a Canal Officer ;

(k) fails to close the temporary channels dug out for supply on a temporary basis after the period of sanction is over ;

(l) fails to assist a Canal Officer in the discharge of his duties whenever called for ;

(m) violates any rules made under section 114 for breach whereof the State Government shall, in such rules, direct that a penalty may be incurred ;



(2) without prejudice to the provision of section 19, whoever obstructs the field to field irrigation from any canal ;

(3) whoever contravenes the provisions of this Act or any rules made thereunder ;

(4) whoever uses water from the canal in an unauthorised manner ; or

(5) whoever being responsible for the maintenance of a field-channel, or using a field-channel, neglects to take proper precautions for the prevention of waste of the water thereof, or interferes with the authorised distribution of the water therefrom, or uses such water in an unauthorised manner or prevents or interferes with the lawful use of such field-channel by any person authorised to use the same or declared to be joint owner thereof under section 29 ;

shall, when such act does not amount to an offence of committing mischief within the meaning of the Indian Penal Code, on conviction, be punished for each such offence with fine which may extend to five hundred rupees or with imprisonment for a term which may extend to six months or with both, and in the case of a continuing offence with an additional fine which may extend to fifty rupees for every day during which such offence continues after conviction for the first such offence. XLV
of
1860.

Penalty for endangering stability of canal, etc.

94. Whoever without proper authority—

(1) pierces or cuts through or attempts to pierce or cut through, or otherwise to damage, destroy or endanger the stability of any canal ;

(2) opens, shuts or obstructs or attempts to open, shut or obstruct any sluice in any canal ;

(3) makes any dam or obstruction for the purpose of diverting or opposing the current of a river or canal on the bank whereof there is a flood-embankment or refuses or neglects to remove any such dam or obstruction when lawfully required so to do ;

shall, when such act shall not amount to an offence of committing mischief within the meaning of the Indian Penal Code, on conviction, be punished for each such offence with fine which may extend to one thousand rupees, or with imprisonment for a term which may extend to one year or with both, and in the case of a continuing offence, with an additional fine which may extend to fifty rupees for every day during which such offence continues after conviction for the first such offence. XLV
of
1860.

Obstruction to be removed and damage repaired.

95. Whenever any person is convicted under either of the last two preceding sections, the convicting Magistrate may order that he shall remove the obstruction or repair the damage in respect of which the conviction is held within a period to be fixed in such order. If such person neglects or refuses to obey such order within the period so fixed, any Canal Officer duly empowered in this behalf may remove such obstruction, or repair such damage, and the cost of such removal or repair as certified by the said officer, shall be leviable from such person by the Collector as an arrear of land revenue.



96. Any person in charge of, or employed upon any canal, may remove from the lands or buildings belonging thereto, or may take into custody without a warrant, and take forthwith before a Magistrate or to the nearest police station, to be dealt with according to law, any person who within his view—

Persons employed on canal may take offenders into custody.

(1) wilfully damages, obstructs or fouls any canal ; or

(2) without proper authority interferes with the supply or flow of water, in or from any canal, or in any river or stream so as to endanger, damage, make dangerous or render less useful any canal.

97. (1) Notwithstanding anything contained in the foregoing provision of this Part, where a Canal Officer duly empowered in this behalf is of opinion that water in any canal is being used unauthorisedly, the Canal Officer may, with a view to preventing such use, direct any person to desist immediatly on the issue of such direction from using water on such canal unauthorisedly. ¹[On his failure to comply with the direction, notwithstanding anything contained in this Act or in any law for the time being in force or in any agreement for the supply of water or electricity, it shall be lawful for the Canal Officer, with the assistance of the police and the licensee or other authority supplying electricity, by order to direct the seizure and removal of the machine, contrivance, equipment or any other apparatus whatsoever, with which water was or is being lifted or used unauthorisedly from such canal or the discontinuance or reduction of the supply of electricity to the consumer by the licensee or other authority ²[for such period as may be specified in the order and such period shall not be beyond the 30th day of June next following the order. Any machine, contrivance, equipment or apparatus so seized shall be kept in safe custody, till the period specified by the Canal Officer in his order.] It shall be obligatory on the licensee or other authority to comply forthwith with any direction issued by the Canal Officer under this sub-section.]

Procedure in respect of machine, apparatus with which canal water is used unauthorisedly.

The machine, contrivance, equipment or apparatus removed as aforesaid shall be restored to the person from whose custody it was removed after the expiry of the period specified in the order :

Provided that if the Canal Officer is of opinion that water in any canal is being persistently used by any person unauthorisedly, the Canal Officer may, after giving such person a reasonable opportunity of being heard, direct that the machine, contrivance, equipment or apparatus removed as aforesaid be forfeited to the Appropriate Authority.

(2) Any person aggrieved by the order of the Canal Officer under sub-section (1) may, within 15 days of the date of receipt of such order by him, appeal to the Appropriate Authority, and that Authority may, with the least possible delay, pass such order as it may deem fit in the circumstances of the case. The decision of the Appropriate Authority in appeal and subject thereto, the decision of the Canal Officer shall be final.

2 of 1974.

98. Notwithstanding anything contained in the Code of Criminal Procedure, 1973, all offences punishable under sections 93 and 94 shall be cognizable and bailable.

Cognizance of certain offences.

99. Whoever abets any offence punishable under this Act, or attempts to commit any such offence shall be punished with the punishment provided in this Act for such offence.

Abetment.

¹ This portion was substituted for the original by Mah. 31 of 1984, s. 3.

² This portion was substituted by Mah. 24 of 1989, s. 2.



reward to
informants.

100. If a person notices an unauthorised use of canal water for which punishment has been provided in this Act and the rules made thereunder and if he informs a Canal Officer in writing of such use and if this information leads to the detection of the offence and of the person responsible for the offence, the Appropriate Authority may grant him such reward as it may deem fit.

Compensation to
private persons
injured.

101. Whenever any person is fined for an offence under this Act, the court which imposes such fine, or which confirms in appeal or revision a sentence of such fine, or a sentence of which such fine forms part, may direct that the whole or any part of such fine may be paid by way of compensation to any person injured by such offence.

Compounding
of
offences.

102. (1) The Appropriate Authority may either before or after the institution of proceedings for any offence punishable under this Act, or the rules made thereunder, accept from any person charged with such offence by way of composition thereof a sum of money not exceeding two hundred and fifty rupees within such time as Appropriate Authority may determine.

(2) On payment by such person of such sum, such person, if in custody, shall be set at liberty and, if any proceedings in any criminal court have been instituted against such person in respect of the offence, the composition shall be deemed to amount to an acquittal and no further criminal proceedings shall be taken against such person in respect of such offence.

PART XI

APPEAL AND REVISION

Appeal and
revision.

103. (1) Every order passed by a Canal Officer under sections 20, 25, 31, 33, 51, 52, 53, 55 and 56 and every order made by an authorised Canal Officer in relation to the provisions of section 34 or section 40 shall be appealable to the Canal Officer who is next higher in rank. If the order is passed by a Canal Officer who is a Chief Engineer, then the order shall be appealable to the Appropriate Authority.

(2) Every order passed under any provision of this Act for which no specific provision has been made shall be appealable to such officer as may be prescribed.

(3) Every appeal shall be presented within thirty days of the date of receipt of the order by the appellant.

(4) The Appropriate Authority may call for and examine the record of any decision, order, or proceedings of any Canal Officer under this Act for the purpose of satisfying itself as to the legality or propriety of any decision or order passed and as to the regularity of the proceedings of such Canal Officer. If in any case it appears to the Appropriate Authority that any decision, order or proceedings so called for should be modified, annulled, or reversed, it may pass such order thereon as it deems fit:

Provided that the Appropriate Authority shall not modify, annul or reverse any decision or order without giving to the persons affected thereby a reasonable opportunity of being heard.



PART XII

MISCELLANEOUS

104. No suit shall lie in any civil court contesting the validity of Canal Officer's order, under section 32, 70 or 71; and no claim whatsoever made against the Appropriate Authority for approving or sanctioning any such order shall entertained by any civil court. suits barred in certain cases.

105. (1) On the publication of a notification in the Official Gazette under section 3 of this Act or from the date of modification of that notification under that section, any person desiring to construct a well in his land in the irrigable command of the canal referred to in such notification, shall inform the Canal Officer of his intention to do so. Excavation of wells in lands under irrigable command of canal to be intimated.

(2) If such person constructs any well without informing the Canal Officer, then the Canal Officer may impose on him a fine of a sum not exceeding one hundred rupees.

106. All rights to cut grass, to graze cattle, to cultivate land or to do other acts on land in the bed of or on the bank of any canal and to fish or ply a vessel in a reservoir or tank on, across or along a canal or channel maintained or controlled by the Appropriate Authority shall vest in the Appropriate Authority and the Appropriate Authority may dispose of any such rights in such manner as may be prescribed. Rights in tank bed lands, fishing and plying of vessels in tanks etc., controlled or maintained by Appropriate Authority to vest in Appropriate Authority.

107. No person shall conduct mining or quarrying operations requiring the use of explosive within a distance of 200 metres from the boundaries of a canal, without the written permission of the Canal Officer duly empowered in this behalf. Prohibition of mining, or quarrying operations.

108. When a person damaging, altering, enlarging or obstructing any canal or causing damage or obstruction to, or alteration or enlargement of such canal without proper authority cannot, after such enquiry as the Canal Officer may deem fit, be identified, the Canal Officer, after giving not less than one month's notice in writing to the holders and occupiers of all lands benefited thereby and after hearing their representations, if any, recover from them in such proportion as he thinks fit the cost of repair of such damage or removal of such alteration or obstruction or of enlargement of such canal, as the case may be. Recovery of cost of repairing damage when offender is unascertainable.

109. Any Canal Officer empowered under this Act to conduct any inquiry may exercise all such powers connected with summoning and examining of witnesses and the production of documents as are conferred on civil courts by the Code of Civil Procedure, 1908; and every such inquiry shall be deemed to be a judicial proceeding within the meaning of sections 193 and 228 of the Indian Penal Code. Power to summon and examine witnesses.

V of 1908. XLV of 1860.



Delegation
of powers
and duties.

110. The Appropriate Authority, and subject to the previous approval of the Appropriate Authority, any Canal Officer may, by notification in the *Official Gazette*, direct that all or any of the powers conferred or duties imposed on it or him by or under this Act may, subject to such restrictions and conditions, if any, be exercised also by such officer not below such rank, as may be specified in the notification.

Service of
notices.

111. Service of any notice under this Act shall be made by delivering or tendering a copy thereof signed by the officer therein mentioned. Whenever it may be practicable, the service of the notice shall be made on the person therein named. When such person cannot be found, service may be made on any adult male member of his family residing with him, if no such adult male member can be found, the notice may be served by fixing the copy on the outer door of the house in which the person therein named ordinarily dwells or carries on business; and, if such person has no ordinary place of residence within the district, service of any notice may be made by sending a copy of such notice by post in a registered cover addressed to such person at his usual place of residence.

Power of
State
Government
to give
directions to
Company
and Zilla
Parishads
regarding
mainte-
nance of
their
canals.

112. (1) The State government may, by an order in writing, give to the Company or any *Zilla Parishad* such instructions or directions for the maintenance or administration of the canals constructed, controlled or managed by it in such manner and within such period as may be specified in the order; and it shall be duty of the Company or the *Zilla Parishad* to give effect to such instructions or directions.

(2) If the Company or a *Zilla Parishad* fails to give effect to such instructions or directions within the period specified in the order, the State Government may carry out the repairs or maintain the canal at its own expense in the manner indicated in the order made under sub-section (1); and the expenses of such repairs or maintenance of the canal shall forthwith be paid by the Company or the *Zilla Parishad* to the State Government.

(3) If the expenses of such repairs or maintenance are not so paid, the Canal Officer duly empowered in this behalf may direct the officer-in-charge of the treasury or bank in which the Company has its account or in which the district fund of the *Zilla Parishad* is kept, to pay the expenses of repairs or maintenance or as much portion thereof as is possible, from the balance of such account, or such fund, as the case may be.

Public
servant and
some other
persons
protected
from legal
proceed-
ings.

113. No suit, prosecution, or other legal proceedings shall be maintained against any public servant or persons appointed under this Act in respect of anything in good faith done or purporting to be done under the provision thereof or the rules made thereunder.

Rules.

114. (1) The State Government may, by notification in the *Official Gazette* and subject to the condition of previous publication, make rules for the purpose of carrying into effect the provisions of this Act.



(2) In particular and without prejudice to the generality of the provisions of sub-section (1), such rules may provide for all or any of the following matters, namely :—

(i) under clause (24) of section 2, the manner in which payment shall be made for supply or facility of water from a canal;

(ii) under clause (a) of section 4, declaring the meaning of 'wet' in relation to lands;

(iii) under section 10, specifying the class of Canal Officers by whom the duties shall be performed or power exercised;

(iv) (a) under clause (ix) of section (2) of section 34, prescribing the other particulars which the draft scheme for compulsory constructions of field channels shall contain;

(b) under sub-sections (3) and (4) of section 34, prescribing the manner of publishing the draft scheme and the final scheme;

(v) under section 35, prescribing the manner of construction of field channels under the final scheme ;

(vi) under sub-section (2) of section 37, prescribing the form of, and the manner in which, the notice to holders and occupiers of land to construct field channels shall be given;

(vii) under clause (a) of sub-section (1) of section 39, prescribing the form of certificate of completion of field-channel to be issued by an authorised Canal Officer;

I of
1894.

