

ENVIRONMENTAL STATUS REPORT

OF

KALYAN REGION



MAHARASHTRA POLLUTION CONTROL BOARD

Kalpataru Point, Sion Circle , Sion (East)

Mumbai 400 022

2004 - 2005

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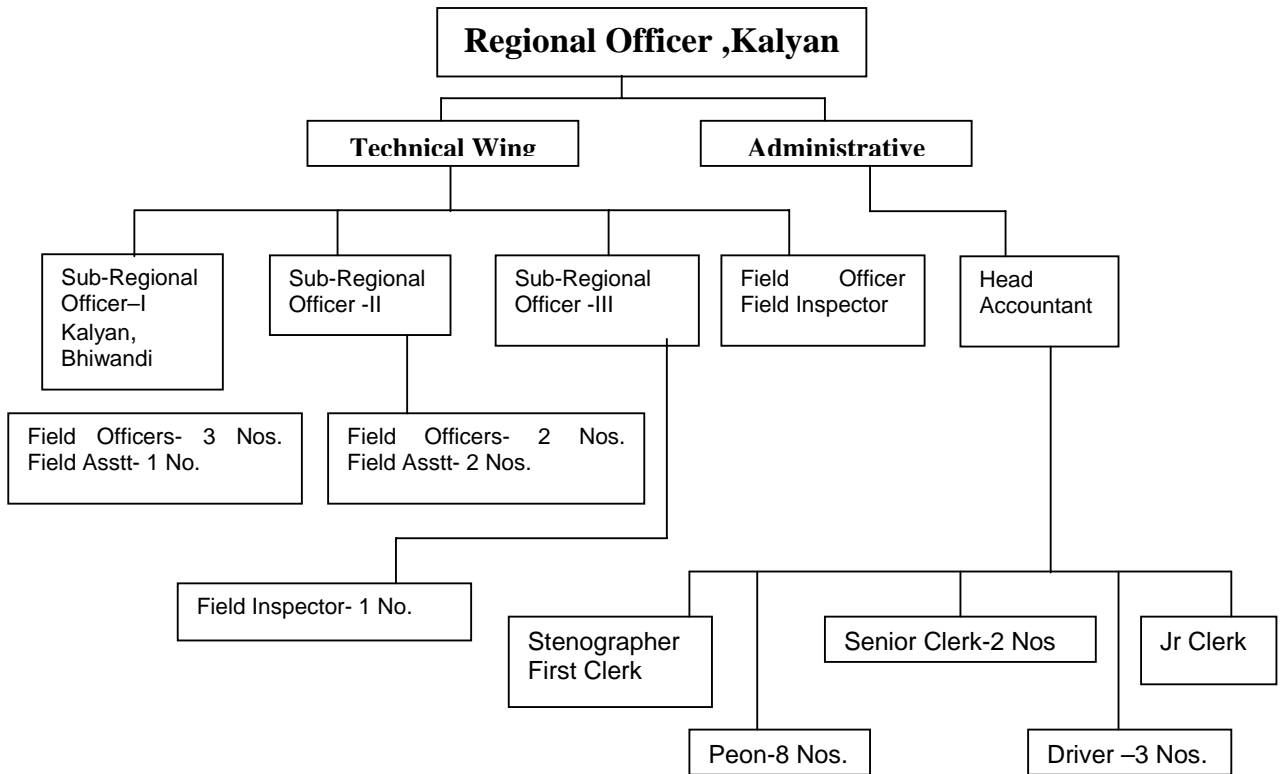
1. INTRODUCTION

Maharashtra Pollution Control Board was the first Board established in India under the Maharashtra Water Pollution and Prevention Rules 1969, in the year 1970. Then Central Water (Prevention and Control of Pollution) Act, 1974 came into the force in the year 1981. MPCB is now regulating all the major environmental legislation in the state including -

- Water (Prevention and Control of Pollution) Act, 1974
- Air (Prevention and Control of Pollution) Act, 1981
- Environmental (Protection) Act, 1986 and the rules made there under like:
 - Environmental Impact Assessment Notification, 1994
 - Coastal Zone Regulation, 1991
 - Hazardous Waste (Management and Handling) Rules, 1989
 - Bio-Medical Waste (M & H) Rules, 1998
 - Municipal Solid Waste (M&H) Rules, 2000
 - Recycled Plastic Manufacture and Usage(Amended) Rules, 2003
 - Fly ash Utilization Notification, 1999 etc.

The Environmental Status Report of Kalyan region is prepared which covers the background status, efforts towards effective implementation of above enactments and thereby present status of environment as regard to water, air, solid waste, hazardous waste and bio-medical waste management The implementation of these enactments is being carried out with the administrative infrastructure as below : -

Administrative Infrastructure of Kalyan Region



2. BACKGROUND & STATIATICS OF INDUSTRIES

Mumbai is a commercial and industrial capital of India. In view to avoid the concentration of pollution load on Mumbai, the Govt. of Maharashtra has banned establishment of new polluting industries in the territory of Mumbai city and suburban areas. Obviously, the industrial activities have been shifted to adjacent district, i.e. Thane. Being an adjacent district to Mumbai and availability of natural resources and other infrastructures it has been industrialized at a very faster rate. Therefore, now, Thane district is one of the most industrialized districts in Maharashtra. There are some large

chemical industries like NRC Limited, Century Rayon, Dharamsi Morarji and other industrial estates developed by M.I.D.C. with full facility at Dombivli, Ambarnath, Badlapur, Tarapur and Thane.

The Six rivers namely Bhatsa, Kalu, Vaitarna , Tansa, Surya and Ulhas rivers are flowing through the district, which are of great importance for water supply to the industries as well as drinking Source for nearby localities. Considering the water supply from these rivers for drinking purpose, increase in population and density of polluting industries. This area becomes environmentally sensitive. Therefore, MPC Board has established a new Regional Office in the year 1997. The jurisdiction of Regional Office, Kalyan covers the talukas of Kalyan, Bhiwandi, Ambarnath, Ulhasnagar, Wada, Murbad and Shahpur. Due to faster industrialization there is rapid growth of residential area in Kalyan, Ulhasnagar and Bhiwandi and hence the Municipal Councils now got the status of Municipal Corporations.

As per the available office records there are about **2534** no. of industries exist in Kalyan region. Out of them **1053** industries are in “Red” category. There are 4 major industrial estates named as M.I.D.C. Dombivli Phase I & II & M.I.D.C. Ambarnath, M.I.D.C. Badlapur, M.I.D.C. Saravali. Some large-scale industries are also located in scattered areas. Besides this, some re-rolling type industries also exist in Wada taluka. The details of industries as per categories is presented in table no. 1

CATEGORY AND SCALEWISE DISTRUBUTION OF INDUSTRIES.

District	Category	LSI	MSI	SSI	TOTAL
Thane	RED	32	40	981	1053
	ORANGE	3	5	365	373
	GREEN	5	7	1096	1108
	TOTAL	40	52	2442	2534

TABLE -1

LSI : Large-Scale Industries

MSI : Medium Scale Industries.

SSI : Small Scale Industries

3. **INDUSTRIAL ESTATES IN REGION AND POLLUTION LOAD**

The Five rivers are the prime sources of water supply, which has catalyzed industrial growth in district. But simultaneously threaten for possibility of pollution of river water. Hence it has become very important to protect these rivers from the probable pollution.

Here the efforts have been made to report in details about the towns and industrial estates, scattered industries on the bank of river and in the vicinity, the effluents generated from them, the treatment and disposal of these effluents and impact of all these activities on the river water.

The MIDC has established seven industrial estates at Dombivali, Ambarnath, Chikroli-Morivali, Badlapur and Saravali .The relevant information in brief is tabulated as below.

Information regarding the industrial areas developed by Maharashtra Industrial Development Corporation.

Sr. No	Name of Industrial Estates	Total Number of industries	Number of pollutant industries	Quantity of industrial effluent in MLD	Details about CETP	Location of Disposal of Treated Effluent
1	Badlapur	353	198	8	Primary, secondary & tertiary treatment facility provided and in operation.	Ulhas creek through Waldhuni Nalla
2	Ambarnath Chemical Zone	53	40	0.250	Primary, secondary treatment facility provided and	Ulhas creek through Waldhuni Nalla

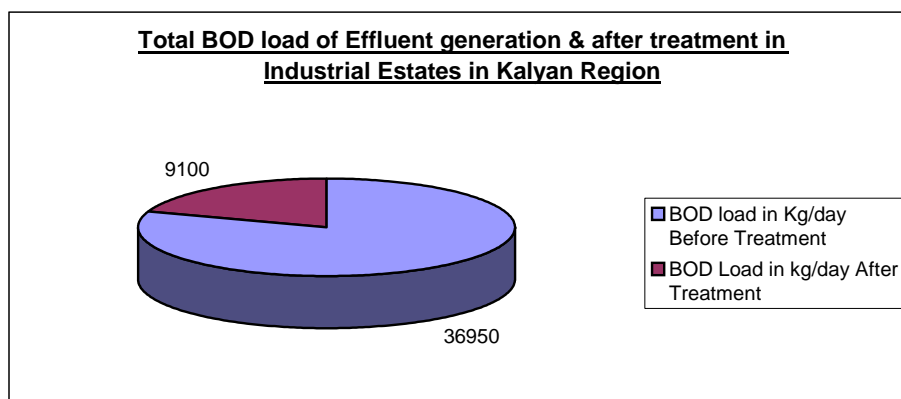
					in operation	
3	Ambernath Chikloli Morivali	121	88	0.800	Work of CETP is in Progress	Ulhas creek through Waldhuni Nalla
4	Additional Ambernath , Anand Nagar	180	18	1.2	Effluent treatment facility installed 2 MLD Capacity but it not started the operation .	Ulhas creek through Waldhuni Nalla
5	Dombivali	453	287	15.5	A- CETP Chemical (1.5 MLD capacity) Primary, secondary treatment facility provided and in operation B- CETP Textile (14 MLD Capacity) Primary, secondary treatment facility provided and in operation	Ulhas creek
6	Saravali	16	14	2.5	Individual industries have provided required effluent treatment Plant.	Ulhas creek
7	Murbad	250	27	0.110	Not necessary	Treated effluent is used for tree plantation in industries premises.

