

**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

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-

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 Ambernath 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/l.)		
		CD	PD	SCN
1	0 to 5	1. COD (mg/l.) > 2000 2. pH<5.5 & >9.0 3. SS<100mg/l.	1. COD (mg/l.) > Between 1000-2000 2. pH<5.5 & >9.0 3. SS<100mg/l.	1. COD (mg/l) > 500-1000 2. pH<5.5 & >9.0 3. SS<100mg/l.
2	5 to 15			
3	15 to 20			

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

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
2	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 Dombivli 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-

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.

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

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/lt., COD 880 mg/lt.) 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

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 severally 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;

- (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 Bhoyar 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 :

- (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.

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 :

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

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 Ambarnath 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

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/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.

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

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

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.

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

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 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

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