(viii) under sub-section (3) of section 44, all matters connected with the enforcement of the provisions of the Land Acquisition Act, 1894 in so far as they are applicable to the acquisition of land or extinguishment of the right or interest;

(ix) under sub-section (3) of section 47, determining the crops, and the period or periods during which such crops may be sown, planted and grown and for regulating supply of water for the purpose and for matters referred to in that sub-section;

(x) under section 52, fixing charges for unauthorised use of water;

(xi) under sub-section (1) of section 53, fixing charges in respect of water suffered to run to waste;

(xii) under sub-section (1) of section 57, regulating the supply of water from any canal and also prescribing dates before which applications for supply of water shall be made and for sanctioning supply;

(xiii) under sub-section (1) of section 58, prescribing the form of application for supply of water from a canal; and under sub-section (5), the manner in which the application for supply of water shall be dealt with;

(xiv) under section 68, providing for remission of rates charged for supply of water under an irrigation agreement, where there has been a failure of crops or failure to deliver water owing to a defect in the head works or distribution system of a canal; and for deduction from rates under clause (e) of that section;



(xv) under section 71, providing for distribution and payment of compensation for damages in respect of any land under any irrigation agreement when such agreement is cancelled;

(xvi) under section (3) (g) of section 74, prescribing the manner in which the accounts of the amounts paid to the Water Committee shall be maintained by it;

(xvii) under sub-section (1) of section 88, rules for determining the amount of extra charge;

(xviii) under section 91, the guidelines subject to which the Collector shall prepare, add to or alter a list of persons liable to be required to assist on works or repairs urgently required;

(xix) under section 93, regulating the animals or vehicles to pass in or across any of the works, banks or channels of a canal and also for directing that a penalty may be incurred for breach of any rule;

(xx) under sub-section (2) of section 103, prescribing the officers to whom appeals against orders passed under any provisions of the Act shall be made in cases where there is no specific provision;

(xxi) under section 105, prescribing the manner in which a person desiring to construct a well in his land under the irrigable command of a canal is required to inform the Canal Officer;

(xxii) under section 106, prescribing the manner in which the Appropriate Authority may dispose of the rights in tank, bed-lands, fishing and plying of vessels in tanks, etc.;

(xxiii) under section 120, the guide lines subject to which the Canal Officer may commute any right contained in the record of rights which in his opinion cannot be continued having regard to the maintenance or management of any Second Class Irrigation Works;

(xxiv) under sub-section (1) of section 129, prescribing the guidelines for construction of a Water Committee for each village in which a Second Class Irrigation Work is situated;

(xxv) for any other matter for which rules are required to be made under this Act, or generally for carrying out the purposes thereof.

(3) Every rule made under this Act shall be laid as soon as may be, after it is made, before each House of the State Legislature while it is in session for a total period of thirty days which may be comprised in one session or in two successive sessions, and if, before the expiry of the session in which it is so laid or the session immediately following, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, and notify such decision in the *Official Gazette*, the rule shall from the date of publication of such notification have effect only in such modified form or be of no effect, as the case may be; so however, that any such modification or annulment shall be without prejudice to the validity of anything previously done or omitted to be done under that rule.



115. Nothing in this Act shall be deemed to apply to any canal, channel, reservoir, lake or other collection of water belonging to, or vesting, or under the control of any local authority other than *Zilla Parishad*. Savings of certain water works.

116. (1) Notwithstanding anything contained in this Act, where a lift irrigation work has been constructed, maintained or controlled by a society before the commencement of the Act or any society desires after such commencement to construct, maintain or control any such work, and the society desires that certain provisions of this Act and rules made thereunder should apply to such work or all the lands within the irrigable command of the work or the lands adjoining thereto, the society shall make an application to the Canal Officer duly empowered by the Government in this behalf stating therein the location of the work, the area within the irrigable command of the work and the provisions of the Act and the rules made thereunder which should apply to such work or the lands aforesaid and such other particulars as the Canal Officer may require. Applications of certain provisions of Act to lift Irrigation Works of Co-operative Societies.

(2) On receipt of the application under sub-section (1), the Canal Officer shall verify the contents of the application and shall forward the application to the State Government with his own remarks thereon. In forwarding the remarks, the Canal Officer shall in particular examine the provisions of the Act and the rules which the society desires should be made applicable to the lift irrigation work and the aforesaid lands and offer his remarks on the extent of protection the society is likely to receive in relation to such work or lands whether or not it is necessary to extend any other provisions of the Act or rules or whether or not provisions of the Act or rules specified by him should not be applied to such work and lands and the consequences flowing from the application of such provisions to the lift irrigation work and lands.

(3) The State Government on receipt of the application and remarks of the Canal Officer may, by a notification in the *Official Gazette*, direct that such provisions of the Act and the rules thereunder, if any, shall apply to such irrigation work and lands subject to such conditions, if any, as may be specified in the notification; and thereupon, the provisions of the Act and the rules, if any, specified in the notification shall take effect in relation to such lift irrigation work and lands as they take effect in relation to a canal of an Appropriate Authority :

Provided that no notification, which does not provide for complying with the request of the society contained in the application made under sub-section (1), shall be made unless the persons affected and the society have been given reasonable opportunity to be heard.

Mah. XXIV of 1961. *Explanation.*—In this section “society” means a lift irrigation society registered or deemed to be registered under the Maharashtra Co-operative Societies Act, 1960.



PART XIII

SECOND CLASS IRRIGATION WORKS

Application
of this Part
to Second
Class
Irrigation
Works.

117. This Part shall apply to the Second Class Irrigation Works only, existing immediately before the commencement of this Act.

Application
of certain
sections
and Parts
of this Act
to Second
Class
Irrigation
Works.

118. (1) A Second Class Irrigation Work shall be deemed to be a canal within the meaning of clause (2) of section 2 and to such work, the following sections and Parts only shall, so far as may be, apply, namely:—

Section 2, Part II, sections 11, 14, 15, 17 to 21, and 23 to 30 (both inclusive), Part V, sections 49, 51, Part VII and Parts X to XII (both inclusive).

(2) The aforesaid sections and Parts shall, for the purposes of this Part, be subject to the following modifications, namely:—

(i) in section 23, for the words "Field-channels" the words "Subject to any rights recorded in the record-of-rights already prepared before the commencement of this Act or revised as hereinafter provided, field channels" shall be substituted ;

(ii) in section 24, for the words "Any person" the words "Subject as aforesaid, any person" shall be substituted ;

(iii) in section 27, in sub-section (2) for the portion beginning with the words "by such field channel" and ending with the words "as the case may be" the following shall be substituted, namely:—

"on such terms as may be recorded in the record-of-rights prepared or revised as hereinafter provided";

(iv) to section 28, the following proviso shall be added, namely:—

"Provided that no such private arrangement shall affect any rights to water recorded in the record-of-rights already prepared or revised as hereinafter provided.";

(v) in section 51, in sub-section (1), for the words "Every agreement for" the words "All rights to" shall be substituted, and after the words "other immovable property" the words "which have been recorded in the record-of-rights already prepared or revised as hereinafter provided" shall be inserted. Sub-section (2) and (3) of the same section shall be omitted.

(vi) in section 75, in sub-section (1), in the proviso, clause (c) and sub-section (2) shall be omitted ;

(vii) in section 77, in sub-section (1), the words and figures "section 12, section 13," shall be omitted ;

(viii) in section 93, in clause (1), sub-clause (h) shall be omitted ;

(ix) in section 103, after the figures "56" the words and figures "and every order passed under Part XIII" shall be inserted.



119. (1) The Irrigation Record-of-Rights prepared in respect of any Second Class Irrigation Work and in force immediately before the commencement of this Act in any part of the State shall be deemed to be Irrigation Record-of-Rights for such Second Class Irrigation Work and such Irrigation Record-of-Rights may, from time to time, be revised by a Canal Officer duly empowered in this behalf who shall be a Revenue Officer not below the rank of Tahasildar.

Revision of
Irrigation
Record-of-
Rights.

(2) For settling the claims of any persons during the course of such revision, the Canal Officer may ascertain the nature of the right from the records of Government and the evidence of any person likely to be acquainted with the same and any other documentary or oral evidence which the parties concerned or their witnesses may produce.

(3) For the purposes of revision under sub-section (1), the Canal Officer may enter by himself or through any officer authorised by him for the purpose upon any land adjacent to any work and may survey, demarcate and make a map of the same.

120. Where a Canal Officer duly empowered in this behalf finds that, having due regard to the maintenance or management of any Second Class Irrigation Work, any right contained in the Irrigation Record-of-Rights cannot continue to be exercised to the extent recorded therein, he shall (subject to such rules as the State Government may from time to time prescribe in this behalf) commute such right wholly or in part either by payment to the holder of such right of a sum of money in lieu thereof, or by the grant of land, or in such other manner as he may think fit; and he shall revise the Irrigation Record-of-Rights accordingly.

Commuta-
tion of
rights.

121. In the event of the State Government undertaking at their own cost any work whereby the supply of water in any Second Class Irrigation Work is increased beyond the amount of such supply at the time the Irrigation Record-of-Rights was prepared or revised, the State Government may, without prejudice to any rights so recorded, direct that the right to such surplus water shall vest in the State Government, and shall be applied as the State Government may deem fit; and Irrigation Record-of-Rights shall be revised in accordance with such direction.

Power of
State
Govern-
ment
where
works are
under
taken
increasing
supply.

122. When any Irrigation Record-of-Rights has been revised under this Part, it shall be published in the language of the residents of the area at the office of the Tahsildar of the taluka in which the work is situated and in every town and village which, in the opinion of the Collector, is affected by such Irrigation Record-of-Rights.

Publication
of Irrigation
Record-of-
Rights.

123. An entry made in Irrigation Record-of-Rights shall be relevant as evidence in any dispute as to the matters recorded, and shall be presumed to be true until the contrary is proved or a new entry is lawfully substituted therefor:

Entries in
Irrigation
Record-of-
Rights to be
relevant as
evidence.

Provided that no such entry shall be so construed as to limit any of the powers conferred on the State Government by this Part.



Notice of
suit to be
given to
Collector.

124. (1) No suit or proceedings shall lie against the State Government in respect of anything done by the Collector, Canal Officer or any other person acting under the orders of the State Government in the exercise of any power by this Part conferred on such Collector, Canal Officer or other person or on the State Government.

(2) Any suit or proceeding in which an entry made in any Irrigation Record-of-Rights maintained under this Part is directly or indirectly called in question shall be dismissed (although limitation has not been set up as a defence) if it has not been instituted within one year from the date of the commencement of this Act or from the date of publication of the revised record under section 122, and if one or more appeals have been made against any order of a Canal Officer with reference to any entry in such Irrigation Record-of-Rights, then from the date of any order passed by the final appellate authority, as determined according to this Part.

Obligation
to carry out
petty
repairs.

125. In every Second Class Irrigation Work, the following repairs shall be performed by the persons on whom the obligation to perform them is imposed by the next following section, that is to say—

(1) The filling up of fullies, ruts and holes especially at the back of revetments, and all petty repairs of a like nature essential for the safety of bunds, of tanks, channel-banks or other portions of the said Second Class Irrigation Work.

(2) The prevention of the growth on such work of prickly pear, young trees and other vegetation endangering the safety or concealing the condition of such work.

(3) The preservation of such bushes and grasses as have been planted for the protection of the interior water slopes of such work.

(4) The clearance of silt from sluices, canals, masonry or concrete works, supply and distributing channels.

(5) The clearance of waste weirs and waste-channels.

Incidence
of obliga-
tions to
carry out
petty
repairs.

126. The obligation to perform the repairs provided by the last proceeding section shall with reference to any land irrigated from such work, be deemed to be imposed jointly and severally, in the case of unalienated land, on the occupants of the land, and, in the case of all other lands, on the holders of the land.

Power to
enforce
rights and
obligations.

127. If any person, on whom any obligation is imposed with reference to any Second Class Irrigation Work by any of the provisions of this Part, fails to fulfil the obligation so imposed, or if any person infringes any right recorded in the Irrigation Record-of-Rights, the Canal Officer duly empowered in this behalf may require him by notice to fulfil such obligation or to desist from infringing such right within a period to be specified in the notice of not less than fifteen days, and in the event of failure may take such steps as may be necessary for the discharge of the said obligation, or the enforcement of the said right, and the amount of any expense so incurred shall be a sum due to the State Government and recoverable as an arrear of land revenue.



128. It shall be the duty of the Talathi of any village or any officer appointed for the purpose within the limits of which any Second Class Irrigation Work or portion of such work is situated, to report to the Tahsildar without delay any failure or neglect to carry out any of the repairs specified in section 125.

Duty of Talathi to report failure to effect repairs.

129. (1) In accordance with the rules made under this Act, there shall be constituted a Water Committee for each village in which a Second Class Irrigation Work is situated for the purpose of regulating distribution of water from such work.

Constitution of Water Committee for each village and its power.