POLLUTION LOAD OF INDUSTRIAL ESTATE

The incoming pollution load and final outlet pollution load of the industrial area are presented in Table No. 2

Sr. No.	Name of the MIDC	Total Ind. Effluent generation in MLD	BOD load in Kg/day Before Treatment	BOD Load in kg/day After Treatment
1	Dombivli Phase-I & II	15.5	22050	5750
2	ACMA,Ambernath	0.25	500	25
3	Badlapur	5.0	10000	1500
4	Chikloli-Morivali,Ambernath	0.8	2400	1200
5	Saravali	2.5	2000	625

TABLE-2



4. Information about scattered major Polluting Industries .

Besides the industrial estate of MIDC there are some scattered industries in the vicinity of river /creek. The information of the some major industries is given below.

Sr. No.	Name of the Industry	Quantity of Industrial Effluent MLD	Status of Ind. Effluent Treatment Facility	Disposal of Treated Ind. Effluent
1.	M/s.Century Rayon Ltd., Sahad,Tal:Ulhasnagar, Dist - Thane	14134	Primary and Secondary	Ulhas creek

2.	M/s.Century Rayon Ltd. (Chemical Division), Sahad,Tal:Kalyan,Dist - Thane	400	Primary and Secondary & Tertiary	Reuse and Tree Plantation.
3.	M/s.N.R.C.Ltd.,Mohane,Tal: Kalyan. Dist - Thane	47690	Primary and Secondary	Kalu Estuary
4.	M/s.I.D.I.Ltd.,Sahad,Tal Ulhasnagar. Dist - Thane	23580	Primary and Secondary	Ulhas Creek
5.	M/s. Dharmasi Morarji Chemical Co.Ltd.,Ambernath Dist - Thane	600	Primary	Waldhuni Nalla
6.	M/s. M.T.P. Factory, Ambernath Dist - Thane	1620	Primary and Secondary	Waldhuni Nalla.
7.	M/s.Ordance Factory, Ambernath Dist - Thane	2400	Primary and Secondary	Waldhuni Nalla.
8	M/s.Borax Morarji Ltd, Ambernath Dist - Thane	85	Primary	Reuse
9	M/s.Jindal . Vasind,Tal: Shahapur Dist - Thane	75	Primary and Acid Recovery Plant	Tree plantation in company premises
10	M/s.Global Wool, KamalGaon,Tal: Shahapur Dist - Thane	100	Primary , Secondary, and Tertiary	Tree plantation in company premises
11	M/s.Liberty Oil Mill, Shahapur Dist - Thane	100	Primary Secondary and Tertiary	Tree plantation in company premises
12	M/s.Hindustan Coca-Cola Company, Kudus,Wada. Dist - Thane	1600	Primary, Secondary and Tertiary	Tree plantation in company premises
13	M/s.National Peroxide Ltd. Mohane.Tq-Kalyan, Dist - Thane	264	Primary and Secondary	Ulhas Creek
14	M/s Danube Fashion Ltd, At Dhanivali, Tq-Murbad,Dist - Thane	600	Primary,Secondary y & Tertiary Treatment with Reverse Osmosis with Multiple Evaporator	Recycle in Process.

5. WATER ENVIRONMENT

In this region, there are 4 major rivers namely, Ulhas, Bhatsa, Tansa and Vaitarna. These rivers are major sources of drinking water supply to Mumbai and nearby Municipal Corporations and towns. The peculiarity of each river is as under:

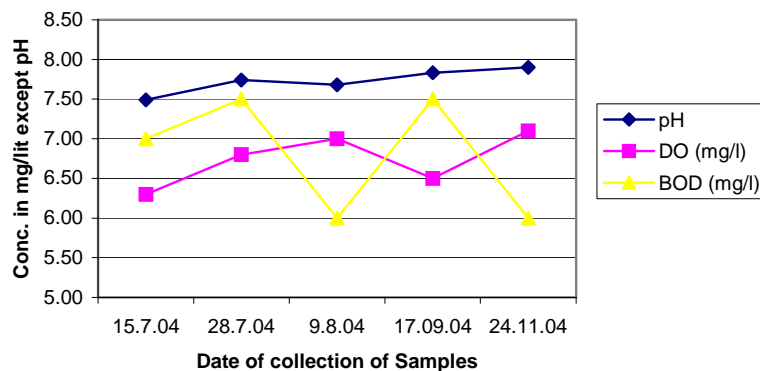
A) Bhatsa River:

It originates from Igatpuri area and finally meets to the Ulhas creek. The total stretch of river is classified as A-1 class. This river is one of the main sources of water supply to Mumbai and Thane. Though the MIDC has not established here any industrial estate, there are cooperative industrial estates and some scattered industries are established on the bank of river and in the vicinity. Maharashtra Govt. has declared industrial location policy in 1987 and banned polluting industries within 8 km periphery to maintain river water quality. There were only three existing medium and large-scale water polluting industries, established prior to said notification. They are not permitted to discharge their effluent into the river. MPC Board has also prescribed the stringent standards to such type of industries. In response to this, two industries have provided tertiary treatment facilities. And third one M/s. Jindal Ltd., Vasind, have provided Acid Recovery Plant to recover 100% acid by investing an amount of Rs.10.5 Crores in the year 1997. This was the first acid recovery plant set up in India. Even they have provided STP for the treatment of domestic effluents generated from their residential colonies. Fortunately large cities and towns are not located in these areas. Due to above prevention and control measures and constant vigilance on industry we are able to maintain the water quality of Bhatsa River. The water quality of Bhatsa River is presented in table no.3 & 4 by graph.

Name of Sampling Station : Bhatsa River- Bhatsa Dam,Shahapur					
Date	15.7.04	28.7.04	9.8.04	17.09.04	24.11.04
pH	7.49	7.74	7.68	7.83	7.9
DO (mg/l)	6.30	6.80	7.00	6.50	7.1
BOD (mg/l)	7.00	7.50	6.00	7.50	6.0

TABLE- 3

Water Quality Report of Bhatsa River at Bhatsa Dam, Shahapur



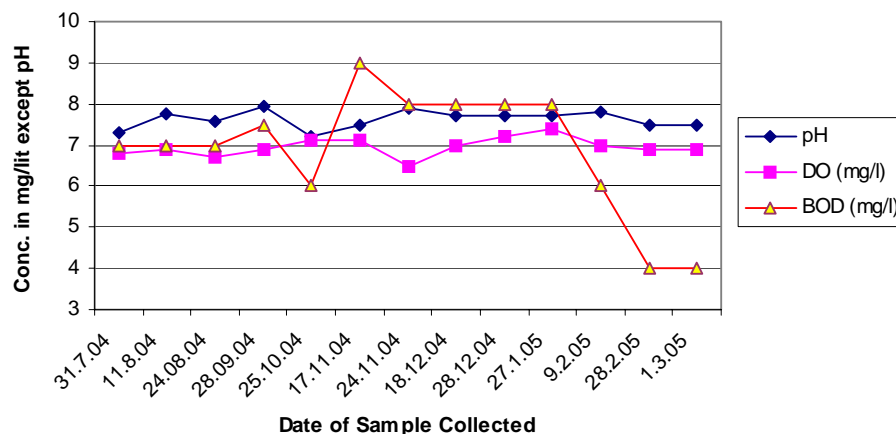
Name of Sampling Station : Bhatsa River- Pise Dam

Date	31.7.04	11.8.04	24.08.04	28.09.04	25.10.04	17.11.04	24.11.04
pH	7.31	7.74	7.58	7.95	7.2	7.5	7.9
DO (mg/l)	6.8	6.9	6.7	6.9	7.1	7.1	6.5
BOD (mg/l)	7.0	7.0	7.0	7.5	6.0	9.0	8.0

Date	18.12.04	28.12.04	27.1.05	9.2.05	28.2.05	1.3.05
pH	7.7	7.7	7.7	7.8	7.5	7.5
DO (mg/l)	7.0	7.2	7.4	7.0	6.9	6.9
BOD (mg/l)	8.0	8.0	8.0	6.0	4.0	4.0

TABLE-4

Water Quality Report of Bhatsa River at Pise Dam



A) **Ulhas River:**

It originates from Sahyadri Hills near Khandala and passes through Karjat taluka of Raigad District and further flows through Badlapur, Ambarnath, Ulhasnagar and Kalyan areas and finally meets the Arabian Sea.

The main input to this river is tailrace water of Bhivpuri dam project hence, this river is Perennial River. This river is also main source of water supply to Ambarnath, Badlapur, Kalyan, Dombivali, Ulhasnagar and part of Thane. This river is classified as under:

From origin to Badlapur water works – A I , Badlapur Water Works to NRC Bund, Shahad – A II & Downstream of NRC Bund to meeting with sea – SW-I I

Badlapur, Chikroli-Morivali, Ambarnath and Additional Ambarnath industrial estates of MIDC are located in A II class of Ulhas river basin. Industries established in these estates have provided ETP and Badlapur, Ambarnath estate has commissioned their CETP for further treatment and the work of Chikroli-Morivali CETP is in progress

To maintain the water quality of Ulhas river as A II the MPC Board had given directions to the MIDC authority to provide collection and disposal arrangement of treated effluent generated from these industrial estates and to dispose into Waldhuni nala which meets to saline zone of Ulhas river.

Accordingly, the treated industrial effluent generated from MIDC area and nearby major industries is discharged into the Waldhuni nala. Hence, the water quality of A II Zone of Ulhas River is not affected.