(2) Such Committee shall consist of five members of whom, one shall be the Talathi and the remaining four members shall be nominated by the Canal Officer not below the rank of a Superintending Engineer, from the irrigators who have got right to take water as provided in the Irrigation Record-of-Rights. The members of the Committee shall hold office for a period of two years from the date of their nomination, made by an order duly made in that behalf. It shall be lawful for the State Government, or as the case may be, the Zilla Parishad, to terminate the appointment of all or any of the members of the committee at any time by an order in writing without assigning any reasons.

(3) The Water Committee may meet from time to time, and may follow such procedure as it deems fit for the transaction of its business.

(4) The Water Committee shall—

(a) assist the Canal Officer in detecting and preventing encroachment on the lands appertaining to any such work, prevent damage to such work and report to the Canal Officer any wilful damage caused thereto ;

(b) be responsible for the distribution of water according to regulations made in that behalf with the previous approval of the State Government or any officer authorised in that behalf ;

(c) decide the crops to be grown in phase and other system ;

(d) ensure that the persons responsible to carry out the repairs referred to in section 125, are responsible for the proper up-keep of the said work ;

(e) report to the Canal Officer duly empowered in that behalf the names of persons who neglect or avoid to carry out the repairs referred to in section 125; or who use water from any canal whether or not situated in the village unauthorisedly ;

(f) have the power to levy fine for unauthorised use of water, or for any out of turn or irregular methods adopted for irrigation.

(5) The penalty may consist of a fine not exceeding two hundred rupees.

(6) The amount of fine if not paid shall be recoverable as an arrear of land revenue and the amount of fine paid shall be credited to the Consolidated Fund of the State.

(7) Any person who is aggrieved by any decision of the Committee may, within 30 days from the date of receipt of such decision, file an appeal before the Canal Officer not below the rank of Superintending Engineer, and the decision of the Committee, subject to the appeal to the Canal Officer, shall be final and conclusive.



Power of State Government to denotify any existing Second Class Irrigation Work. **130.** The State Government may, subject to the condition of previous publication, by notification in the *Official Gazette*, direct that any existing Second Class Irrigation Work shall cease to be so, and thereupon, the provisions of this Part shall cease to apply in relation thereto, except as respects any thing done or omitted to be done under this Part.

PART XIV

REPEAL AND SAVING

Repeal and saving. **131.** On the commencement of this Act, the following Acts, that is to say—

- | | |
|--|--|
| (i) the Bombay Irrigation Act, 1879, | Bom.
VII of
1879. |
| (ii) the central Provinces Irrigation Act, 1931, | C. P.
III of
1931. |
| (iii) the Central Provinces and Berar Regulation of Waters Act, 1949, | C. P.
and
Berar
XXXVII
of
1949. |
| (iv) the Hyderabad Irrigation Act, 1357-F, and | XXIV
of
1357-
F. |
| (v) the Hyderabad Irrigation (Betterment Contribution and Inclusion Fees) Act, 1952, | Hyd.
V of
1952. |

are hereby repealed :

Provided that the repeal shall not affect—

- (a) the previous operation of any law so repealed or anything duly done or suffered thereunder, or
- (b) any right, privilege, obligation, or liability acquired, accrued or incurred under any law so repealed, or
- (c) any penalty, forfeiture or punishment incurred in respect of any offence committed against any law so repealed, or
- (d) any investigation, proceeding, legal proceeding or remedy in respect of any right, privilege, obligation, liability, penalty, forfeiture or punishment as aforesaid,



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and any such investigation, proceeding, legal proceeding or remedy may be instituted, continued or enforced, and any such penalty, forfeiture or punishment may be imposed as if this Act had not been passed :

Provided further that, subject to the preceding proviso, anything done or any action taken (including any charges created, appointments, rules, notifications, orders, summons, notices, warrants and proclamations made or issued, authorities and powers conferred or vested, record-of-rights prepared or revised, canals or any water works or water courses or field-channels constructed, any supply of water made, water rates charged, agreements or contracts made, any taxes or fees levied, any compensation awarded, any labour obtained or supplied for emergency works of canals, any rights acquired or liabilities incurred, any suits instituted or proceeding taken or appeal made, and any Second Class Irrigation Works declared as such under any law so repealed) shall, in so far as such thing done or action taken is not inconsistent with the provision of this Act, be deemed to have been done or taken under the corresponding provisions of this Act ; and shall continue to be in force accordingly unless and until superseded by anything done or any action taken under this Act.



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Maharashtra Government Publications can be obtained from —

- ∞ THE DIRECTOR
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3.1.2 Distance of Site from Electric Lines

No structure including varandah or balcony shall be allowed to be erected or re-erected or any additions or alterations made to a building on a site within the distance quoted in Table No.3 below in accordance with the prevailing Indian Electricity Rules and its amendments from time to time between the building and any overhead electric supply line.

Table No. ⁽¹⁾ 3 - Distance of site from Electric Lines		
Electric Lines	Vertical (Meters)	Horizontal (Meters)
Low and medium voltage Lines	2.50	1.20
High voltage lines up to and including 33000 V.	3.70	2.00
Extra High voltage lines beyond 33,000 V.	3.70	2.00
	(Plus 0.3 m. for every additional 33,000 V. or part thereof)	
Note - The minimum clearance specified above shall be measured from maximum sag for vertical clearance and from maximum deflection due to wind pressure for horizontal clearance.		

3.1.3 Construction within Blue and Red Flood Line**i) Where Blue and Red flood line are marked on the Development Plan / Regional Plan or received from the Irrigation Department.**

- a) The Red Flood Line and Blue Flood Line shall be considered as per the plan prepared by the Irrigation Department. The area between the river bank and blue flood line (Flood line near the river bank) shall be prohibited zone for any construction except parking, open vegetable market, garden, lawns, open space, cremation and burial ground, sewage treatment plant, water / gas / drainage pipe lines, public toilet or like uses, provided the land is feasible for such utilization.

Provided that, redevelopment of the existing authorised properties, within river bank and blue flood line, may be permitted at a plinth height of 0.45 m. above red flood line level.

- b) Area between blue flood line and red flood line shall be restrictive zone for the purposes of construction. The construction within this area may be permitted at a height of 0.45 m. above the red flood line level.
- c) If the area between the river bank and blue flood line forms part of the entire plot in Development Zone, then, FSI of such part of land may be allowed to be utilised on the remaining land.
- d) The red and blue flood line, if shown on the Development / Regional Plan / Planning Proposal shall stand modified as and when it is modified by the Irrigation Department.

ii) Where Blue and Red flood line is not marked on the Development Plan / Regional Plan or not received from the Irrigation Department.

Where Blue and Red flood line is not marked on the Development Plan / Regional Plan or not received from the Irrigation Department, the tentative Blue line shall be earmarked taking into consideration maximum observed flood level records available locally and also interacting with the residence in the area. The plan showing such tentative Blue line shall be got approved from Chief Engineer, Irrigation Department. The distance of 50.0 m. on landward side from this tentative Blue line shall be treated as No Construction Zone.

⁽¹⁾ Substituted vide Corrigendum / Addendum No.CR.121/21, dt.02nd December, 2021



In such cases, provisions of Regulation No.3.1.3(i)(a,b,c,d) shall be applicable to that extent.

Till such tentative Blue line is prepared and marked on the plan, the development permission shall be governed by the provisions of Regulation No.3.1.1(ii).

3.1.4 Development within 30.0 m. Distance from Railway Boundary

For any construction within 30.0 m. from railway boundary, No Objection Certificate from Railway Authority shall be necessary.

3.1.5 Environmental Clearance

Environmental clearance certificate shall be submitted for the project as may be prescribed by the Ministry of Environment from time to time.

3.1.6 ⁽⁹⁾ Development along Highways / Classified Roads

The development along the highways shall be subject to the provisions of State Highways Act, 1965 and National Highway Act, 1956 and orders issued by Public Works Department, directives issued by Urban Development Department vide Resolution No.TPS-1819/UOR-36/19/UD-13, dated 5.8.2019 in this regard, from time to time. ⁽¹⁰⁾ All the classified roads passing through the ⁽¹¹⁾ ULBs i.e. Municipal Corporations / Municipal Councils / Nagar Panchayats shall be treated as city roads.

A service road as specified in Regulation No.3.3.8 shall be provided along State and National Highways on both sides. Where service road of 12.0 m. width is already provided in adjoining land, such service road of the same width may be continued in the development permission. Such service roads may not be insisted if it has no continuity from junction to junction due to existing authorised development / construction.

3.1.7 Development within certain distance from the Prison Premises

The development within 150 m., 100 m., 50 m. from the perimeter wall of Central Prison, District Prison and any Sub Prison respectively shall be regulated and may be permitted with prior consent of the committee constituted in this regard by the Home Department. This provision shall be subject to the orders issued by the Government from time to time.

3.1.8 Distances from land fill sites

For any residential development, segregating distance from the land fill site shall be observed as specified under Solid Waste Management Rules in force from time to time or as specified by competent authority.

3.1.9 Restrictions in the vicinity of Airport

For structure, installations or buildings including installations in the vicinity of aerodromes,

- i) The height shall be restricted to permissible top elevation as mentioned on Colour Coded Zoning Maps (CCZM) prepared by the Airport Authority of India (AAI) published on its web site.
- ii) For any additional height beyond that mentioned in i) above, prior NOC from AAI shall be submitted.
- iii) For the areas depicted in red colour on CCZM, prior NOC from AAI shall be submitted.

⁽¹⁰⁾ Inserted vide Corrigendum / Addendum No.CR.121/21, dt.02nd December, 2021
⁽⁹⁾ Clarification issued vide Order No.CR.236/18 (Part -2), dt.23rd December, 2021

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 ADVOCATE





AGK

**IN THE HIGH COURT OF JUDICATURE AT BOMBAY
CIVIL APPELLATE JURISDICTION**

PUBLIC INTEREST LITIGATION NO.36 OF 2021

Sarang Yadwadkar & Ors. ... Petitioners

V/s.

The State of Maharashtra, through
Principal Secretary, Urban
Development Department & Ors. ... Respondents

Ms. Gayatri Singh, Senior Advocate with Ms. Ronita
Bhattacharya Bector for the petitioners.

Mr. P.P. Kakade, Government Pleader with Mr. O.A.
Chandurkar, Additional G.P. and Mrs. G.R.
Raghuwanshi, Additional G.P. for respondent No.1 -
State.

Mr. Abhijit P. Kulkarni with Ms. Sweta Shah and Mr.
Gaurav Sahane for respondent Nos.2 & 3 - Pune
Municipal Corporation.

Mr. Nitin Gaware Patil for respondent No.5 -
MKVDC.

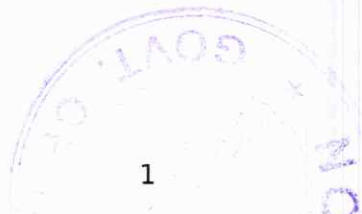
Mr. Samir Gosavi, Deputy Engineer, D.P. Cell and
Mr. Ganesh Kamble, Sub-Engineer D.P. Cell, are
present.

**CORAM : DEVENDRA KUMAR UPADHYAYA, CJ &
AMIT BORKAR, J.**

DATED : JUNE 26, 2024

P.C.:

1. Considering the issue raised in this public interest
litigation petition which is of seminal importance as it raises
concerns about faulty demarcation of flood line in the city of



Pune, the Court on 6 December 2023 had passed an order directing the Irrigation Department to complete the study of demarcation of flood lines in the City of Pune and produce it before the Court. The said study has been conducted in terms of an earlier order passed by this Court on 27 March 2023.

2. The respondent No.5 - Maharashtra Krishna Valley Development Corporation has filed an additional affidavit-in-reply sworn in by Ms. Shweta Yogendra Kurhade, Executive Engineer, Khadakwasla Irrigation Division which contains a report dated 2 January 2024. Learned Counsel appearing for respondent no.5 has taken us through said report. Apart from various charts containing necessary statistics, the report has clearly mentioned that while determining the flood lines various important factors and considerations were not taken into account in the past. The relevant extract of the said report contained in clauses 14 to 18 are reproduced hereinbelow:

"14. It appears that there are several important factors and considerations that have not been taken into account while making flood lines in the mentioned areas. Let's summarize the key points raised in each statement.

15. Free Catchment Area: The flow from the free catchment area between Khadakwasla Dam and Mula-Mutha Confluence in 2011 has not been considered. It is suggested that this factor should be taken into account in the flood line marking process.

16. MERI Guidelines: The Maharashtra Engineering Research Institute (MERI) in Nashik published guidelines for Blue/Red flood lines on 16/11/2015. However, these



guidelines were not considered when marking flood lines in 2011, and also not taken into account for the 2016 flood lines superimposed on Development Plan maps.

17. TERI Action Plan: The Energy and Resources Institute (TERI) in New Delhi prepared a climate change action plan in 2014 for Maharashtra. This plan predicted a 37.5% rise in rainfall around Pune with more frequent cloud burst events. The applicants point out that this prediction was not considered in the demarcation of flood lines.

18. In light of these points, it is suggested that a comprehensive review of the flood line demarcation process be conducted, taking into account the flow from the free catchment area, MERI guidelines, and the TERI climate change action plan. Addressing these aspects would contribute to a more accurate and comprehensive understanding of flood risk in the area."

3. The report has thus suggested that a comprehensive review of the flood line demarcation be carried out taking into account various relevant considerations, guidelines and reports etc. Learned counsel for the Pune Municipal Corporation as also the learned counsel representing the petitioners also emphasized that a fresh comprehensive review of demarcation of flood lines in the city of Pune is the need of hour.

4. Demarcation of flood line in an urban area or a city like Pune assumes importance for the simple reason that in case any development activity is permitted by the municipal body of such an urban area in the flood zone of any water channel like a river etc., the same results in reducing the flood carrying capacity of such a water channel, which, ultimately is



the cause of flood. To ensure that the earth continues to remain habitable, it is thus very necessary to appropriately and correctly demarcate the flood line of water channels, failing which the inhabitants of the area may face problems beyond remedies.

5. The Government of Maharashtra had appointed an Experts Study Committee to analyze the causes and remedies on flood, which submitted a report which is on record as Exhibit-A appended to the additional affidavit in rejoinder, dated 21 February 2024. The report of the Experts Study Committee analyzes the causes and remedies. Perusal of the said report would reveal that a lot needs to be done by the Government, its agencies and municipal bodies to check the flood in the urban areas.

6. Having regard to the significance of the issue involved, on our request learned Advocate General Mr. Birendra Saraf has addressed the Court and has expressed his concerns as well.

7. Accordingly, we direct that the report dated 2 January 2024 which forms part of the additional affidavit-in-reply filed by the respondent No.5 - Maharashtra Krishna Valley Development Corporation, dated 9 January 2024 shall be placed before the Additional Chief Secretary / Principal Secretary of the Department of Water Resources Development of the State Government, who shall consult all other departments / bodies, including municipal corporation and form a five-member Supervisory Committee comprising of



experts of the Water Resources Department and any other related departments. He shall also co-opt some experts from the external expert agencies, i.e. the agencies other than the Government agencies such as any institute of repute at national level or any academic / research institution.

8. The said Experts Committee to be formed under this order shall be headed by the Additional Chief Secretary of the Department of Water Resources Development which shall formulate a plan for conducting the comprehensive review of the flood line demarcation in the city of Pune. The Committee shall also prepare a blue print for conducting the said review and shall also determine the human resources to be deployed for the said purpose.

9. The Experts Committee to be formed under this order shall also fix a time-line within which the flood line demarcation review is to be completed.

10. We, thus, direct that the Experts Committee under this order shall be formed within two weeks, which shall consider and finalize the blue print for undertaking comprehensive review of demarcation of flood line in the city of Pune within four weeks' thereafter.

11. When the matter is next listed, an affidavit shall be filed by a high-ranking officer to be nominated by the Additional Chief Secretary of the Department of Water Resources Development of the State Government, giving details of the steps which may be taken during this period for ensuring compliance of the directions being issued by us in this order.



12. The affidavit to be filed under this order by the State Government shall be served in advance at least by one week upon the learned counsel for the petitioner and also learned counsel representing Pune Municipal Corporation.

13. List the PIL petition on **14 August 2024**.

(AMIT BORKAR, J.)

(CHIEF JUSTICE)

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ADVOCATE





सत्यमेव जयते

Government of Maharashtra

Maharashtra State Water Policy

Water Resources Department

(2019)

(Govt. Resolution No- Water policy-2019/C.R.21/17/WR(P), dated-05th September 2019)

MAHARASHTRA STATE WATER POLICY 2019

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MAHARASHTRA STATE WATER POLICY, 2019

1. PREAMBLE:

Per capita water availability is decreasing due to ever increasing population. Also, due to rising food demands, rapid industrialization and urbanization the stress on water management is increasing. As an effect water management has emerged as one of the 21st century's grand challenges.

In September 2015, the United Nations 193 member states including India, committed to the 17 Sustainable Development Goals (SDGs) to be achieved over the next 15 years. SDG-6, "ensuring clean water and sanitation for all" has placed "water" firmly on the global agenda. Without water, the other development goals - such as ensuring healthy lives, ending hunger, boosting economic growth and others- will not be achieved. Further, SDG - 12 - "**Ensure sustainable consumption and production patterns**" and SDG - 15 - "**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt degradation and halt biodiversity loss,**" also are equally relevant. Thus, to achieve the targets set forth in the SDGs, it is of utmost importance to effectively develop and manage the water resources.

The distribution of water resources is uneven over a large part of the State. A large area is, therefore, water deficit whereas a small part is bestowed with abundance in water. Large part of the State has already become water stressed. With the threat of climate changes the situation is likely to deteriorate.

Water being a State subject, State of Maharashtra had framed its Water Policy in 2003 which was subsequently revised in May 2011. Since adaptation of this policy, significant positive changes have occurred in the water scenario of the State. However, some of the issues and challenges faced in the state water sector still continue and require policy reforms.

Government of India (GoI) has also revised its earlier policy and released the National Water Policy in 2012. GoI vide provisions of clause 16.2 of the National Water Policy, expresses the intent that the states may revise and align their respective state Water Policy in accordance with the National Water Policy, keeping in mind the basic concerns, principles and also a unified national perspective.

With this background, the State has again revised its Water Policy in accordance with the National Water Policy for addressing certain State-specific concerns and challenges.

2. SCOPE OF THE POLICY:

This Policy applies to all the line departments, semi-government agencies of the State Government related to water, local bodies, bulk water users (domestic, industrial/commercial and others) and the citizens of the State.

3. OVERVIEW OF THE STATE:

Maharashtra occupies the Western and Central parts of India and has a long coastline of about 720 km along the Arabian Sea. With population of 112.4 million, as per population Census 2011 and geographical area of 0.308 million sq. km, Maharashtra is ranked 2nd by population and 3rd in terms of area. Maharashtra is highly urbanized with 45.2 % population residing in urban area.

The State enjoys tropical monsoon climate and is semi-arid. There exists an extreme spatial and temporal variation in the rainfall pattern in the State. The average annual rainfall in the State ranges from 400 to 6000 mm. The State witness frequent drought conditions. Almost, 42.5 % area of the State is drought prone. Gross cropped area in the State is 22.9 million ha (2015-16), net sown area is 17.19 million ha and area sown more than once is 5.929 million ha. Half of the State's population is dependent upon agriculture for their livelihood.

4. WATER RESOURCES OF THE STATE:

The area of the State is covered under five major river basins namely Godavari, Krishna, Tapi, Narmada and West flowing river basins. Also, a very small area of North-Eastern part of the State comes under the Mahanadi basin. The estimated average annual availability of water resources of the State is 198 Billion cubic metres (BCM) which consists of 164 BCM of surface water and 34 BCM of groundwater. The storage capacity created through State Sector water resources projects is 42.85 BCM as of June 2017.

Except the West flowing rivers, Maharashtra shares remaining four river basins with the neighbouring states. Various inter-state river water disputes, tribunal awards /agreements and decisions on water sharing have limited the use of surface water resources of the State to about 126 BCM, of which 69 BCM (55%) contribution is alone of west flowing river basins. The Cultivable area of this region is very limited (10.6 %), comprising narrow strip of 50 km between Sahyadri ranges and Arabian Sea. Hence, there is a limitation on local use of entire available water. The entire water available in basins of West flowing rivers can neither be used locally nor can be transferred economically to other basins as the rest of the basins are separated by high altitude ridge (+610 m). On the other hand, remaining four river basins having 89.4% of the cultivable area has only 45% of the water resources. Due to these constraints, about 42.50% area of the State lies in deficit or highly deficit sub-basins. The State is experiencing water shortage and recurrent droughts.

The State is divided into 1531 elementary watersheds considering river basin and sub-basin boundaries as the base. Watershed wise groundwater assessment was done in 2013-14 and it revealed that net groundwater availability is 31.48 BCM and annual draft is about 17.07 BCM.



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5. WATER RESOURCES DEVELOPMENT AND RELATED REFORMS IN THE STATE:

Since independence and in particular after formation of the State in 1960, significant investments have been made in water sector which has resulted in:

- I. Increase in irrigation potential (surface water) from 2.74 lakh ha to 68.37 lakh ha (State Sector: 50.36 lakh ha, Local Sector: 18.01 lakh ha) by June 2017. The actual utilisation of potential created through State Sector projects in 2017-18 is 39.50 lakh ha.
- II. Effective management of the drinking water supplies to majority of the cities and towns as well as augmented supplies in the rural areas.
- III. Achieving accelerated industrial growth.
- IV. Increasing hydropower capacity from 290 MW to 3684 MW up to March 2019.

The State has also achieved following milestones in water governance;

- I. Water Users' Association (WUAs) have been empowered under Maharashtra Management of Irrigation Systems by Farmers (MMISF) Act, 2005 and its Rules. WUAs formed till September 2017 are 5326.
- II. To regulate the water resources within the State, the Maharashtra Water Resources Regulatory Authority (MWRRA) has been established under section 3 of the MWRRA Act.
- III. To regulate and facilitate sustainable, equitable and adequate supply of groundwater within the State, the Maharashtra Groundwater (Development and Management) Act, 2009 has been enacted, which empowers MWRRA to regulate groundwater resources of the State also.
- IV. For auditing the bulk water use the State has established a separate office at Aurangabad viz. Chief Auditor, Water & Irrigation, Maharashtra State.
- V. The State has received first prize in Best State Award category, in 2018, for its excellent work in Water Management Sector.

6. CONCERNS AND CHALLENGES FACED BY THE STATE WATER SECTOR:

In spite of large investment and reforms in the water sector, the existing scenario of water resources and their management in the State has certain concerns and critical challenges, prominent amongst them are listed below:

6.1 Growing imbalance between demand and supply of water:

Rapid increase in demand of water due to population growth, urbanization and changing lifestyle has created a considerable gap in demand and supply. This has posed serious challenges to water security. Conflicts amongst inter-sectoral, inter-regional and the upstream and downstream water users in the basin are increasing. Access to safe water for drinking and other domestic needs still continues to be a challenge in the rural area of the State. The conjunctive use of surface water and groundwater is still not considered in urban areas.

6.2 Uncertainty in availability of water:

There is a wide temporal and spatial variation in the availability of water resources within the State which may increase substantially in future due to the impending Climate Change, causing deepening of water crisis and instances of water related disasters; i.e. floods, increased erosion and increased frequency of droughts etc.

6.3 Limitation to access to available water:

There are limitations for utilizing available water in Eastern Vidarbha due to difficulties in diversion of forest land, and in Konkan region due to topographical constraints.

6.4 Lack of assured access to allocated quota of water:

There is no assured access to the farmers for their allocated quota due to deferred maintenance of the water resources projects.

The delineation and handing over command areas to WUAs is very slow due to lack of funds for carrying out restoration & rehabilitation of the distribution system to design parameters.

6.5 Low operational efficiency:

Lack of proper maintenance of the created irrigation infrastructure results in low water use efficiency. To strike a balance in the investment on completion of the ongoing water resources projects and that on maintenance of the existing infrastructure through limited available resources is a challenge.

6.6 Significant gap between IPC & IPU:

Bridging the gap between Irrigation Potential Created (IPC) and Irrigation Potential Utilized (IPU).

6.7 Depleting groundwater resources:

Groundwater, though part of the hydrological cycle and a community resource, is still perceived as an individual property and is being exploited inequitably without any recharge obligations leading to its over-exploitation in several areas. Presently, seventy six watersheds have become over-exploited and four are rendered critical.

6.8 Losses in Urban Distribution Network:

Reducing the Non-Revenue Water (NRW) and Restricting domestic water use within the prescribed norms particularly in urban areas is a key issue which needs to be addressed on priority.

6.9 Deteriorating Water Quality:

Release of untreated effluent by the industries and urban local bodies is deteriorating water quality of both the surface water as well as the ground



water, causing reduction in availability of safe water, environmental and health hazards and damages to aquatic ecosystem.

6.10 Lack of accurate data base and trained human resources:

Adequate data base required for informed decision making is not available. Also, the trained personnel who can address the concerns and challenges in a scientific or technical manner with modern tools and techniques are not available in adequate numbers.

6.11 Encroachment in Natural water Bodies and Drainage channels:

Natural water bodies and drainage channels are being encroached upon and diverted for other purposes. Ground Water recharge zones are often blocked.

6.12 Achieving Ultimate Irrigation Potential:

Achieving ultimate irrigation potential of 126 Lakh ha. (56% cultivable areas) at the earliest, considering the present pace of growth in agricultural sector is essential.

7. APPROACH TOWARDS FORMULATION OF THIS POLICY:

In furtherance to the National Water Policy and in line with the best global practices, the State Government intends to ensure balanced and sustainable development, management of the water resources of the State by way of a holistic, interdisciplinary approach, thereby addressing the various concerns and challenges faced by the State Water Sector.

7.1 Objectives of the State Water Policy:

The aim of the State Water Policy is to apprise all the line departments, local bodies, agencies working for the water sector, industries and all the water users of the State their rights, roles and responsibilities along with the planned strategies, expectations and directions of the State Government for achievement of specified objectives. These objectives are broadly:

- i. To ensure clean water and sanitation in the State.
- ii. Building resilience to water scarcity and drought.
- iii. Judicious and strategic sectoral allocation of water among different water use sectors.
- iv. Equitable distribution of water and assured access to allocated quota of water.
- v. Protection of ecosystems.
- vi. To protect and enhance water quality of surface as well as groundwater.
- vii. Increase in productivity and efficiency of water use.
- viii. To make systematic transition from the water resources development mode to an integrated water resources management mode; with appropriate reforms.