Though the domestic waste from Badlapur city enters into the river, no water is abstracted for drinking purposes from this stretch upto Jambhul

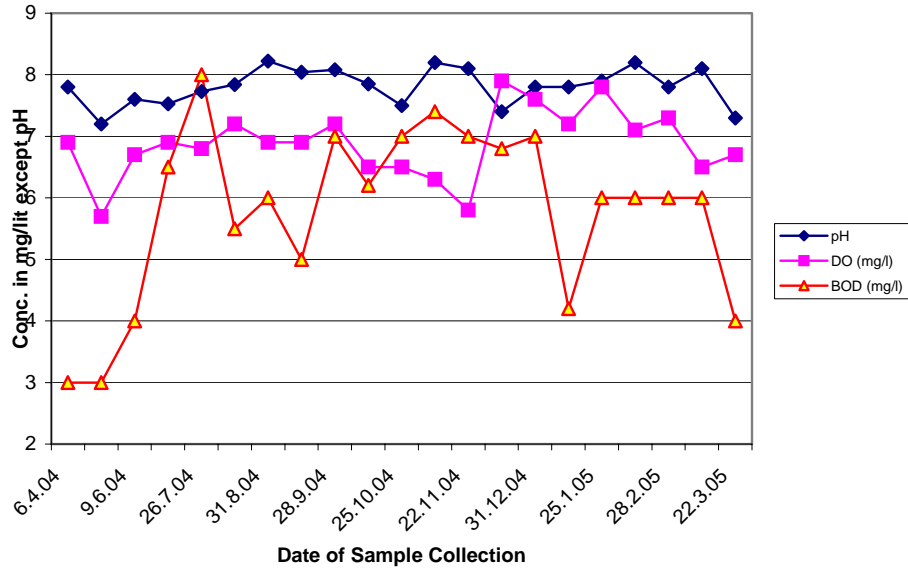
that is 6 to 7 km and the distance is enough for natural purification of this water till it is abstracted at Jabhul water works. Due to this and release of water from Bhivapuri power station the intensity of pollutants is not remarkable at this water supply station at jambhul. Fortunately huge quantity of domestic waste from Ulasnagar Municipal council and Ambarnath Munciple council is not entering in sweet water zome and it is discharged into saline zone through Waldhuni Nala. But very little quantity of domestic waste from UMC enters through Khemani Nala into sweet zone of Ulhas river at upstream of abstraction point. Board has already given directions in this regards to Ulhasnagar Municipal Corporation.UMC has prepared proposal to intersects Nalla and for the treatment and disposal of the effluent into saline zone by diverting the discharge into Waldhuni Nalla But no significant progress has been observed so far at the end of UMC. The water quality of Ulhas river is presented in table no.4,5 & 6 by graph.

Waldhuni Nalla environmental improvement programme is in hand and features of the same are given separately

Name of Sampling Station : Ulhas River At Badlapur water Works											
Date	6.4.04	6.5.04	9.6.04	6.7.04	26.7.04	9.8.04	31.8.04	9.9.04	28.9.04	5.10.04	25.10.04
pH	7.8	7.2	7.6	7.53	7.73	7.84	8.22	8.04	8.08	7.85	7.5
DO (mg/l)	6.9	5.7	6.7	6.9	6.8	7.2	6.9	6.9	7.2	6.5	6.5
BOD (mg/l)	3.0	3.0	4.0	6.5	8.0	5.5	6.0	5.0	7.0	6.2	7.0
Date	8.11.04	22.11.04	9.12.04	31.12.04	6.1.05	25.1.05	9.2.05	28.2.05	9.3.05	22.3.05	
pH	8.2	8.1	7.4	7.8	7.8	7.9	8.2	7.8	8.1	7.3	
DO (mg/l)	6.3	5.8	7.9	7.6	7.2	7.8	7.1	7.3	6.5	6.7	
BOD (mg/l)	7.4	7.0	6.8	7.0	4.2	6.0	6.0	6.0	6.0	4.0	

TABLE-5

**Water Quality Report of Ulhas River at Badlapur
Water Works**



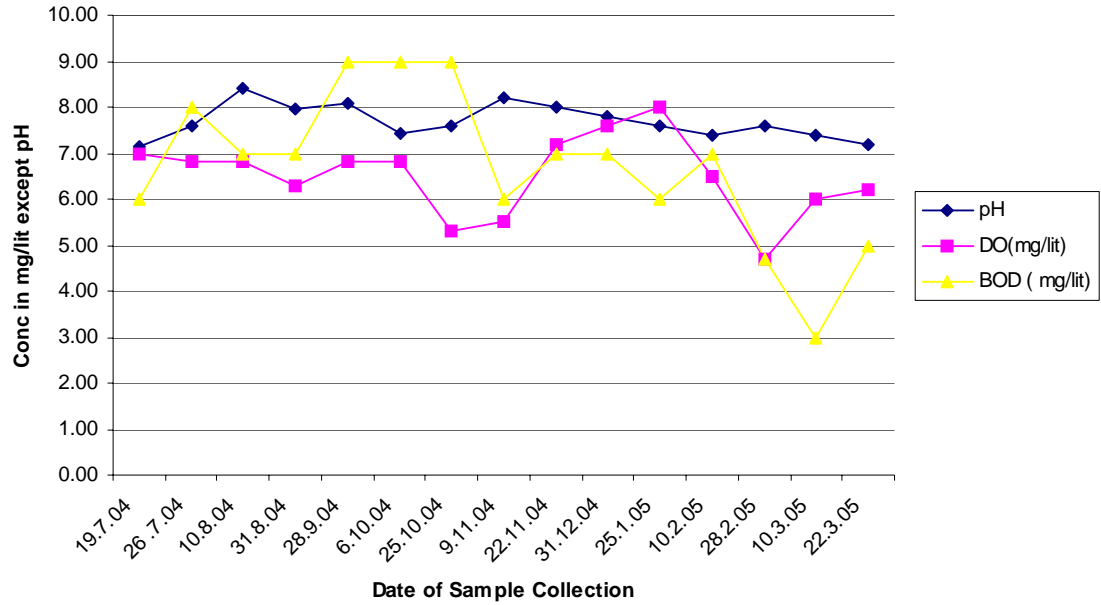
Name of Sampling Station : Ulhas River at Jambul Water Works .

Date	19.7.04	26.7.04	10.8.04	31.8.04	28.9.04	6.10.04	25.10.04	9.11.04	22.11.04
pH	7.14	7.58	8.40	7.96	8.10	7.42	7.60	8.20	8.00
DO(mg/lit)	7.00	6.80	6.80	6.30	6.80	6.80	5.30	5.50	7.20
BOD (mg/lit)	6.00	8.00	7.00	7.00	9.00	9.00	9.00	6.00	7.00

Date	31.12.04	25.1.05	10.2.05	28.2.05	10.3.05	22.3.05
pH	7.80	7.60	7.40	7.60	7.40	7.20
DO(mg/lit)	7.60	8.00	6.50	4.70	6.00	6.20
BOD (mg/lit)	7.00	6.00	7.00	4.70	3.00	5.00

TABLE-6

Water Quality Report of Ulhas River at Jambhul Water Works



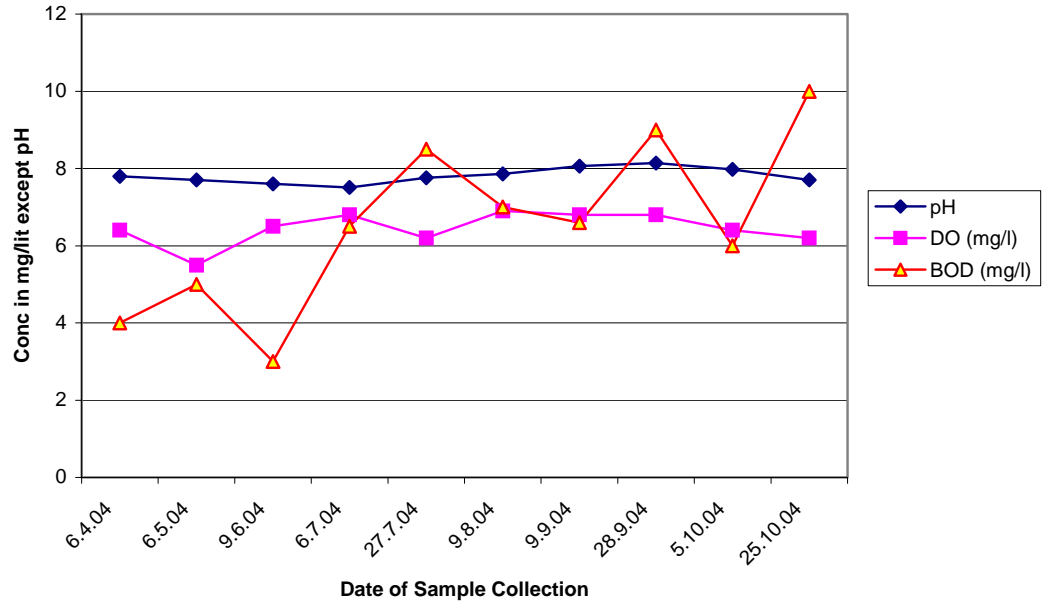
Name of The Location : Ulhas River at NRC Bund

Date	6.4.04	6.5.04	9.6.04	6.7.04	27.7.04	9.8.04	9.9.04	28.9.04	5.10.04	25.10.04
pH	7.8	7.7	7.6	7.51	7.76	7.86	8.06	8.14	7.98	7.7
DO (mg/l)	6.4	5.5	6.5	6.8	6.2	6.9	6.8	6.8	6.4	6.2
BOD (mg/l)	4.0	5.0	3.0	6.5	8.5	7.0	6.6	9.0	6.0	10.0

Date	8.11.04	22.11.04	9.12.04	31.12.04	6.1.05	25.1.05	9.2.05	28.2.05	9.3.05	22.3.04
pH	8.1	8.2	7.5	7.6	7.4	7.9	8.2	7.9	7.5	7.7
DO (mg/l)	6.4	7.3	7.2	7.8	6.4	7.8	8.2	6.4	6.5	6
BOD (mg/l)	7.0	7.0	7.0	6.0	4.8	5.0	5.4	7.0	5.6	6.0

TABLE-7

Water Quality of Ulhas River at NRC Bund



C) Tanasa and Vaitarna Rivers:

Tansa River:

This river originates from hills at Igatpuri and Tansa Dam is constructed in Shahapur Tahsil and flows through part of Shahapur and Wada Taluka. The Tansa River water is classified A-I Class of water from origin to Tansa Dam and A-II Class of water from Tansa Dam to Saline Zone. There is no much flow of water after monsoon in the river in A-II Class. There is no industry established in the catchment area of Tansa Dam and no water polluting industry is located on the bank of the Tansa River except M/s. Hindustan Coca-cola Ltd., who have provided full fledged ETP and part of the treated is recycled and remaining is used for gardening purpose only & downstream of Tansa Dam. Tansa Dam water is one of the source for drinking water to Mumbai Municipal Corporation and water is being taken by gravity from Dam to Water Treatment Plant at Bhandup .