7.2 Water Policy Focus Areas:

- i. Engagement of stakeholders for inclusive water governance.
- ii. Strategic planning and prioritizing investments;
- iii. Continuous monitoring and updating the policies;
- iv. Demand Management;
- v. Improving Water Use Efficiency in all water use sectors;
- vi. Increasing quantity of usable water;
- vii. To adopt good governance through transparent informed decision making to achieve objectives of equity, social justice and sustainability.

STATE WATER POLICY

8. ENVISAGED STRATEGIES:

8.1 Stakeholders Engagements:

Ensure stakeholders' involvement for a long term sustainable change. Emphasis shall be given on consistent stakeholder engagements in building certain degree of consensus on change in the prevailing water use practices. Stakeholders' opinion shall be taken before taking major decisions. Views of water users, policy makers, experts in the field, non-governmental organisations shall be ensured in the decision making and reform process.

8.2 Sectoral Allocation:

Water allocation across different user groups e.g. domestic, agricultural, industry, eco-systems and other uses is an effective policy instrument to manage the water resources sustainably for increased resilience, economic prosperity and quality of life for the present as well as future generations. Properly structured allocation policy can boost the economy of the State.

Sectoral allocation of water shall be optimally structured with the following objectives:

- i) Meeting basic human needs.
- ii) Sustaining basin health (Eco System).
- iii) Maximizing the value of water.
- iv) Enhancing the water use efficiency.
- v) Achieving economic development of the State in sustainable manner.

Sectoral allocation need not be uniform throughout the State. It may vary project to project to cater for area specific requirements. The project specific sectoral allocations of available water resources shall be done by the competent authority as specified in the extant laws. Water allocation between different uses will be done to meet critical needs, sustain basin health and maximise the value of water. Following principles will be observed while deciding the sectoral allocation.

- (i) The State Government is committed to respect, protect and fulfill the formally recognised human right to drinking water and sanitation. The first priority and charge on water shall be to meet the basic safe water requirements of each human being, which include water for drinking, cooking, bathing, sanitation, personal hygiene, related personal or domestic uses and water required for domestic livestock;
- (ii) After meeting the prescribed norm-based basic safe water requirement of human being in the service jurisdiction of the project and subject to the sub-clause (iii), the importance to other water user categories in allocation will be in the following order:
 - a) Other Domestic Needs.
 - b) Agriculture and agro-based industries.
 - c) Industry, Thermal Power Generation, Hydro Power Generation.
 - d) Eco system.
 - e) Other uses such as water for cultural and religious ceremonies, recreation, amusement, sports etc.
- (iii) The order of water use set out above may be modified in a particular project at the discretion of the competent authority, with reference to area specific considerations such as prevalent land use pattern, activities and means of livelihood, cultural and spiritual values of water to indigenous citizens etc.
- (iv) RBA shall distribute the bulk water entitlements to various users within the project wise sectoral allocation as may be decided by the competent authority.
- (v) In water deficit years, allocation criteria (deficit sharing percentage) for different uses shall be determined by the regulatory authority considering the views of the stakeholders.

8.3 Integrated State Water Plan (ISWP):

ISWP has been prepared to ensure balanced, sustainable development and management of the State's water resources (surface/sub-surface) with the effective inclusion and participation of representatives of all basin water user entities, various categories of water user, other stakeholders, various line departments. The integrated plan is developed to promote the balance development among the different regions/ basins, especially for minimizing regional imbalance. Water resources planning, development and management in the State will be guided by ISWP.

8.4 Water Resources Planning and Principles Thereof:

- I. The water resources of the State shall be used, conserved and managed to provide the maximum economic and social benefits for the people of the State and in a manner that minimizes regional imbalance and maintain important ecological values within river and adjoining lands. The water resources of the State must be planned, developed and managed with a



river basin and/or sub-basin as the unit, adopting a multi-sectoral and Integrated Water Resources Management (IWRM) approach. Integration in planning will be achieved between;

- (a) Soil moisture, direct precipitation, groundwater and surface water.
- (b) Small water harvesting structures and conventional reservoirs.

- II. The availability of water resources and its use by various sectors in various basins in the State will have to be assessed scientifically and reviewed periodically, for instance every ten years. So also, the water planning of each major and medium project will be reviewed after ten years. Base year shall be taken as year of 1st impounding of water.
- III. The water resources projects must be planned by taking into consideration social and environmental aspects in addition to the techno-economic considerations and also considering the impact on the project affected and beneficiary families, local governing bodies. Projects and programs shall be planned and formulated taking into account full range of costs and benefits.
- IV. The water resources projects, including hydropower projects must be planned, to the extent feasible, as multi-purpose projects with provision of over the year storage (carry over storage) planning for adaptation to Climate Change. The anticipated increase in variability in availability of water because of climate change will have to be dealt by initiatives to increasing water availability in various forms, namely; soil moisture, ponds, groundwater, small, medium and major reservoirs and their combination.
- V. The planning of irrigation projects in water deficit and highly water deficit sub-basins must be done on eight-monthly basis.
- VI. No irrigation project shall be commenced unless all statutory clearances are obtained. Comprehensive investigation and detail project design shall be completed prior to commencement.
- VII. No project shall be commenced without ensuring adequate budgetary financial stream until its completion.
- VIII. The distribution system in the water resources projects, where technically feasible and economically viable, will preferably be through pipe network. Particularly in area having limited irrigation facilities projects with pipe distribution network and micro irrigation must be planned to spread the benefit of available water on a larger area. Lift Irrigation Schemes shall be promoted with micro irrigation system (drip & sprinkler) through pipe network distribution system with the participation of beneficiaries.
- IX. Untapped ground water potential shall be developed and used conjunctively with surface water.
- X. The command area development activity will be a part of the project planning and shall be executed through a multi-disciplinary approach.



- XI. As a part of project activity, baseline socio-economic, environmental and ecological surveys must be done in the project benefited area and also in adjoining influence area to assess the impact of water resources project.
- XII. Enhanced economic viability norms for the projects located in hilly areas and in saline track (*khar-pan-patta*) will be framed.

8.5. Sustainable Approach for Mitigating Demand-Supply Gap:

The State Government will adopt sustainable approach for mitigating existing demand-supply gap with following strategies:

8.5.1 Integrated Water Management:

Integrated management of surface water, groundwater and manufactured water (recycled/desalinated water) shall be promoted.

8.5.2 Demand Management and Water Use Efficiency

There is a mismatch between supply and demand. Considering limited scope for new storages, existing resources shall be used more effectively. State shall focus on demand side management and promoting the uptake of more efficient infrastructure technologies e.g. micro irrigation, water reuse and more efficient appliances etc.

Concerned line Departments shall prepare action plan in respect of strategies as defined in this policy along with measurable targets, resources required and the time lines for completion of the targets to State Water Board and State Water Council for approval. State Water Board/ Council shall periodically monitor its implementation.

8.5.3 Integrated Planning for Maximizing Utilisable Water:

The demand for water is increasing rapidly due to growing population, change in the life style, rapid urbanization and industrialization and economic development. Therefore, the availability of water needs to be augmented to meet the increasing demands of water. The strategies envisaged to achieve this are:

- (i) Rainwater harvesting and maximizing the direct use of rainfall.
- (ii) Maharashtra has a typical Geographical pattern with skewed distribution of rain fall resulting in limited availability of natural water resources. Nearly 42.5% of the Geographical area at the state is water stressed. There is need to supplement the fresh water sources by exploring options of reuse of treated waste water particularly in the urban area. Emphasis be laid on collection and treatment of all sewage using cost effective technological innovations and minimum 30 % of the recycled water shall be reused to reduce the fresh water demand in next 5 years. Comprehensive policy in this regard shall be framed by respective department.
- (iii) Inter-basin transfers (Diversion Schemes).
- (iv) Protecting and enhancing quality of surface and subsurface water

resources.

- (v) Desalination.
- (vi) A system evolving benchmarks for water uses for different purposes: i.e water footprints and water auditing shall be strengthened to promote and incentivize efficient use of water. The 'project' and the 'basin' water use efficiencies need to be improved through continuous water balance and water accounting studies.
- (vii) Water saving in irrigation use is of paramount importance. Methods like aligning cropping pattern with natural resource endowments, micro irrigation, automated irrigation operation, evaporation-transpiration reduction, etc, should be encouraged and incentivized. Recycling of canal seepage water through conjunctive groundwater use shall also be accounted.
- (viii) Agricultural irrigation water use will be kept in check by providing economic incentives to farmers.

8.5.4 Water Quality Management:

The quality of the water resources shall be protected to preserve their usability in sustainable manner for the peoples of the State. The State shall establish a programme, to control discharge of any pollutants to the surface and groundwater including the sea and saltwater marshes of the State. This programme shall also include the establishment of standards and acceptable limits for discharge of any pollutants into these waters. Urban water supply and sewage treatment scheme shall be integrated and executed simultaneously. Domestic water supply bills shall include sewerage treatment charges also.

The system of third party periodic inspection shall be introduced and stringent punitive actions be taken against the persons or entities responsible for pollution. Polluter pays principle shall be adopted as provided in the laws and regulations. Strong regulation to stop water polluting activities shall be initiated.

For the effective control over water pollution in all sectors, and also to monitor maximum recycling & reuse of water, an integrated approach is necessary by all the water stake-holders together. For this, a high-power Apex body need to be formed, under the leadership of Environmental Ministry of the state and with members from all the water users line departments.

8.5.5 Conservation of Water:

- (i) Water conservation consciousness will be promoted through public participation, training, education and awareness campaigns, incentives, and disincentives and penalties through regulation mechanism. Program on water literacy should be launched right from the primary school level so as to create awareness about the importance of conserving water and quality thereof.
- (ii) Conservation of rivers, river corridors, water bodies and



infrastructure must be undertaken in a scientifically planned manner through community participation.

- (iii) In urban and industrial areas, the rainwater harvesting must be made mandatory by the relevant State agency.
- (iv) Measures to control evaporation from the water bodies shall be taken up in a cost-effective manner.
- (v) Tendency of wastage of water shall be monitored by monetary penalties/ reducing the entitlements.
- (vi) "Water Resources Conservation Fund" shall be created with the participation of Corporate sector, Industries and Urban local bodies. The funds thus raised shall be utilized for conservation of the all Natural Fresh Water and Water Bodies and overall Eco System in a sustainable manner.

8.5.6 Intra and Inter Basin Transfers:

Intra and inter-basin river water transfer from surplus Basins to deficit ones shall be undertaken on the basis of merits of each individual case after evaluating environmental, social and economic impacts and inter-state water sharing obligations.

8.5.7 Water Governance:

The State Government has recognized the need to have appropriate regulatory institutional and legal framework in the water sector. Necessary amendments shall be done in prevailing statutes with a view to ensure that there is a certainty in the role / responsibility / functions and powers of MWRRA and other relevant in-line departments.

9. WATER USE

9.1 Domestic Water Management:

Adequate domestic water facilities shall be provided to the entire population both in urban and in rural areas including water required for animals. Disparity between norms for water supply in urban and rural areas will be removed gradually. Efforts should be made to provide improved water supply in urban and rural areas with proper sewerage facilities. Development of eco-friendly sanitation shall also be promoted. Multi-purpose projects shall invariably include a domestic water component wherever there is no alternative and adequate source of drinking water. Norms for permissible per capita consumption of water shall be different, in different basin / sub-basin depending upon the availability of water resources.

A perspective plan to meet rural domestic water requirements including water for animal shall be prepared and steps taken to provide adequate resources for this purpose in a phased manner. For new water supply schemes, drawing water from storage reservoirs and only through closed conduits shall be mandatory. The existing water supply schemes drawing water from canals or rivers as a source shall have to be converted to draw water from storage reservoirs with closed conduits in a phased



manner. Integrated use of other sources including groundwater shall also be explored.

In urban areas, the rainwater harvesting shall be made compulsory. Groundwater use plan shall be necessary document with the development plan of new townships. Assessment of groundwater shall be carried out in urban areas taking into consideration the quantity and quality of the water available, so as to plan for conjunctive use of surface water and groundwater. In urban areas, the electronic meters shall be used to measure the water supplied to every consumer. A rolling programme shall be undertaken to prevent leakages and unauthorized withdrawals in all reticulated water supplies.

The community will be effectively involved in the planning and management of drinking water supply and sanitation facilities in the urban as well rural areas. The community level organization and appropriate local level bodies / community organizations shall manage, operate and maintain these services on day to day basis. –

Water Budgeting and Water Auditing, prompt compliance of recommendations and shortcomings pointed out in the audit report which will lead to water savings.

In water resource planning of the basin it is assumed that at least 80% of the water used for domestic purpose will be available for reuse. Therefore, it is the obligation of local bodies to make available, entire quantity of generated sewage, for reuse after treating it to the standards prescribed by the MPCB.

Considering limited availability of water to meet future requirement, a suitable legislation targeted towards water budgeting, water accounting, water rationing and punitive action in case of default, shall be mooted to regulate domestic water supply.

9.2 Agricultural Water Management:

Agriculture is the dominant water consuming sector in the State. Low water use efficiency and considerable gap between IPC and IPU are the major concerns in the agricultural water management.

As per Maharashtra Water & Irrigation Commission Report (1999), the ultimate irrigation potential of the State through surface and sub-surface water resource is 126 lakh ha. The cultivable area of the State is 225 lakh ha. Thus only 56% of the cultivable area can be brought under irrigation. Further, due to rapid urbanization more and more water is being diverted for catering the needs of domestic sector.

On this background, State Government shall strive to create enabling infrastructure to promote micro-irrigation. In remote areas micro irrigation with solar pumps will be promoted. Water intensive crops like sugarcane and banana will be brought under micro-irrigation in first phase. Also cropping pattern requiring less water shall be promoted.



Command Area Development and Water Management (CADWM) works along with correction of system deficiency in canal network will be implemented for providing assured supply of water to each farm / field in the command.

For improving water use efficiency in agricultural sector the State will focus on:

- (i) Conjunctive use of soil moisture, rainfall, groundwater, surface water and recycled water.
- (ii) Volumetrically measured supply of water.
- (iii) Pipe water distribution system, wherever it is technically feasible.
- (iv) Proper upkeep and maintenance of the existing water bodies and their distribution systems.
- (v) Expeditious implementation of Extension Rehabilitation & Modernization (ERM) of old schemes.
- (vi) Auditing and Benchmarking of the water resources projects.
- (vii) Optimal distribution of water and integration of water resources services with agriculture services to increase productivity, crop yields, cropping intensities and enhance the diversification of agriculture.

9.3 Industrial Water Management:

The strategies envisaged for industrial water management are:

- (i) All industrial units must endeavour to reduce their water footprint over the time by optimizing the various industrial processes, modifying the equipment, recycling wastewater and creating awareness amongst their workers. Accordingly, industries shall be encouraged to recycle and reuse water and follow the policy of 'Zero effluent' in the final stage.
- (ii) All industries / industrial bulk water having annual water consumption of 1 million m³ or more will be required to publish Annual Water Report, giving the account of annual water entitlement as per the Criteria determined by the MWRRA, gross annual water consumption, water use per unit of production, harvested rainwater used, water recycled and reused and fresh water used. The Annual Water Report shall also cover information regarding permissible effluent discharge and actual effluent discharge, its test reports etc. The Annual Water Report shall also set out the proposed plan of action including the methodology to reduce their net water footprint over the time with specific targets along with its achievements. Industries will submit their Annual Water Report to respective RBA and also to MWRRA and shall put the same in public domain.
- (iii) Priority will be given to agro-based industries in water deficit sub-basins.
- (iv) With an objective to reduce the burden on fresh water resource, the State will promote the use of recycled water for cooling purposes. In the first phase, all thermal power plants within radius of 50 km from



urban STPs must be switched over to use treated effluent of STPs.

- (v) Water intensive industries will be permitted only in sub-basins having average annual water availability more than 3000 cubic metre per ha of Cultivable Command Area.
- (vi) Groundwater exploitation by the industries shall be regulated in over exploited and critical watersheds.
- (vii) Water bailed out from mines must be treated before releasing it into natural streams. MPCB authorities must monitor the quality of mine discharges. The water so bailed out from the mines will be used for providing irrigation benefits to nearby areas.

9.4 Water Policy regarding other uses :

9.4.1 Ecosystem:

Rivers, water bodies, aquifers and wet lands will be recognized as ecological systems and must be protected from over exploitation, depletion, pollution or contamination and degradation. Rivers will be protected from any form of construction on their flood plains and from excessive sand mining.

9.4.2 Thermal Power Generation:

In order to reduce burden on fresh water, the State will promote use of treated and recycled water for TPS.

9.4.3 Hydro Power Generation:

Installed capacity of hydropower stations in the State is 3684 MW. Theoretically, water used in hydropower generation is non-consumptive in nature, provided the hydro projects are planned as multipurpose projects. However, at present, the water which is being diverted westward for power generation, across Sahyadri ranges is not being fully utilised after power generation for other uses. Efforts will be made to optimize its use. The sites for conventional hydro projects in the State have already been exploited. Small /mini/micro hydro projects coupled with irrigation systems will be promoted wherever economically viable. The State has some attractive sites for Pumped Storage Schemes (PSS) which will be developed preferably on PPP model.

9.4.4 Pisciculture (Inland Fisheries):

Pisciculture is a non-consumptive use of water. Maharashtra has a good potential for Pisciculture, which will be developed in a planned manner to generate revenue as well as employment opportunities in rural areas.

9.4.5 Tourism:

Water based tourism is also a non-consumptive water use activity. It does not require specific water allocation. It has a very good employment and revenue potential. However, while developing



tourism, measures must be adopted to keep the water bodies clean, and pollution free.

9.4.6 Navigation:

Most of the rivers in the State are not perennial rivers; therefore the scope for year round water routes is limited. However, this aspect cannot be left out in water resource planning as it is the most convenient and economical mode of transportation. Water links in tanks and reservoirs could be used for local transport and as tourism activity.

9.4.7 Aviation:

Water aviation will be promoted in the submergence of major and medium dams with due care as to preservation of water quality.

10. GROUNDWATER DEVELOPMENT AND MANAGEMENT STRATEGY:

Groundwater must be recognized as a common property of the society held in public trust, for the use of all, subjected to reasonable restrictions to protect all water and associated ecosystems. The State has already enacted Maharashtra Groundwater (Development and Management) Act, 2009 for regulation of development and management of its groundwater resource.

The strategies envisaged for groundwater management are:

- (i) Groundwater will be conserved, protected, regulated and managed in accordance with the extant laws.
- (ii) The regulation of groundwater shall be in consonance with the principles of non-discrimination and equality, the principle of subsidiary and the precautionary principle.
- (iii) Priority charge on groundwater shall be for drinking purpose.
- (iv) Adequate measures must be undertaken to ensure that present and future generations will have access to sufficient quantity and acceptable quality of groundwater.
- (v) Quality conservation and improvement for groundwater is very important. Since reversing of groundwater pollution is very difficult, State will take necessary efforts to reduce and prevent pollution and degradation of groundwater. It needs to be ensured that industrial effluent, residues of chemical fertilizers, local cesspool or soak pits do not infiltrate to the groundwater table.
- (vi) Based on the encouraging experiences from the pilot studies in the past, the participatory groundwater management will be up-scaled in the entire State.
- (vii) Groundwater entitlements will be given based on preceding year recharges. Necessary mechanism will be established to monitor monthly entitlements. Special initiatives will be taken for groundwater recharge with water of acceptable quality. It shall be obligatory for water users to adopt groundwater recharge measures to compensate for the water extracted by them.
- (viii) There will be a periodical preferably a biannual assessment of the



groundwater potential on a scientific basis.

- (ix) Aquifer mapping studies will be undertaken to assess the groundwater dynamics and its occurrence.
- (x) Rain water harvesting and aquifer recharge projects will be taken up on priority.

11. DROUGHT MITIGATION:

The State has been facing recurring drought conditions due to uneven and unpredictable monsoon. Strategies identified for drought mitigation and management are:

- (i) The objective of drought mitigation measures must be to reduce soil erosion, augment soil moisture, retard drainage of rainwater and improve the efficiency of water use.
- (ii) Relief works undertaken for providing employment to drought stricken population will preferably be for drought proofing. Water resources development and management works will be given top priority.
- (iii) Drought mitigation program must be implemented with active participation of Panchayat Raj Institutions and NGOs.
- (iv) The State shall involve the corporate sector for undertaking drought mitigation activities as a part of their CSR activities.
- (v) 'Jalyukta Shivar Abhiyan' program will be continued as a long term drought mitigation measure with adequate technical support and target of 5000 villages per year.
- (vi) Subsidy scheme named 'Magel Tyala-Shettale' shall be continued as a drought mitigation measure.
- (vii) 'Gal Mukta Dharan and Gal Yukta Shivar' program for restoring storage capacity of water bodies by de-silting and making adjoining barren land fertile will also be implemented with community participation and CSR convergence.
- (viii) Priority will be given to water resource projects in drought prone area.
- (ix) Micro-irrigation shall be promoted in drought prone areas.
- (x) Soil Water Conservation measures such as mulching, poly house, green house, hydro gel, etc. will be promoted.
- (xi) Less water intensive economic activities shall be promoted in water deficit and highly water deficit sub-basins.

12. WATERSHED DEVELOPMENT:

- (i) Integrated watershed development and management plan will be prepared for each watershed which will form the part of sub-basin / basin water plans of the State, and must be implemented through community participation.
- (ii) Watershed Development Program will be implemented on priority in an area devoid of conventional irrigation system owing to natural constraints to provide soil moisture security and to ensure minimum



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water needs of the people.

- (iii) Watershed Development & Management programs will be implemented with convergence of various central and state government schemes, with an objective to increase the productivity of rain-fed farming.
- (iv) Watershed development and management activities shall be carried out from ridge-to-valley in a scientific manner. Typical watershed development program has several components. Appropriate components depending on topography (shape, configuration of slope of land), nature and depth of soil cover, types of rocks and their pattern of formation, water absorbing capacity of land, rainfall intensity and land use shall be selected. In the planning and implementation of watershed development works and related activities, the involvement of geologist must be made mandatory. Detailed geo-hydrological investigations will be carried out to ensure that the substrata are amenable to augment groundwater recharge.
- (v) The works undertaken under watershed development program will be geo-tagged for monitoring the progress of work. Performance evaluation of water conservation works done earlier will be subject to a periodic review by a third party, comprising of representatives from Agricultural Universities, WALMI and NGOs working in the water sector. Outcome of such evaluation shall be used for planning, designing and implementation of future schemes.
- (vi) Since watershed development works / schemes are carried out as a part of Government schemes through public money, entitlement/right on the augmented recharge of groundwater will be treated as common right of beneficiaries in the watershed. Beneficiaries shall provide requisite undertaking setting out clearly that they would share the benefits reaped from the watershed development works. Such undertaking must be taken before selecting the watershed for development.

13. FLOOD MANAGEMENT:

Seven per cent of the geographical area in the State is flood prone. Flood mitigation and management strategies envisaged are:

- (i) While every effort will be made to avert flood related disasters through structural and non-structural measures, emphasis should be on disaster management as an option.
- (ii) Flood forecasting methods will be modernized using setting up of a real time data acquisition system and forecasting models.
- (iii) Frequency based flood inundation maps will be prepared to evolve flood management strategies and an emergency plan for mitigation of floods and management for each flood prone area. Habitation and economic activities shall be strictly prohibited in the food plain zones (prohibitive zones –with 25 years return period flood) by the local authorities. The phase wise program can be implemented by concerned local authorities to remove existing encroachments.



- (iv) The State will develop Decision Support System (DSS) for flood forecasting in flood prone areas addressing state/site specific issues.
- (v) SMS-based flood alert system must be developed in flood prone areas.
- (vi) Emergency action plans/disaster management plans will be periodically reviewed and updated by involving people in flood prone area. To increase preparedness for sudden and unexpected flood related disasters, dam break analysis must be carried out.

14. MAINTENANCE OF INFRASTRUCTURE:

The policy for maintenance of water infrastructure will be as follows:

- (i) The responsible authorities of WRD including Irrigation Development Corporations (IDCs), WUAs and other water user entities, will maintain the water resources infrastructure and facilities in their respective jurisdiction to continue to get the intended benefits.
- (ii) Annual maintenance plans must be prepared by the respective IDCs on the basis of Irrigation Status Report, Report of Dam Safety Organization and inspection reports of the officers.
- (iii) The State Government will undertake Maharashtra Water Sector Improvement Program, with focus on Activities related to Dam Safety of old dams and Restoration of old canals distribution systems required to be carried out as per the provisions mentioned in the MMSIF Act 2005 in the delineated command area of completed project before handing over the same to WUAs.
- (iv) Repairs-Rehabilitation-Restoration (R-R-R) of traditional water harvesting water bodies such as ex-Malguzari Talav, etc.

15. INSTITUTIONAL ARRANGEMENTS:

- (i) An autonomous centre for research on water policy shall be established. This centre will also evaluate impact of policy decisions and advise on policy matters with changing scenario.
- (ii) "Centre of excellence" in water sector will be opened with international collaborations to promote the soft skills, to learn from global best practices and disseminate the same after assessing its state specific suitability. Innovative ideas will be incubated at such centres before they are rolled out for wider use.
- (iii) E-modelling platform will be developed to support integrated planning, operation and management of the water resources in the basin with global support.
- (iv) Capacity building of existing research institutes functional in water sector will be done with necessary collaborations with national / international institutes.
- (v) Innovative ideas and programmes in water resources sector must be encouraged, recognized and awarded. (e.g. best performing WUA, best performing city in terms of recycling of its sewage, city having

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- least NRW etc).
- (vi) Continuing research and advancement in technology will be promoted to address the issues in the water sector in a scientific manner. Adequate funding will be provided for R & D activities and also for updating the existing technology, design, planning and management practices. R&D Advisory Panel of internal/external experts will be established for steering and monitoring research activities and validating the same before role out.
 - (vii) Key persons will be provided with sponsorships for higher studies / specialization and exposure through international cooperation activities.
 - (viii) Collaboration with State educational institutes will be done to meet the changing need of the skilled manpower in the water sector.