Vaitarna River:

This river originates from hills at Igatpuri and upper Vaitarna & lower Vaitarna Dams are constructed on this river. Then it flows through Wada Tahsil. The Vaitarna River water is classified A-I Class from origin to Vaitarna Dam and A-II Class of water from Lower Vaitarna Dam upto confluence with sea. There is no much flow of water after monsoon in the river in A-II Class. There is no industry established in the catchment area of Upper and Lower Vaitarna Dam and no water polluting industry is located on the bank of the Vaitarna river and vicinity except M/s. Bharat Fertilizer Ltd., Kharivali, which is also closed since last 2 years. Vaitarna Dam water is one of the drinking water sources to Mumbai Municipal Corporation and water is being taken by gravity from Dam to Water Treatment Plant in Mumbai at Bhandup.

D) Coastal Water

This region is covered by saline water zone namely, Ulhas creek and Kamavari creek. The domestic effluent generated from Ambarnath, Ulhasnagar, Kalyan and Dombivli are finally disposed in Ulhas creek. Also the discharge of treated industrial effluent generated from MIDC area (Badlapur, Ambarnath, Dombivli and Saravali) as well as scattered industries meets the Ulhas creek. The municipal solid waste generated in cities is also disposed unscientifically along the creek and in the vicinity resulted in addition of leachates/runoffs. Therefore there can be adverse effect on aquatic life in this area. The MPC Board regularly monitoring the quality of Ulhas creek at Retibundar, Kalyan. The water quality of Ulhas creek is presented in table no.7

Domestic effluent from BNMC as well as treated industrial effluent from textile processing 45 Nos. of industries and 35 Nos. yarn dyeing units are finally discharged into Kamavari creek, Bhiwandi. There are repeated complaints from nearby villagers regarding discharge of effluent into the creek. Though, the industries have provided physico chemical treatment followed by carbon/sand filter to treat the effluent, the operation and maintenance of ETP is needs improvement. This office carried out constant

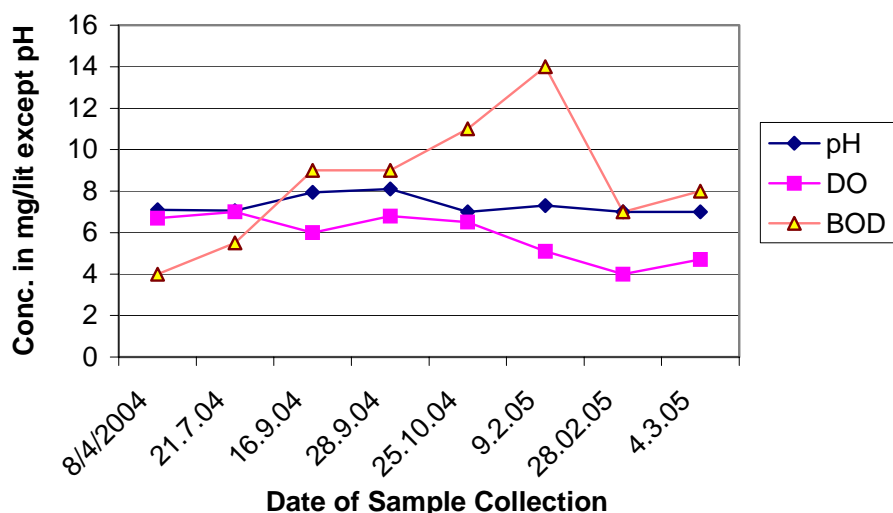
vigil on the industries to check the operation & maintenance of pollution control devices. Action under the Water (P & CP) Act, 1974 & Air (P & CP) Act, 1981 have been taken against 49 no. of industries during April 2004 to March 2005. Hence due to constant vigil and action, there is lot of improvement in operation & maintenance of ETP provided by the industries.

Name of Sampling Station: Reti Bunder at Kalyan-Bhiwandi bridge.

Date	8/4/2004	21.7.04	16.9.04	28.9.04	25.10.04	9.2.05	28.02.05	4.3.05
pH	7.1	7.06	7.94	8.10	7.00	7.3	7.0	7.0
DO	6.7	7.0	6.0	6.8	6.5	5.1	4.0	4.7
BOD	4.0	5.5	9.0	9.0	11.0	14.0	7.0	8.0

TABLE-8

Water Quality of Ulhas Creek at Retibunber Kalyan-Bhiwandi Bridge



E) MONITORING PROGRAMME UNDER GEMS and MINARS

There are 2 sampling stations in Ulhas River namely, Badlapur Water Works and NRC Bund. MPC Board collects the samples under GEMS (Global Environmental Monitoring Scheme). There are 2 sampling stations one on Kalu River at Atali village and another on Bhatsa River at Pise dam.

MPC Board collects the sample under MINARS (Monitoring of Indian National Aquatic Resources).

The water quality of important places is being monitored before and after Ganesh Idols immersion. The water quality is presented in **annexure -I** attached.

M/s. Danube Fashion Ltd., Murbad
Zero discharge facility Reverse Osmosis Plant.





M/s. Danube Fashion Ltd., Murbad
Zero discharge Multiple Evaporator system.

6. AIR QUALITY STATUS

In the Kalyan Region, there are 4 major industrial estates where generally chemical and textile industries are in operation. Industries have provided air pollution control equipment like scrubber/ dust collection system, This office carries out the monitoring of process stack of major industries as well as boiler stack.

MPC Board carries out ambient air quality monitoring at different locations. The Board operates ambient air quality monitoring stations under NAMP (National Air Monitoring Programme) at MIDC Dombivli and Ambarnath city. The air quality monitoring data is presented in table no.8,9 & 10. The ambient air quality is generally within the standards. Due to cost factor most of the industries have changed their fuel from LDO / Furnace Oil to Coal, resulting in black emission from chimney. This office had pursued the matter with the industrial association and issued notices to defaulters. Hence the industries have installed dust collectors and scrubbers. Some of the industries have installed controlled coal charge system as well as fluidized beds to avoid dust emission . The problem of air pollution is because of heavy traffic density and non-availability of buffer zone between residential and industrial areas still much is to be done in this area.

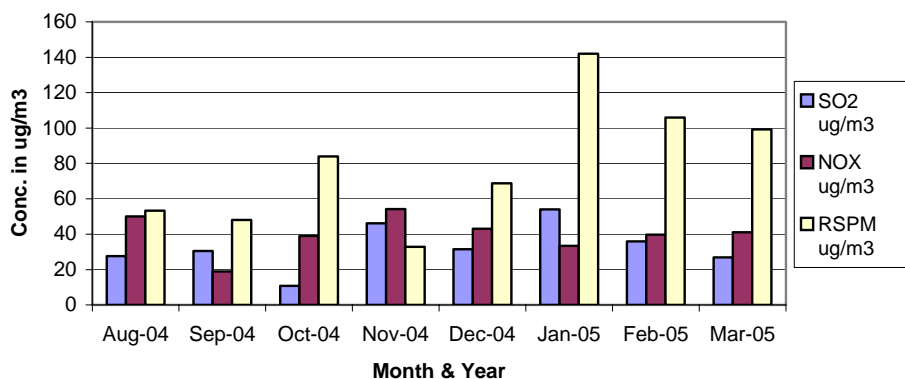
Ambient Air Quality Monitoring at Ambarnath City under National Air Monitoring Program(NAMP)

Sampling Station:- Terrace of Ambarnath Municipal Council Office

Sr.No	Month & Year	SO2 ug/m ³	NOX ug/m ³	RSPM ug/m ³
1	August-04	27.61	50.00	53.36
2	September-04	30.52	18.90	48.00
3	October-04	10.71	39.04	84.00
4	November-04	46.09	54.07	32.90
5	December-04	31.47	43.14	68.81
6	January-05	54.03	33.37	142.03
7	February-05	36.00	39.60	105.87
8	March-05	26.96	41.07	99.29

TABLE-9

**Ambient Air Quality Monitoring Report of
Ambernath town under NAMP**



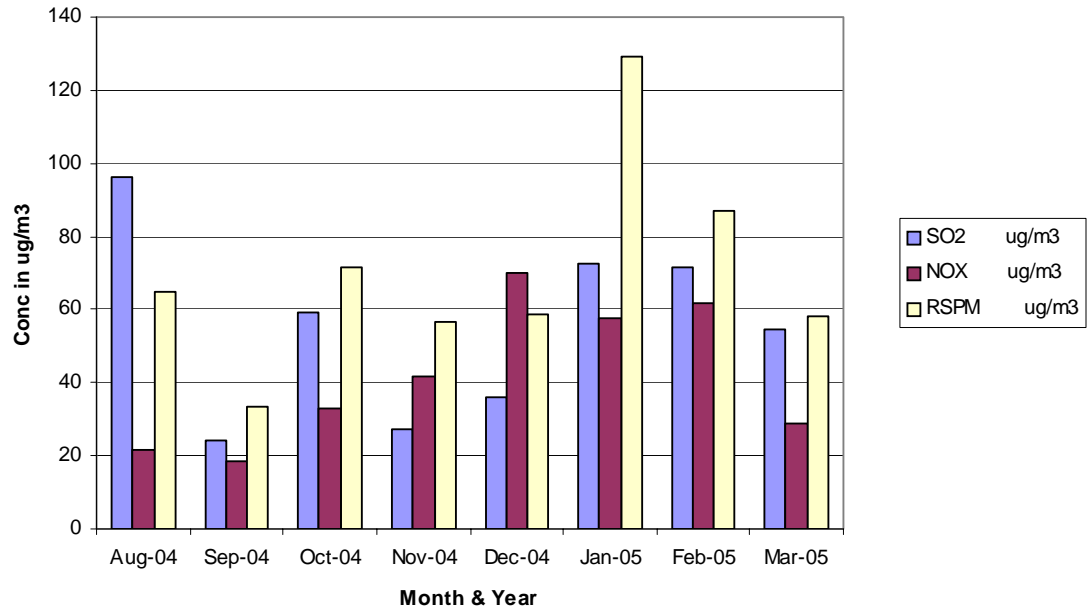
**Ambient Air Quality Monitoring at Dombivli MIDC under National Air Monitoring
Program(NAMP)**