16. MONITORING AND INFORMATION SYSTEM:

- (1) Reliable and appropriate data and information essential for effective management of water resources. A modern integrated monitoring networks for hydro-meteorological, water resources and water use data with information management system, shall be established on real time basis. This will sustain and support planning, project formulation and implementation, operations and decision making by the River Basin Agencies, all water users, water service providers and other agencies.
- (2) All State agencies, departments and all entities - public or private, that collect, maintain, collate or archive hydro-meteorological, related water resources and water use data shall contribute data to information system after ensuring its validity and accuracy. All such data shall be in public domain.
- (3) The State shall monitor and take appropriate measures through community involvement to address problems like unacceptable depletion or raising the groundwater level, salinity or similar problems arising out of prevailing water uses.
- (4) In view of change in water availability, change in cropping pattern and diversion of more water for non-irrigation purposes, the irrigation potential of the water resources projects completed before ten years shall be reviewed realistically.
- (5) All water user entities shall publish annual water accounts and water audit reports. Such reports shall contain all data relating to water quota, actual water use, pollution levels, losses, leakages, unauthorized withdrawals, recycle and reuse of water, including return flows, treated effluent water quantity, and per unit consumption etc. All such reports shall be in public domain.
- (6) The Water Resources Department shall undertake the benchmarking exercise in all the projects in the State, in a phased manner, in such a way that all projects will be covered. The State shall publish annual



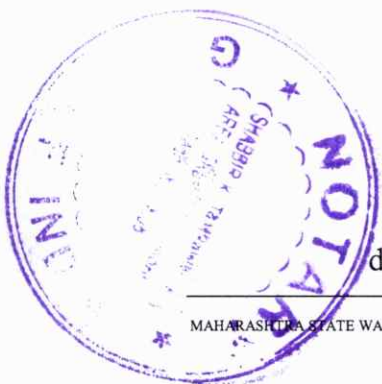
benchmarking report of water resources projects along with analysis and recommendations for improvement, every year by 22nd March i.e. World Water Day.

- (7) Water auditing shall be made mandatory for all Water Resources Projects. The service providers shall be accountable for providing measuring devices for volumetric supply and for giving the account of water use in various sectors. The cost of such meters shall be recovered from the users in phased manner. The Water Resources Department shall publish annual water audit report of all water resources projects, along with analysis and recommendations for improvement, every year by 22nd March i.e. World Water Day.
- (8) The Water Resources Department shall collect and compile data for water storages, water use for various categories of use- irrigation potential developed and utilised, water charges levied and collected and all other such relevant data. The State shall publish annual irrigation status report every year by 15th September; i.e. Engineers' Day.
- (9) Remote sensing coupled with Geographic Information System (GIS) shall be used for sustainable management of Water Resources, covering all extensively spread water harvesting structures including irrigation projects. This will include information on runoff, flood management- mapping of flood plains, watershed management, management of irrigation in command area- for estimation of acreage of crop and production, silt accumulation in dam etc. This will facilitate availability of real time data in public domain leading to transparency.

17. WATER CHARGES:

Water pricing plays an important role in regulating the water use and ensuring the efficiency of water use. The State has already entrusted the responsibility of tariff determination to MWRRA. The Authority is further guided by following Principles in finalising tariff structure;

- a) The Authority shall function in a transparent and participatory manner, conducting public consultations & hearing before deciding upon the tariffs.
- b) Authority shall ensure the realisation of at least norm based recurring expenses on the water infrastructure initially, as well as cost reflective water pricing subsequently in a phased manner.
- c) The recurring expenses shall include operation and maintenance charges including electricity charges, spares, consumables, establishment and administrative charges, overheads and also the cost of special repairs (restoration and retrofitting of structures) including replacement cost of any component of the infrastructure (viz. control gates etc.), required to ensure sustainability of the system, water use efficiency, user access to avail water rights and equitable water distribution.
- d) In order to meet equity, efficiency and economic principles, the water



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charges, as a rule, shall be determined on volumetric basis.

- e) The pricing of water shall encourage its efficient use and reward conservation.
- f) Recycle and reuse of water after treatment of sewage water to specified standards be incentivised through a properly planned tariff system.
- g) The cross-subsidy among various users categories will be removed in a gradual manner.

Necessary amendments as may be necessary shall be carried out in the extant law to achieve above policy objectives.

18. PARTICIPATION OF THE PRIVATE SECTOR:

The participation of the private sector will be encouraged in the planning, development and management of water infrastructure projects to introduce new ideas, new technology, innovative financing, management expertise, improved quality and cost effectiveness of water services and accountability to water users. Private sector participation in development of pumped storage schemes, development / operation of large lift irrigation schemes, water treatment plants, water distribution systems, and wastewater treatment plants shall be promoted, wherever feasible. External funding at reasonable rate of interest shall also be promoted in water resources development and management.

19. IMPLEMENTATION AND MONITORING:

Various targets mandated by ISWP and the SDGs are to be achieved in time bound manner. The Respective Line Department shall prepare action plans to achieve these targets as well as for implementation of the strategies envisaged in the policy. These action plans shall be finalized by State Water Board and approved by State Water Council. State Water Board shall regularly monitor its implementation. State Water Council will review the progress periodically.

20. REVIEW OF THE POLICY:

The State Water Policy being a dynamic document would be periodically reviewed, as and when needed, to overcome the future water sector development and management challenges.

[Note :- In case of any discrepancy in english and marathi version of State Water Policy, the provisions in english version shall prevail.]

TRUE COPY
ADVOCATE



Fwd: CJNI review visit and meetings for Waldhuni River restoration

1 message

Dr. Snehal Donde <drsnehaldonde@gmail.com>
To: Ronita Bhattacharya <ronita.b6@gmail.com>

22 February 2025 at 08:04

----- Forwarded message -----

From: Dr. Snehal Donde <drsnehaldonde@gmail.com>

Date: Wed, Aug 14, 2024 at 11:12 AM

Subject: CJNI review visit and meetings for Waldhuni River restoration

To: Dr. Prashant Rasal <chiefofficerambarnath@gmail.com>, जिल्हाधिकारी ठाणे <collectorofficethane@gmail.com>, mc <mc@thanecity.gov.in>, biswa ranjan paramguru <paramguru.biswa@gmail.com>, "का. अ. ठाणे पाटबंधारे विभाग, कळवा" <eetmidkalwa@gmail.com>

Dear Rasal ji,

Thanks for yesterday's Nadi Samvad CJNI visit organised by Mr Sunil jadhav AE, AMC water supply for the follow up of the previous meetings and in the light of Thane Corporation meeting minutes of 24th July, 2024 shared with you.

Following are the highlights of the observations, discussion and suggestions shared with Additional CO Mr Abhijit Pednekar;

1- Jainam Residency Ambarnath complaints received regarding severe water logging due to unmindful permissions on river /drainage channels and designs for new building complex in palegaon area and overall town planning issues. We observed that along with the above, also Reliance area new buildings permissions, Open gutters and no garbage management, with slopes, drainage flowing from Palegaon area have added to the issues of Waldhuni river. Influx of water during heavy rains are regular sites of serious flooding in the downstream area in Shiv Mandir. As the place has become so congested with building permissions on Waldhuni upstream areas/ stream orders and channels, without a hydraulic survey, is a matter of great concern.

This is very important today with the aggravating issues of climate change. Please take note and ensure we do not repeat mistakes as nature is taking its toll.

2- Shiv mandir ghat making is at a fast pace, and a side wall constructions restricting water flowing from upstream palegaon and reliance area is unexpected. a) Even if we do not have Waldhuni floodline map, you may approach Mrsac, hydrology dept, geo technical experts before proceeding with the Ghat construction or any other work, as these services are available readily. b) Since Waldhuni has a long history which is evident from the ancient temple construction on its bank as per the Indian traditional system, Many previous SC and NGT rulings are there where Waldhuni river is recognised. c) No consultation had been done with the irrigation department even prior to the approval of the project design. This shows a great ignorance in our part and due to heavy rains Few days back shiv idol and temple was completely flooded with gutter and chemical water. Kindly take note of the nature alerts, otherwise we will even loose the temple. Hence we recommend that,

A) With priority river bed concrete and pipe be removed and stop the ghat work, until environmental and economic aspects are worked out simultaneously with a comprehensive hydraulic survey of the places.

B) Kindly issue a letter to MPCB and MIDC as they were shown the fumes and chemicals in the shiv mandir river water and small children were found swimming and ladies were washing clothes, who may be severely affected. Chronic toxicity is high.

C) Also we recommended SBT technology to be adopted for drainage treatment of balance sewage discharge and reorientation of STPs functioning but not providing positive outcome.

3- Textile units in Loknagari area need to be dismantled..no letter issued is yet issued for demolition by AMC, and it was found functioning. MPCB has not issued a closure notice. Ensure that this formality is also done with a speed.

4- At loknagri bridge n Govind pull garbage all over the place, silt accumulation and garbage dumping was noticed. In Mr karanjule land as a wall was dismantled all debris is lying in the river bed and on the opposite side of govind pull a garden is created on the river, is unmindful. So concrete bed in Govind pull area and the garden be dismantled.



In the govind pull area the other side establishments on Waldhuni river bank is in the violation of river norms. Due to improper town planning there is worst issues of garbage management. Not even 1% is handled well. We need to make sincere efforts to know about waldhuni long history and flow rate and volumes to plan our Ambernath city. Just not having a flood line map cannot be an excuse to declare it as a nallah or derecognize the facts in place.

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5- At Phansi pada area from the MIDC area, in absence of complete system of CETP chemicals continue to flow in Waldhuni, along with water of tables from the forest area encroachments in the vicinity. Despite of informing forest dept yet the places have not been vacated. Yesterday forest officers and MIDC DE was present and were informed to do the needful.

Most importantly in Phansi pada, palegaon, Loknagari and govind pull areas No fogging, garbage collection or disposal happening.

Hence we suggest a Pyrolysis unit be started, garbage aero bins be installed and SBT technology be adopted for the waste management. We shall assist in all including providing experts and right technology selection, to speed up the process.

I have spoken with Abhijit karanjule bjp president 8888443000 as your staff connected me from during the site visit with regards to the garden constructed on the Waldhuni at govind pull. Regarding the borewell made and 5 valves there is still a mystery. With 155cr as the ghat work is going under Mr kumbhar city engineer, panhale Deputy, engineer, Rajesh talvi Asst engi PWD, I would like to request you to educate them regarding hydraulics and connecting to hydrology dept, before proceeding with further ghat construction work. To understand the nature and geography. Because engineering alone is very destructive.

Form recent floods devastation in Bharangi river in shahpur, Waynad in Kerala and all over the country, we need to take lessons and not repeat the mistakes.

Looking forward to your appointment for a detailed presentation on scientific solutions for the above issues identified.

Kindly revert

Jalnayak Dr Snehal Donde

Nadi Samanvayak



----- Forwarded message -----

From: **Dr. Snehal Donde** <drsnehaldonde@gmail.com>

Date: Sun, 30 Jun 2024, 12:20 pm

Subject: Re: Intimation for World Environment Day celebration in collaboration and to be Guest of Honor for Tree Plantation on Waldhuni River Bank

To: Dr. Prashant Rasal <chiefofficerambarnath@gmail.com>

Cc: जिल्हाधिकारी ठाणे <collectorofficethane@gmail.com>, mc <mc@thanecity.gov.in>

Dear Rasal ji,

Humble reminder to take action against concretization and pollution of river waldhuni.

Despite of timely intimations no constructive action is taken and we were not ever invited for the joint meeting held with the ASI and others

Kindly give your time to have discussions to work in coordination, as CJN mandate is to assist in river rejuvenation work.

Looking forward to hear from you.

Jalnayak Dr Snehal

Nadi Samanvayak

On Thu, 18 May 2023, 5:52 pm Dr. Snehal Donde, <drsnehaldonde@gmail.com> wrote:

Dear Prashant Rasal ji,

Chief Officer, Ambernath Municipal Council

This is with regards to my teams visit to Waldhuni and Ulhas river basin areas yesterday dated 17th May, 2023 as a part of Chala Januya Nadila campaign (as per the GRs issued by Government of Maharashtra Ministry of Culture and tourism), i wish to urge you to conduct a meeting at earliest as we could not meet you and AMC officers as expected.

For yesterday's campaign, although the time schedule was shared with Mr Shelke we could only meet Mr Sunil Jadhav of water supply department at the time of concluding Yatra at Shiv mandir Waldhuni river site. 1- We showed him the unscientific way of handling the issues faced by the Waldhuni river. Putting the river in pipe upto some distance and later in a open channel and concretizing the bed of river is the most pathetic idea to work in

consultation with archeological Dept (as informed by Mr Jadhav) and contractor. To resolve the Waldhuni river pollution and clean it, I had suggested measures from time to time, which has been completely ignored.

462

I wish to further inform you that as a mail was sent to you on 19th April, 2022 seeking your appointment to discuss serious issues of waldhuni and could not meet you, i had met Mr Sunil Jadhav and Mr Ashok Patil Chief engineer and had explained the corrective measures for waldhuni river rejuvenation. However, unmindful work on Waldhuni River at shiv mandir site and Govind pull area is continuing, leading to garbage dumping, pollution and drying of river affecting massively the ecosystem. 2- Also at Phansi pada onwards in the AMC region we could see yesterday prominently the encroachments and pollution of river by the companies in the vicinity. The tree plantations done by us (AMC and my team) at the MIDC pipeline area near the bridge and road going towards Vrudhashram has also been uprooted in the name of river desilting work done by AMC with some NGO help.