Sampling Station:- MIDC Dombivli Area

Sr.No	Month & Year	SO2 ug/m ³	NOX ug/m ³	RSPM ug/m ³
1	August-04	96.44	21.62	65.00
2	September-04	24.32	18.36	33.30
3	October-04	59.00	33.00	71.33
4	November-04	27.16	41.55	56.50
5	December-04	36.23	69.91	58.60
6	January-05	72.64	57.87	128.95
7	February-05	71.54	61.64	86.82
8	March-05	54.56	28.75	58.12

TABLE-10

Ambient Air Quality Monitoring Report of MIDC Dombivli under NAMP

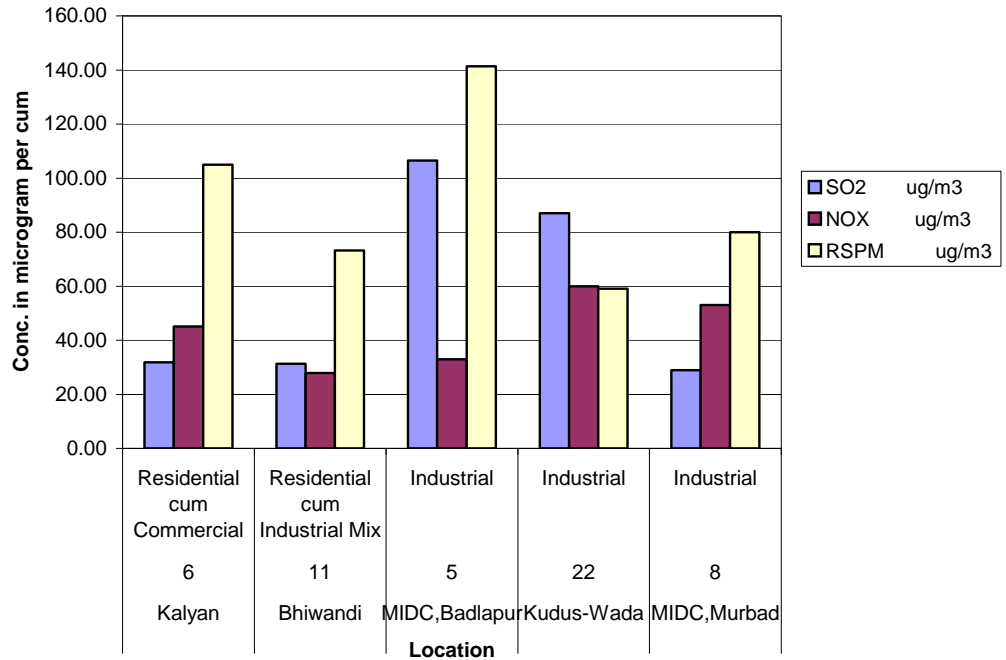


Ambient Air Quality Report of Kalyan Region (2004-2005)

Sr.No	Name of Sampling Station	No. of Sample Analysis	Class of Area	SO2 ug/m ³	NOX ug/m ³	RSPM ug/m ³
1	Kalyan	6	Residential cum Commercial	31.85	45.18	105.00
2	Bhiwandi	11	Residential cum Industrial Mix	31.30	27.80	73.16
3	MIDC,Badlapur	5	Industrial	106.50	33.00	141.40
4	Kudus-Wada	22	Industrial	87.00	60.00	59.00
5	MIDC,Murbad	8	Industrial	29.00	53.00	80.00

TABLE-11

Ambient Air Quality Monitoring Report of Kalyan Region



This office has monitored the noise level during Deepavali festival at different locations, which are presented in [Annexure –II attached.](#)

M/s. Alok Ingots (Mumbai) Pvt. Ltd. Wada

Air Pollution Control System provided by Bilets Manufacturing Industry.





7. HAZARDOUS WASTE MANAGEMENT

A) Treatment And Disposal of Hazardous Waste

There are **802** no. of hazardous waste generating industries as per the Hazardous Waste (M&H) Rule, amendment 2003 out of which near about **199** industries observed closed and **586** industries have become a member of Common Hazardous Waste Treatment and Disposal Facility. The closure notice under Hazardous Waste (M&H) Rule, amendment 2003 has been issued to non complied industries and accordingly they are not in operation. The status of hazardous waste generating industries of Kalyan region and the details of member of CHWTSDF and quantity of hazardous waste sent to CHWTSDF is presented in **table no.12**

Sr. No.	Total No. of HW generating industries	Total no. of industries found closed	No.of Industries become member of CHWTSDF	No.of industries sending HW to CHWTSDF regularly.	Total quantity of HW sent to CHWTSDF
1.	802	199	586	259	9537 MT

Table No. 12.

A) **Illegal dumping of hazardous waste:**

As there was no Common Hazardous Waste Treatment and Disposal Facility in the state previously, the hazardous waste were dumped illegally by the industries in MIDC areas which was identified and as per the directives of Supreme Court 1454 MT hazardous waste has been lifted from Dombivli, Ambarnath, Badlapur industrial estates by MIDC and sent to CHWTSDF

8. BIO-MEDICAL WASTE MANAGEMENT

In this region, as per the available office record there are **723** health care units with **5550** beds and generating about **925** Kg of bio-medical waste per day. The details of bio-medical generation in this region is as per **table no.13**

Bio-Medical Waste generation in Kalyan Region.

Sr. No.	Hospital and Nursing homes with bed capacity	Number of Hospitals	Total No. of Beds	BMW generation Kg/Month.
1	500 beds and above	Nil	Nil	Nil
2	200 to 500 beds	1	202	1515
3	50 to 200 beds	10	905	6788
4	Less than 50 beds	410	4443	23789
	Total	421	5550	32101
	Expected BMW generation with 80% occupancy.			@ 25680 Kg/Month

TABLE-13

There is one common bio-medical waste treatment and disposal facility namely, M/s. PRS Enterprises developed by KDMC on the BOOT basis. This facility is having the capacity of incinerating **90 Kg/hour** BMW and autoclave and shredding. Initially, this facility was started for collecting bio-medical waste generated from Kalyan Dombivli Municipal Corporation area and about 300-400 Kg/Day bio-medical wastes were received at site last year.

This office has constantly persuaded with medical association and issued notices to defaulters, which were not sending BMW to facility. Then, nearby health care units located at Ulhasnagar, Bhiwandi, Ambarnath and Badlapur have joined that facility to treat and dispose BMW. As a result of exemplary action by this office the quantity of BMW is increased to maximum 1000 Kg/day from 300 Kg/day. The performance of Common Bio-Medical Waste Treatment Facility of Kalyan region is presented in **table no.14**

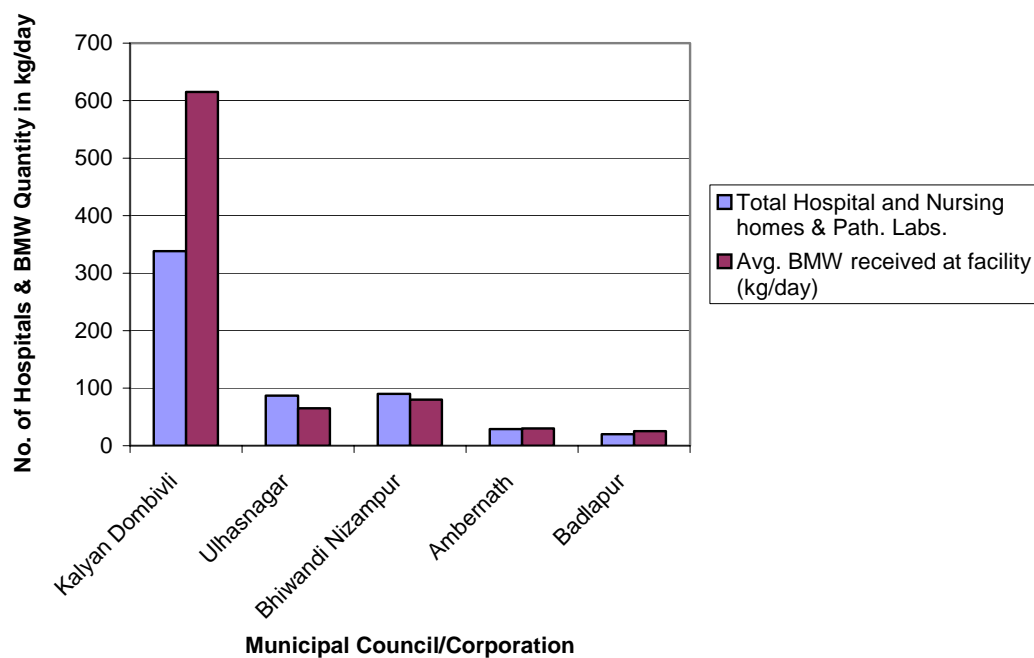
**Performance of Common Bio-Medical Waste Treatment & Disposal Facility
in Kalyan Region.**

M/s. PRS Enterprises, Umbarde, Kalyan.

Sr. No.	Name of Municipal Council/Corporation	Total Hospital and Nursing homes & Path. Labs.	Avg. BMW received at facility (kg/day)
1	Kalyan Dombivli	338	615
2	Ulhasnagar	87	65
3	Bhiwandi Nizampur	90	80
4	Ambarnath	29	30
5	Badlapur	20	25
	Total	564	815

TABLE-14

Bio-Medical Waste Generation ,Treatment & Disposal .