As MIDC and MPCB officers were with us we expected AMC officers to join us. Anyways now we have shown the issues to MIDC representative Mr Kumbhar and MPCB officer Mr Kukade to take necessary step at earliest for the pollution issue and samples were tested onsite by my IIT Bombay students for making a comprehensive report. 3- There is rampant excavation and illegal extraction of soil from the bank of river in Phansi pada area, which needs to be stopped immediately. 4- Municipal garbage waste dumping near Ambarnath west railway station Rickshaw stand shows a casual handling of such important aspects from a health and sanitation point of view. Garbage being burnt with a maximum percentage of plastics is so carcinogenic. Near the same site waldhuni and Ulhas river flowing and a nallah crossing the road is completely neglected. I have shared the videos and pics on whatsapp too with you and Mr Shelke for necessary action and few pictures are shared here for reference and action.

Kindly take necessary action for the above information shared and if possible arrange a meeting on 30th May as per your convenience.

Kind regards

Dr Snehal Donde

On Fri, Jun 4, 2021 at 2:32 PM Dr Snehal donde <drsnehaldonde@gmail.com> wrote:

Thank you so much Sir.

Regards

Dr Snehal Donde

Sent from my iPhone

On 04-Jun-2021, at 1:20 PM, Dr. Prashant Rasal <chiefofficerambarnath@gmail.com> wrote:

Due to the meeting I am not able to attend the program. On behalf of me Deputy Chief Officer Mr. Bhau Nipurte will attend the function.

On Thu, Jun 3, 2021 at 4:35 PM Dr Snehal donde <drsnehaldonde@gmail.com> wrote:

Dear Sir,

Greetings!

PFA. Kindly acknowledge and revert for confirmation.

Kind regards

Jalnayak Dr Snehal Donde

Sent from my iPhone

--

Respected Sir / Madam,

Please download the attached file.



463

Yours Faithfully,

Ambarnath Municipal Council

Contact No. :- 0251-2682353

Plant trees, save trees.

Please print only if necessary. !!

--
Sincerely

Dr (Mrs) Snehal S Donde
MSc, PhD (Zoology) EMBA, PGDEM, MEM, PhD (MS),
Jalnayak Govt of Maharashtra (Thane & Mumbai)
Dean Administrative Affairs, BVRC & Director Centre for Water Research
Govardhan Ecovillage, Palghar (MS)
Mob. 9819088651, 9167698570

--
"Vision where Passion meets Purpose of inspiring & transforming lives"

Sincerely

Dr (Mrs) Snehal Subhash Donde

MSc, PhD (Zoology) EMBA, PGDEM, MEM, PhD (MS)

Fulbright Scholar, Washington DC, Fulbright Foreign Scholarship Board & United States Bureau of Education & Cultural affairs,

Jalnayak Govt of Maharashtra (Thane & Mumbai), Member, World Water Council & Core Member Indian River Basin Council, Chairperson, Clean & Healthy Rivers Committee, Microbiologist Society, India

Dean Administrative Affairs, BRC, GEV, Affiliated to University of Mumbai.

Mob. 9819088651, 9167698570



Dr. Snehal Donde <drsnehaldonde@gmail.com>
To: Ronita Bhattacharya <ronita.b6@gmail.com>

22 February 2025 at 08:03

464

----- Forwarded message -----

From: **Dr. Snehal Donde** <drsnehaldonde@gmail.com>

Date: Sun, Jun 30, 2024 at 12:20 PM

Subject: Re: Intimation for World Environment Day celebration in collaboration and to be Guest of Honor for Tree Plantation on Waldhuni River Bank

To: Dr. Prashant Rasal <chiefofficerambarnath@gmail.com>

Cc: जिल्हाधिकारी ठाणे <collectorofficethane@gmail.com>, mc <mc@thanecity.gov.in>

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Looking forward to hear from you.

Jalnayak Dr Snehal

Nadi Samanvayak

[Quoted text hidden]

--

[Quoted text hidden]



Fwd: Intimation for World Environment Day celebration in collaboration and to be Guest of Honor for Tree Plantation on Waldhuni River Bank

3 messages

Dr. Snehal Donde <drsnehaldonde@gmail.com>

22 February 2025 at 08:02

To: Ronita Bhattacharya <ronita.b6@gmail.com>

----- Forwarded message -----

From: **Dr. Snehal Donde** <drsnehaldonde@gmail.com>

Date: Thu, May 18, 2023 at 5:52 PM

Subject: Re: Intimation for World Environment Day celebration in collaboration and to be Guest of Honor for Tree Plantation on Waldhuni River Bank

To: Dr. Prashant Rasal <chiefofficerambarnath@gmail.com>

Cc: जिल्हाधिकारी ठाणे <collectorofficethane@gmail.com>, <mc@thanecity.gov.in>

Dear Prashant Rasal ji,

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Kindly take necessary action for the above information shared and if possible arrange a meeting on 30th May as per your convenience.

Kind regards

Dr Snehal Donde

On Fri, Jun 4, 2021 at 2:32 PM Dr Snehal donde <drsnehaldonde@gmail.com> wrote:

Thank you so much Sir.



Regards
Dr Snehal Donde

466

Sent from my iPhone

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Dear Sir,
Greetings!
PFA. Kindly acknowledge and revert for confirmation.
Kind regards
Jalnayak Dr Snehal Donde

Sent from my iPhone

--

Respected Sir / Madam,

Please download the attached file.

Yours Faithfully,

Ambarnath Municipal Council

Contact No. :- 0251-2682353

Plant trees, save trees.

Please print only if necessary. !!



467

Sincerely

Dr (Mrs) Snehal S Donde

MSc, PhD (Zoology) EMBA, PGDEM, MEM, PhD (MS).

Jalnayak Govt of Maharashtra (Thane & Mumbai)

Dean Administrative Affairs, BVRC & Director Centre for Water Research

Goverdhan Ecovillage, Palghar (MS)

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Mob. 9819088651, 9167698570

7 attachments



WhatsApp Image 2023-05-18 at 5.46.19 PM.jpeg
125K

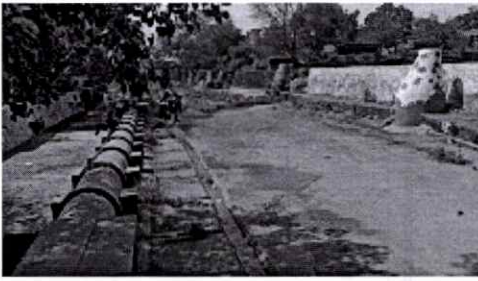


WhatsApp Image 2023-05-18 at 5.48.04 PM.jpeg
150K



WhatsApp Image 2023-05-18 at 5.45.52 PM.jpeg
106K





WhatsApp Image 2023-05-18 at 5.45.08 PM (1).jpeg
279K

468



WhatsApp Image 2023-05-18 at 5.45.08 PM.jpeg
324K



WhatsApp Image 2023-05-18 at 5.44.08 PM.jpeg
172K



WhatsApp Image 2023-05-18 at 5.44.36 PM.jpeg
283K

Dr. Snehal Donde <drsnehaldonde@gmail.com>
To: Ronita Bhattacharya <ronita.b6@gmail.com>

22 February 2025 at 08:03

----- Forwarded message -----

From: **Dr. Snehal Donde** <drsnehaldonde@gmail.com>

Date: Thu, May 18, 2023 at 6:57 PM

Subject: Fwd: Intimation for World Environment Day celebration in collaboration and to be Guest of Honor for Tree Plantation on Waldhuni River Bank

To: RO Kalyan <rokalyan@mpcb.gov.in>

Dear Mr Kukade,

This mail is being Forwarded for necessary action and reminder for the previous monitoring report of the areas visited yesterday during the Nadi Parikrama wrt CJN.

Dr Snehal Donde

[Quoted text hidden]

[Quoted text hidden]

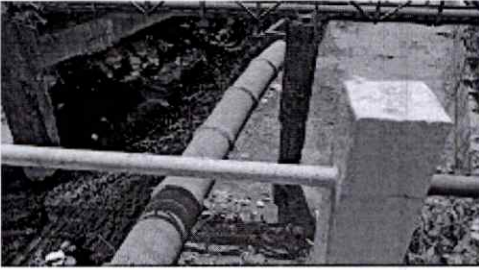
7 attachments



469



WhatsApp Image 2023-05-18 at 5.46.19 PM.jpeg
125K



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150K



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106K



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324K



WhatsApp Image 2023-05-18 at 5.44.08 PM.jpeg
172K



WhatsApp Image 2023-05-18 at 5.44.36 PM.jpeg
283K



Fwd: भिवंडी येथील कामवारी नदी प्रदूषण व अतिक्रमणाबाबत

1 message

Dr. Snehal Donde <drsnehaldonde@gmail.com>
To: Ronita Bhattacharya <ronita.b6@gmail.com>

22 February 2025 at 07:53

----- Forwarded message -----

From: **Dr Snehal donde** <drsnehaldonde@gmail.com>
Date: Tue, Apr 19, 2022 at 10:54 AM
Subject: Fwd: भिवंडी येथील कामवारी नदी प्रदूषण व अतिक्रमणाबाबत
To: Dr. Prashant Rasal <chiefofficerambarnath@gmail.com>

Dear Sir,

Please revert on Waldhuni issue along with other request. Seeking your appointment to discuss Waldhuni river issue which is presently being dredged without scientific and technical mapping, this is not fetching the outcome as expected. Hence I request you to arrange a meeting for consultation with Irrigation water and environment department officers. Kindly acknowledge and let me know the time to meet.

Regards

Jalnayak Dr Snehal Donde

Sent from my iPhone

Begin forwarded message:

From: "Dr. Snehal Donde" <drsnehaldonde@gmail.com>
Date: 16 March 2022 at 8:52:45 PM IST
To: "नगरविकास शाखा, जिल्हाधिकारी कार्या. ठाणे" <nagarpalika18@yahoo.com>
Cc: Bhiwandi Nizampur City Municipal Corporation <bncmc.cd@gmail.com>
Subject: Re: भिवंडी येथील कामवारी नदी प्रदूषण व अतिक्रमणाबाबत



Dear Sir,

This is with reference to your letter that I wish to inform you that yet after so much effort no action has been taken to revive Kamvारी river, despite of my several follow ups and ESR submission with recommendations and meetings with Bhiwandi corporation water department Chief engineer Mr Gaikwad to prioritise the revival strategies. Also i have met you and Mr Dhiraj Chavhan ji in your Ambernath Municipal Council office for delegating Waldhuni restoration work to the irrigation department for widening and deepening of the waldhuni river for ensuring its flow, however yet no step has been taken in this direction. Only the cleaning programme of Waldhuni is periodically arranged by the health and sanitation department which is not enough for her restoration. For Ulhas river restoration a joint committee formation is long awaited to be formed under the Chairmanship of Collector Dr Rajesh Narvekar ji as announced by Guardian Minister Eknath Shinde ji. Hence a visit is organized by IPRBC Virasat Yatra on Kongoan and Nadi Naka, Bhiwandi area along with visits to Ulhas and Waldhuni rivers by Dr Rajendra Singh ji and his team, which shall be followed by meeting with the Collector and others as mentioned in the letter in attachment. Hence hereby requesting for confirming appointment for the meeting between 3-4pm. Kindly see the letter written to Collector Sahab and copy of the detailed program of Virasat Yatra for doing needful.

Regards

Jalnayak Dr Snehal Donde

CC to Bhiwandi Corporation for arrangements of visit along with Dr Rajendra Singhji to Nadi Naka site for discussing action against Kamvारी and Kongoan for Ulhas river pollution and encroachments.

On Fri, Mar 26, 2021 at 7:53 PM Dr Snehal donde <drsnehaldonde@gmail.com> wrote:

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Dear Sir,

Thank you for the letter written to Commissioner of Bhiwandi for taking action. I request to write similar letter to Tehsildar as bhiwandi rural area too have same issues, as left side of Kamvari river is municipal corporation jurisdiction and right side grampanchayat region. The city plan map be reffered for the action. Previous year serious issues had cropped up in Katai, Khoni, and Shelar etc. region which exist on stretch of the Kamvari river.

Kindly consider my request and take appropriate action. The Environmental Survey report submitted by me include these region too. Hence Zilla parishad, MMRDA and MPCB in the region must be also notified.

Regards

Jalnayak Dr Snehal Donde

Sent from my iPhone

On 26-Mar-2021, at 6:06 PM, नगरविकास शाखा, जिल्हाधिकारी कार्या. ठाणे
<nagarpalika18@yahoo.com> wrote:

Dear Sir / Madam,
Please download the attached file herewith for the following action in the subject matter.

Regards,
Dr. Prashant Rasal
District Administration Officer
Urban Development Branch, Thane
4th Floor, Collector Office Thane
Contact No. :- 022-25344828

Plant trees, save trees.

Please print only if necessary. !!

<Kamwari River Pollution Bhiwandi.pdf>

Sincerely

Dr (Mrs) Snehal S Donde

MSc, PhD (Zoology) EMBA, PGDEM, MEM, PhD (MS),

Jalnayak Govt of Maharashtra (Thane & Mumbai)

Dean Administrative Affairs, BVRC & Director Centre for Water Research

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Dean Administrative Affairs, BRC, GEV, Affiliated to University of Mumbai.

Mob. 9819088651, 9167698570

2 attachments

472

 IPRBC Letter to collector.pdf
153K

 Mumbai yatra schedule.docx
23K

TRUE COPY

ADVOCATE