The Government hospitals located at Shahapur, Wada & Murbad have provided their own deep burial facilities to treat and dispose Bio-Medical wastes.

9. STATUS OF LOCAL BODIES.

A) MUNICIPAL SOLID WASTE MANAGEMENT

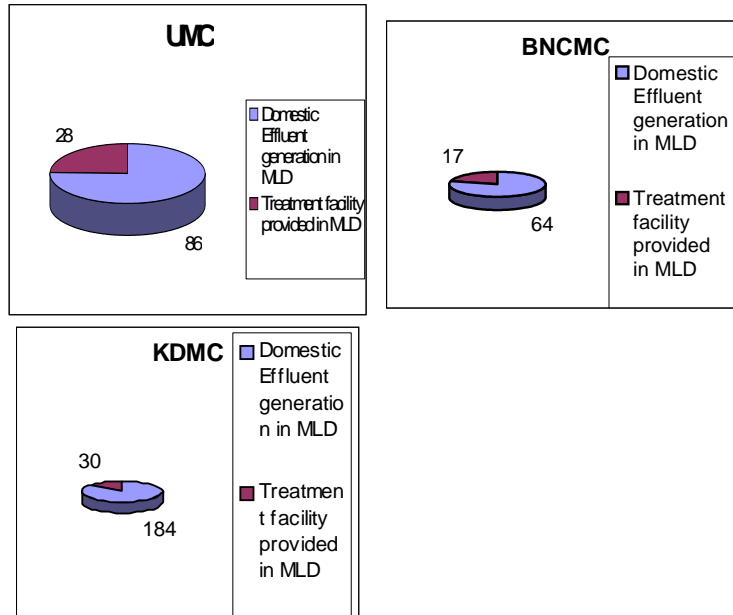
There are 3 Municipal Corporations (KDMC, BNMC & Ulhasnagar), 2 Municipal Councils (Ambarnath and Badlapur). The Ambarnath Municipal Council has started the Vermin-composting Project of 25 MT/day capacity out of 75 MT municipal solid wastes generated.

Kalyan Dombivli Municipal Corporation has proposal to install “Waste to Energy” project on bio-machination technology. The project report is prepared by M/s. Sound Craft Consultant. Power Purchase Agreement has been completed and Municipal Corporation is going to make agreement with M/s. Sound Craft Consultant.

Presently, the urban bodies are dumping solid waste in existing dumping ground. However, most of the corporations have taken steps to avoid the smell nuisance problem by spraying chemicals. The status of MSW Management is presented in Annexure – III attached.

B) STATUS OF STP

The status of sewage treatment management of Municipal Corporations and Councils is presented in **Annexure IV attached.**



10. ENVIRONMENTAL IMPROVEMENT PROGRAMME

A) **Mission Waldhuni :**

The Waldhuni river originates in the hills near Ambarnath. This river receives domestic wastewater from Ambarnath, Ulhasnagar, Vithalwadi and Shahad area. The treated industrial effluent generated from industries located at Badlapur, Ambarnath and Chikhli-Morivali MIDC area and large and medium scale scattered industries located on the bank of the river also meet this river. There is no fresh water in this river after monsoon. Therefore, the river turns into nala (waste water drainage). This nala meets Ulhas creek downstream of NRC bund in saline zone. Though, this does not affect the drinking water source, pollutes the Ulhas creek and adversely affect the marine eco system and hence to sort out the pollution problem of Waldhuni nala, MPC Board has taken initiative to implement the project of purification of said nala. MPC Board has co-ordinated with Municipal Corporation, Council and large-scale industries to contribute for capital investment of said project. The said project is based on low cost treatment technology i.e. Green Bridge and Green Lake. The total cost of the project is about 50lakhs including maintenance and operation for one year. Ulhasnager Municipal Corporation is working as nodal agency. The most of the

pollution problem of this saline zone will be solved after commissioning of the above project.

Name of Spot : Water Quality Report of Waldhuni Nalla

Date	30.4.04	31.7.04	14.9.04	5.10.04	3.11.04	14.01.05	22.3.05
pH	6.60	7.36	7.48	7.66	6.60	6.70	5.90
BOD 3 days 27 ⁰ C (mg/l)	115.0	19.0	110.0	145.0	270.0	140.0	200.0
COD(mg/l)	320.0	76.6	432.0	264.0	496.0	464.0	784.0
SS(mg/l)	121.0	21.0	230.0	72.0	128.0	86.0	318.0
DO (mg/l)	Nil	3.80	Nil	Nil	BDL	BDL	Nil

Water Quality Report of Waldhuni Nalla

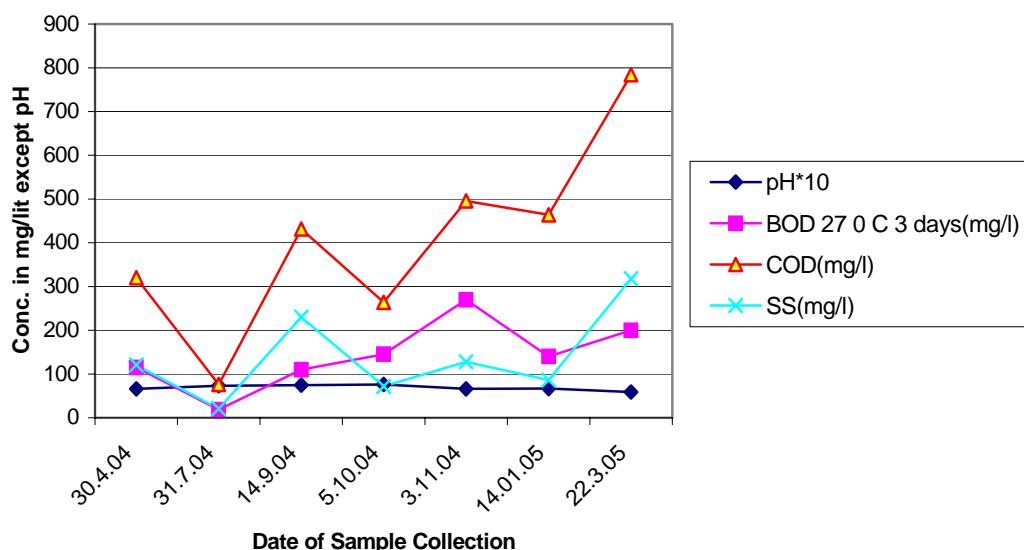


TABLE-15

B) Strengthening of CETP MIDC Dombivali.

Dombivali MIDC is one of the major industrial estate and mainly chemical and textile industries are established in this area. There are 2 CETPs, one is chemical and the other is textile-having capacity of 1.5 MLD and 14 MLD respectively. The CETP chemical was commissioned in 1999 and CETP textile was commissioned in October 2003. The treated effluent of CETP textile was not meeting the standards and sub-standard effluent was being discharge into the environment therefore MPC Board had issued directions

under Section 33A of Water (P&CP) Act, 1974 to 287 concerned industries to stop the manufacturing activity for 48 hours in the month of December, 2004 and directions were given to CETP textile to upgrade existing facility and enhance the capacity to take entire effluent load of MIDC Dombivli. The Bank Guarantee of Rs.25 Lacs has been obtained from both CETPs. Accordingly, the CETP textile has upgraded their existing facility by replacing submerged aerators with surface aerators. The work of enhancement of CETP capacity having approximate cost of Rs.2.25 crores is in progress. Presently the effluent from CETP outlet is discharge into creek through local Nala however the said disposal method is not suitable for proper dispersion of these effluents into water body therefore there can be adverse effect on aquatic life in this area. Therefore it is essential to dispose the effluent by close pipeline into creek at suitable place. The MPCB has already given directions in these regards to MIDC. They have started the work of land acquisition for laying close pipeline.

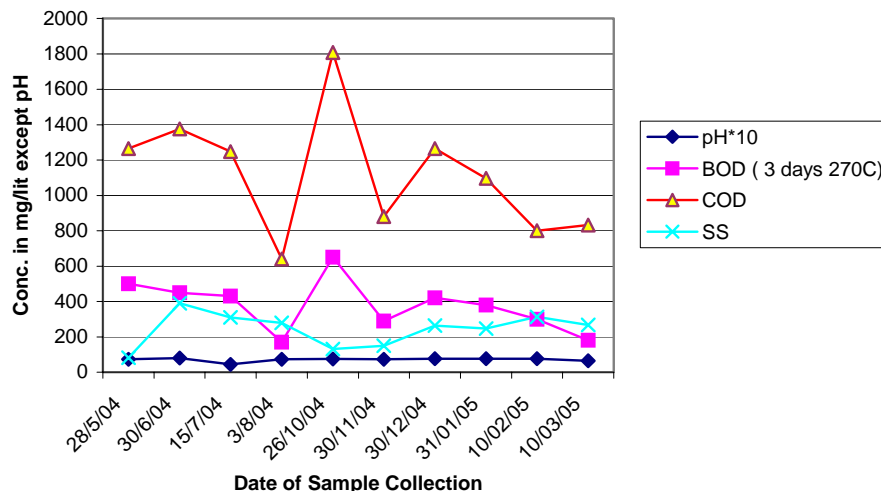
**Analysis Report of CETP Outlet of M/s DBESA ,CETP (Textile)
MIDC, Phase-I,Dombivli**

Date	28/5/04	30/6/04	15/7/04	3/8/04	26/10/04	30/11/04
pH	7.3	8	4.44	7.39	7.5	7.4
BOD (3 days 27°C)	500	450	430	170	650	290
COD	1264	1376	1248	640	1808	880
SS	82	390	310	280	131	150

Date	30/12/04	31/01/05	10/02/05	10/03/05
pH	7.7	7.6	7.6	6.4
BOD (3 days 27°C)	420	380	300	180
COD	1264	1096	800	832
SS	264	246	314	268

TABLE-16

Analysis Report of CETP (Textile) Outlet



C) Improvement in respect of Air pollution control system

i) Air pollution control in Coal fired boiler industries in MIDC Dombivali area

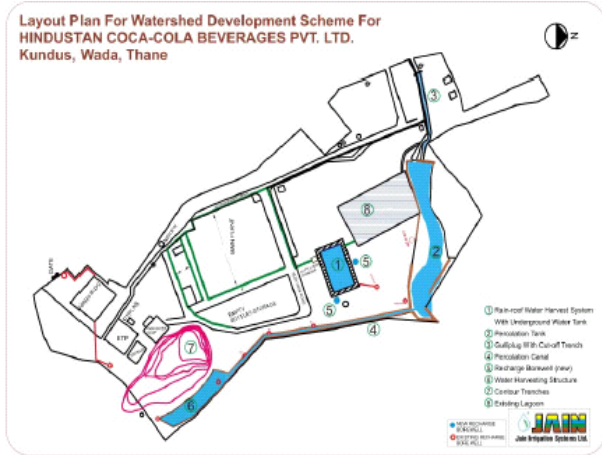
Previously industries were using furnace oil or LSHS or LDO as fuel for their boiler but due to cost factor most of the industries have changed the fuel from oil to coal. The Indian coal having near about 28 to 30% ash contents and creating dust emission from the chimney. All the industries have provided dust collection system but some of them are inadequate as it is not scientifically designed and hence the air pollution problem like black particulate matter emissions appears in the area. Considering the location of MIDC is adjacent to residential area. This office has taken in hand the programme for up gradation of air pollution control system by compelling the industries. Hence this office has started initiating stringent action against the defaulters. Thus we hope that air pollution problem due to coal fired boiler industries will be in control.

ii) M.S. Scrap melting industries

In Wada Taluka of this region there are 15 ingots/ Billets manufacturing industry are in operation which are using M.S. scrap as raw material. All of the industries are having induction furnace. During melting process pollutants are emitted. Almost all the industries have provided swinging hood, with blower, dust collector and chimney to control the emission. However during vigilance it was observed that present system provided by the industries are inadequate. Hence

this office has initiated action against the industries by issuing proposed directions and directed to upgrade the air pollution control system in time bound manner, which will help to sort out the air pollution problem of M.S. Scrap melting industries in Wada Taluka.

11. RAIN WATER HARVESTING PROJECT AT HCCBPL WADA



Plant site

Rain water harvesting pond

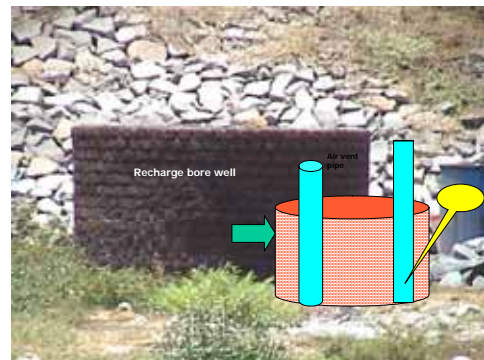
HCCBPL Wada has successfully completed a 'rain water harvesting' project at their plant site. This project has been technically supported by M/S Jain Irrigation, who are pioneers in this field.

There are two types of harvesting that has been completed viz. The 'rooftop rain water harvesting' and the 'surface run-off rain water harvesting' projects.

The unit has been able to harvest through both projects close to 229 million lts of water into the aquifer during the last monsoons.

Back side canal

Recharge Bore wells



The results of the project have yielded significant improvements in the ground water levels this year, in near by village surveys too.

12. Tree plantation

This office appeals the industries for mass tree plantation in and around their premises during every monsoon seasons. In response to appeal major industries like NRC, Century and other industries conducting mass tree plantation campaign every year. The information of major tree plantation done by industries is tabulated in under.

Sr. No	Name of industries	Open space available in acres	No of trees planted
1.	M/s. N.R.C. Ltd , Vill : Mohane , Tal : Kalyan	26.0	240250
2.	M/s. Century Rayon , Vill : Shahad , Tal : Kalyan .	30.0	23500
3.	M/s. Gharda Chemicals B- 29 Ph-I , MIDC Dombivali	5.0	5305
4.	M/s. Liberty Oil Mill Vill : Bamne , Tal :Shahapur	24.0	27213
5.	M/s. Jindal Iron & Steel Ltd Vill :Vasind, Tal :Shahapur	8.0	6150
6.	M/s. Global Wood & alliance Vill : Kalamgaon ,Tal: Shahapur	7.0	5000
7.	M/s. Hindustan Coca –cola Vill : Kudus ,Tal : Wada	35.0	16835
8.	M/s. Laxmi paper & Board Mill MIDC Saravali .	5.0	2000
9.	M/s. Bharat Fertilizer Ltd Vill : Kharavali . Tal : Wada	108.0	7379

Tree Plantation by M/s. Gharda Chemicals, Dombivali.



13. LEGAL ACTIONS:

a) Legal action against Industries :-

This office has issued closure directions to 356 industries and proposed directions to 110 industries. Show cause notices were issued to 111 industries who are not achieving the standards. This office has obtained Rs. 49.90 lacs bank guarantee from 99-industries/municipal council/CETP and Rs. 3.25 lacs bank guarantee encashed from 12 industries. As a result of above action by this office now the pH observed to inlet of CETP is within limit generally. Dombivli CETP has started the up gradation of CETP and Chichloli Morivali CETP has started their work & it is at completion stage. Also three medium type of industries have upgraded their ETP.

b) Legal action against local body:-

Board has issued direction under Section 5 to KDMC to stop the burning and unscientific disposal of municipal solid waste as a result KDMC has stopped the burning of garbage & complainants' have appreciated the Board's work.

Notice was also issued to Ambernath Municipal Council and 3 lacs bank guarantee is taken from municipal council to operate the STP.

c) Legal action against Health care facilities:-

This office has issued notices to 150 Health care facilities to obtain Authorisation / Membership CBMWTDF.

d) Legal action against Brick klin :-

This office has issued closure directions to 600 brick klin manufacturing units for non utilization of fly ash in bricks manufacturing.

14. ACHIEVEMENTS OF THIS REGION

a. Consent Management:

This office has processed and submitted 453 no. of applications to Head Office and granted industries 266 consent in Green & Orange category.

b. Biomedical waste:

This office has granted 310 (including renewal & first time) authorizations to HCF's and 327 HCF's obtained membership of CBMWTDF. Show cause notices were issued to Health Care Units therefore the BMW quantity increased from 300 Kg/day to 1000 Kg/day.

c. Hazardous Waste:

Closure /Propose directions issued to 53 industries to obtain Authorisation / to comply with the conditions of authorizations.

Notices were issued to most of the industries for sendingHW to CHWTSDF.. Due to this action substantial Quantity of hazardous waste is sent to CHWTSDF in this year compare to last year.

All illegal dumped HW sites at Badlapur ,Ambarnath & dombivli MIDC area have been cleared .& about 1500 MT Tons of HW is sent to Talaja CHWTSDF.

Show cause notice was issued to M/s Gharada chemicals under Rule 16 (3) of H W (M &H) 1989 as Amendmed 2003 for levy of a fine of Rs .73.86 lacs. After personal hearing & assurance given by the industry to upgrade their existing ETP, the show cause notice was withdrawn by the MPC Board subject to vital condition to contribute & amount of Rs. 25,00,000/- to upgrade CETP & to submit the Bank Guarantee of Rs. 2 Lakhs. Accordingly M/s. Gharda Chemicals has paid Rs. 25 Lakhs for upgradation of CETP & also submitted Rs. 2 Lakhs Bank Guarantee to this office & started the upgradation work. Augmentation of one bioreactor is completed, another is in progress.

d. CETP

- b) Badlapur CETP has completed the secondary and tertiary treatment arrangement and commissioned the plant.
- c) Chikhololi Morivali CETP has started the work of construction and erection of CETP and it will be completed by May 2005.
- d) Upgradation of Dombivli CETP is in progress and will be completed by June, 2005 to comply with effluent standards.

The improvement in environment is a continuing topic and Kalyan region has taken sincere efforts to upgrade the environment of the region, still there is lot of scope further and administration of this region is committed for the same under the guidance of the Member Secretary of M.P.C. Board, **Dr. D. B. Boralkar**.

ANNEXURE-I

YSIS RESULTS OF WATER SAMPLES OF PRE & POST GANESH FESTIVAL:

Sampling Point	Kamavari River at Bhiwandi		Varhala devi Talao (Lake) at Bhiwandi		Reti Bandar (creek) at Kalyan-Bhiwandi Rd. Bridge Kalyan,		Kala Talao (Lake) near. Telephone Exchange, Kalyan		Tisgaon Talao, (Lake) Tisgaon Rd.Kalyan		Mothagaon,Retibunder, (creek) At Dombivali		Ganesh Ghat at Sanewadi Badlapur (River)		Lake Water at Vadavli vill.	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Date	16/9/04.	28/9/04	16/9/04	28/9/04	16/9/04	28/9/04	17/9/04	28/9/04	17/9/04	28/9/04	17/9/04	28/9/04	17/9/04	28/9/04	17/9/04	28/9/04
pH	8.41	7.75	8.22	7.74	7.94	6.98	8.18	7.65	7.98	7.72	7.76	7.46	8.19	7.97	7.84	7.08
Turbidity NTU	12.5	0.84	2.3	1.3	1	0.42	1.2	1.87	0.31	0.68	0.81	2.85	0.52	0.54	0.3	0.8
Conductivity	588	313	320	303	222	522	471	498	152	618	254	297	183.0	233.0	157.0	217.0
DO	6.8	5.8	6.2	5.2	6	5.2	3.4	3.2	6.7	5.2	5.2	5.3	7.0	7.0	6.6	5.8
BOD	7	8	8	9	9	9	14	16	7	10	9	8	7.0	7.0	7.0	9.0
COD	36	24	40	28	80	40	52	56	28	32	36	28	32.0	24.0	28.0	28.0
SS	28	20	28	21	21	18	38	32	22	18	26	23	16.0	19.0	22.0	20.0
FDS	242	205	234	217	124	322	292	320	102	415	142	165	100.0	141.0	84.0	148.0
TDS	286	242	278	256	192	396	374	382	134	500	168	199	142.0	166.0	116.0	175.0
%Free Ammonia	0.011	0.005	0.018	0.007	0.005	0.017	0.016	0.008	0.002	0.03	0.002	0.002	0.017	0.020	0.002	0.001
TAN	0.0735	0.294	0.352	0.441	0.102	3.07	0.94	0.455	0.124	1.74	0.132	0.132	0.33	0.374	0.117	0.338
Nitrite Nitrogen	0.066	0.044	0.06	0.039	0.074	0.146	0.056	0.094	0.066	0.11	0.044	0.07	0.066	0.049	0.06	0.033
Nitrate Nitrogen	0.842	0.428	0.76	0.514	0.924	3.49	0.742	1.18	0.842	1.8	0.624	0.784	0.624	0.510	0.714	0.392
TKN	0.56	1.68	2.24	1.68	1.12	6.72	3.36	2.22	1.68	5.8	2.24	2.24	2.8	2.24	1.12	1.68
Chlorides	27.5	30	35	40	32.5	85	50	59.5	17.5	50	40	47.5	19.5	27.5	17.5	25.0
Ca Hardness	70	74	60	66	50	64	108	110	32	192	42	40	44.0	52.0	46	64.0
Mg Hardness	68	54	52	42	28	50	54	85	48	56	38	32	32.0	36.0	20.0	24.0
Total Hardness	138	128	112	108	78	114	162	168	80	248	80	72	76.0	88.0	66.0	88.0
Total Alkalinity	134	116	92	86	84	56	180	160	58	142	74	78	86.0	88.0	66.0	88.0
Boron	2.97	1.81	2.44	2.82	3.49	1.99	3.07	2.07	3.19	2.07	1.12	2.21	0.57	2.30	1.4	2.24
Sulphate	9.15	15.57	17.37	26.67	14.73	67.47	30.76	23.32	12.5	116.2	16.78	15.69	7.29	7.29	6.36	15.69
Phosphate	0.05	0.335	0.034	0.184	0.36	0.905	0.3	0.905	0.05	0.704	0.075	0.335	0.059	0.126	0.084	0.134
Sodium	8	7.5	14	13.5	16	52.5	29	26	3.5	21	23	22.5	7.0	6.5	4.50	4.5

ANNEXURE-II

NOISE LEVELS OF VARIOUS LOCATIONS BEFORE DIWALI & DURING DIWALI

Sr. No.	Place	Date	Time (Hours)	Before Diwali		Date	Time (Hours)	During Diwali	
				Minimum (dB)	Maximum (dB)			Minimum (dB)	Maximum (dB)
1.	Valipeer Naka, Near High School , Bail Bazar, Kalyan (w)	21.10.2003	6.00 AM	52.0	56.0	24.10.2003	6.05 AM	68.0	85.0
	--do--	-- --	11.30 AM	60.0	68.0	25.10.2003	7.10 PM	70.0	92.5
	---do---	-- --	8.30 PM	54.3	71.1	26.10.2003	9.40 PM	65.0	89.0
2.	Near RTO office Kalyan (w)	21.10.2003	6.15 AM	57.0	69.0	24.10.2003	6.15 AM	75.0	97.0
		-- --	10.30 AM	60.0	72.0	25.10.2003	7.20 PM	65.0	83.0
	---do---	-- --	8.45 PM	54.0	67.0	26.10.2003	9.05 PM	69.0	95.0
3.	Near Joshi High School Residential Area, Dombivli	21.10.2003	10.00 AM	52.0	65.0	24.10.2003	8.30 AM	73.5	88.4
		-- --	11.00 AM	45.0	62.0	25.10.2003	10.45 PM	75.0	97.5
	---do---	-- --	2.00 PM	47.0	57.0	26.10.2003	10. 25 PM	75.0	95.4
4.	Jai Hind Colony Residential Area, Dombivli, (E)	21.10.2003	9.00 PM	49.0	57.0	24.10.2003	10.00 PM	85.0	90.0
	---do---	-- --	2.00 PM	59.0	68.0	25.10.2003	10.30 PM	57.0	88.0

5.	Vishnu Nagar Near Police Station, Dombivli (E).	21.10.2003	2.15 PM	56.0	65.0	24.10.2003	10.15 PM	57.0	79.0
	---do---	-- --	2.10 PM	60.0	77.0	25.10.2003	9.30 PM	79.0	90.5
6.	Kalyan Naka; Bhiwandi	21.10.2003	3.20 PM	65.4	78.5	24.10.2003	8.00 PM	83.0	97.0
	---do---	-- --	3.30 PM	65.0	77.4	25.10.2003	8.15 PM	79.0	99.2
7.	In front of Police Station, Shanti Nagar, Ulhasnagar-3	21.10.2003	6.10 AM	58.00	69.00	24.10.2003	6.15 AM	78.00	92.00
	---do---	-- --	7.20 PM	62.00	75.00	25.10.2003	7.10 PM	72.00	96.00
	---do---	-- --	8.25 PM	61.00	72.00	26.10.2003	8.40 PM	79.00	82.00
8.	Near Khermani High School, Ulhasnagar-2	21.10.2003	6.00 AM	52.00	66.00	24.10.2003	6.10 PM	77.00	98.00
	---do---	-- --	7.15 PM	60.00	71.00	25.10.2003	7.05 PM	63.00	81.00
	---do---	-- --	8.30 PM	53.00	75.00	26.10.2003	8.50 PM	70.00	85.00
9.	Bagaria Palace, Ulhasnagar-4 (W)	21.10.2003	6.15 AM	56.00	66.00	24.10.2003	6.20 AM	72.00	86.00
	---do---	-- --	7.00 PM	62.00	76.00	25.10.2003	7.10 PM	61.00	78.00
	---do---	-- --	8.25 PM	65.00	78.00	26.10.2003	8.20 PM	62.00	91.00

Annexure-III

Information regarding MSW

Sr. No.	Name of Local Body	Class	Population	Area sq. km.	Quantity of Municipal Solid Waste Generation (MT/Day)	Details of authorization	Details of existing sites	Details of improvement of existing sites.	Details of proposed site	Details of development of proposed site	Waste processing technology adopted
1	2	3	4	5	6	7	8	9	10	11	12
1	Kalyan Dombivali Municipal Corporation	MC	11,93,226	104.57	550 MT/D	Authorization granted vide letter No. BO/MSWA/B-2672 dtd.27.8.2004	Adharwadi Dumping site at Adharwadi, Tal. Kalyan, Dist. Thane.	Nil	Village Umbarde, Tal. Kalyan, Dist. Thane	Nil	Waste to Energy Project on bio-methanisation technology. (Proposed)
2	Bhiwandi Nizampur City Municipal Corporation, Bhiwandi.	MC	5,98,000	26	200 MT/D	Authorization valid upto 31.12.2003 Applied for renewal on 5/3/2005 submitted to HQ on 14/09/05	Katai village near STP, Tal. Bhiwandi, Dist. Thane.	Nil	S.No. 115 Dapoda Bhiwandi, Dist. Thane.	Nil	Composting and land filling (Proposed)
3	Ulhasnagar Municipal Corporation, Ulhasnagar	MC	4,72,943		300 MT/Day	Authorization granted vide letter No. BO/MSWA/B-3158 dtd.15/9/2004	1) Rana Trading, Ulhasnagar-2, 3 Acres area 2) Khadi machine, Ulhasnagar-3, 3 Acres	Nil	S.No.44, 45,53,55,57 Mouji Kambhe, Tal. Kalyan, Ulhasnagar, 47 Hectors.	Nil	Proposed technology, Bio Degradable garbage converted to green coal. By anaerobic digestion, which will further be used, as fuel for production of stem and electricity.

4	Ambernath Municipal Council, Ambernath.	A	2,00,000		75 MT/Day	Yes. Authorisation application Pending at H.Q.	1)25 MT/M garbage processed by Vermiculture at Sr. No. 132, which is approved. 2) 50 MTT/M Garbage is dumped at Gut No. 73.	Nil	Proposed site at S.No. 62 Buwapada	Nil	1) Vermiculture 2) Landfilling
5	Badlapur Municipal Council, Badlapur.	C	97,000		52 MT/Day	Authorization granted vide letter No. ROK/TB/2647 dtd.10/9/2004	Land filling at Vadavali Sr. No. 102	Nil	Walavli Sr. No. 178	Nil	Composting prosposed

ANNEXURE-IV

Information regarding Domestic Water Pollution by Local Bodies
As on 31.3.2005

Name of Local Body	Population	Source of Water	Consent Under Water Act Validity	Quantity of water Consumption	Quantity of Domestic Effluent	Treatment Facility provided whether Adequate/Inadequate	Mode of Disposal
1	2	3	4	5	6	7	8
Kalyan Dombivali Municipal Corporation	11,93,226	River/lake	31.12.2004	230 MLD	184 MLD	STP Provided at Kalyan and at Dombivli but inadequate as it is only for 30 MLD capacity instead of 184 MLD	Kalyan Creek
Bhiwandi Nizampur City Municipal Corporation, Bhiwandi.	5,98,000	River/lake	31.3.2006	84 MLD	64 MLD	STP of 17 MLD capacity provided hence inadequate.	Kamavari creek
Ulhasnagar Municipal Corporation, Ulhasnagar	4,72,943	Barvi Dam/Ulhas river	Not applied	108 MLD	86 MLD	STP provided for 28 MLD capacity hence inadequate.	Ulhas creek through Waldhuni nalla.
Ambarnath Municipal Council, Ambarnath.	2,00,000	Ulhas River	Applied but pending	30 MLD	25 MLD	STP provided for 28 MLD. But adequate collection arrangement not provided. Only 11 MLD domestic effluent taken to STP for treatment. Hence inadequate	Ulhas creek through Waldhuni nalla.
Badlapur Municipal Council, Badlapur.	97,000	Ulhas River	Not applied	18 MLD	14 MLD	STP not provided	Ulhas River