Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ




Annual Report 2010-11

Index

Table of Contents

1. Introduction

The Maharashtra Water (Prevention and Control of Pollution) Board was established in the year 1970, under the provisions of Maharashtra (Prevention of Water Pollution) Act, 1969, which was enacted by the State Legislature. Subsequently, in the year 1974, the Parliament passed Water (Prevention and Control of Pollution) Act 1974.This act was adopted by the State of Maharashtra in the year 1981 and the Maharashtra Pollution Control Board was constituted under the new Act.

The Board has established twelve Regional offices and forty two Sub-Regional offices across the State to safeguard natural environment and curb the pollution with necessary control measures.

In its endeavor to keep the pollution under control the Board has developed six Regional Laboratories and one Central Laboratory situated at Navi-Mumbai having capacity to analyze 32000 samples per year. The Board regularly analyzes Water samples, Air samples and Hazardous waste samples in these laboratories.

Over the years, the Board has strengthened itself in various capacities by developing infrastructure for laboratories and offices, following the practice of e-governance, engaging services of Professionals, Environmental Scientists and Engineers for specific projects and studies.

It has also strengthened its 'Monitoring' network further for assessing ambient air quality, water quality. All the related data is compiled and updated regularly on its website. Also the 'Noise' levels during festivals are monitored regularly by the Board and the data collected is updated on the website for the information of the people at large.

In order to maintain transparency with its constituents and to increase the overall efficiency the Board, through Integrated Management Information System (IMIS), is computerizing its various processes and operations. The system mainly includes Consent Management, Waste Management, Cess Collection, Laboratory Management, Human Resource and Financial Management.

The Board has also developed computer software program for submission of Environmental Statement (Form 5) and the industries concerned are now submitting the same online. The Board has also developed a computer software program for tracking Hazardous waste.

As a part of Common Environmental Infrastructure for Environment protection, Common Effluent Treatment Plants (CETP) common facilities for treatment and disposal of Hazardous Waste and common facilities for treatment and disposal of Bio-Medical Waste have been established. To motivate the local bodies for treatment and disposal of Municipal Solid Waste, the Board had undertaken demonstration projects at five places in the State.

Industries in the State are much aware of the environmental issues and most of them have taken measures to control the pollution having adopted cleaner technologies. However to make the people aware of environment, the Board has conducted various awareness programmes throughout the State. The details are depicted in chapter 9 of this report.

2. Constitution of the Board

The Maharashtra Pollution Control Board consists of Chairman, Members and a full-time Member Secretary, who is the chief executive officer as per the Rules under Water (Prevention and Control of Pollution) Act, 1974 notified by the State Government in 1983. The composition of the Board is as under:

- Chairman: (Part time or full time)
- Representatives of the State Govt. (not exceeding five)
- Representatives of local bodies (not exceeding five)
- Representatives of companies or corporations of the State Govt. (two)
- Members representing interests of agriculture, fishery or industry or trade etc. (not exceeding three)
- Member Secretary

Government of Maharashtra has the powers under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 to constitute State Pollution Control Board, (MPCB). As per the composition the appointments of members representing the State Govt.Companies/Corporations owned by State Govt. are already made, but the appointments of the members representing interests of agriculture, fishery or industry or trade and Local bodies are yet to finalize. State Govt. is in the process.

Shri **Radhyeshyam Mopalwaar** has joined in as Member-Secretary w.e.f. 24/05/2010

Present Constitution of M. P. C. Board	
Smt. Valsa R. Nair Singh	Chairperson, M. P. C. Board, Mumbai.
	Secretary, Environment Dept. Government of Maharashtra, Mumbai.
Additional Chief Secretary	Public Health Dept. Government of Maharashtra, Mantralaya, Mumbai.
Principal Secretary-II	Urban Development Dept. Government of Maharashtra, Mumbai.
Principal Secretary	Water supply and Sanitation. Government of Maharashtra, Mantralaya, Mumbai.
Secretary	Home (Transport) Dept. Government of Maharashtra, Mantralaya, Mumbai.
Chief Executive Officer	M.I.D.C., Mahakali Caves Road, Andheri (E), Mumbai.
Member-Secretary (Technical)	Maharashtra Jeevan Pradhikaran Express Towers, Nariman Point, Mumbai.
Shri Radhyeshyam Mopalwaar	Member Secretary, M. P. C. Board, Mumbai.

3. Meetings of the Board

During the reporting year three meetings were held. The major decisions taken are as below:

151st Meeting (01/10/2010)

- The Board accorded its approval for reconstitution of **'Research Advisory Committee'** which is the statutory requirement of DSIR for obtaining customs and excise duty exemption certificate.
- For effective pollution control management the Board has approved MPCB participation in the proposed study on Health & Air Pollution Linkage in Mumbai city.
- The Board agreed for strengthening the air and noise monitoring network for more accurate information with appropriate data dissemination and utilization practices. The Board also approved the phased installation of CAAQM Stations with the 50% capital cost as financial assistance from CPCB at 12 locations and operation & maintenance cost to be Bourne by MPCB. Board also decided to approve the up gradation of Bandra, Pune and Solapur CAAQMS.
- To discourage the delayed applications for consent for long period and to promote timely payment of consent fees with the application for consent, it was decided to start imposing ten times the penal rates on such un-consented units followed by filing of prosecutions and issuance of appropriate directions including directions of closure and disconnection of electricity and water supply by giving four months advance notice to all such units.
- The expenditure incurred on Orientation, Training and Refreshing course for newly appointed Field Officers of Maharashtra Pollution Control Board at Laboratory, Field as well as in the offices of the Board has been approved by the Board.
- The Board accorded its approval for reconstitution of **'Laboratory Committee'** to examine the proposals of establishment of new laboratories and also other activities like development of laboratories, manpower, instruments, equipments, etc.
- The Board has extended financial assistance to the Lonar Municipal council for preparation Prefeasibility report for STP.

152nd Meeting (02/02/2011)

- The Board agreed to initiate the process for accreditation at Central Laboratory and subsequently to extend the process for other Regional Laboratories and accorded its approval for the following.
    1. MPCB to follow the NABL procedure for ISO/IEC 17025.
    2. Appointment of Consultant and Certified Auditor(s) to cover entire scope in this regard.
    3. To authorize Member Secretary of the Board to approve the expenditure required for appointment of Certified Auditors and other expenses required for improvement of Board laboratories.
    4. To depute the Scientists of the Board for Training(s) required (within India/abroad) for fulfilling the NABL Auditor's requirements.

- For Continuous electricity supply to the STP and CETP It was decided to submit a proposal to the Energy Dept., Government of Maharashtra along with the quantitative and qualitative data of STP and CETP for taking suitable policy decision.
- The Board agreed to develop a cell to work as a Facilitator for providing infrastructure to get carbon credit by the local bodies and industries in collaboration with BARC and specialized agencies proposed by BARC for development of documents and monitoring the records required for carbon credit, so as to give technical assistance.
- The Board has accorded its approval for Finance and Accounts prepared for the year 2008-09.
- Considering the increase in Noise level between 90 dBA to 110 dBA in major cities due to rise in Public/Private transportation and the usefulness of noise barriers to control the noise, it was decided to conduct the Noise Monitoring Survey to identify the places in the major cities, where the Ambient Noise Levels are higher due to heavy traffic.
- Considering the pollution problems created by improper handling of coal, waste materials like oil spill / leakage etc. at Ports/Jetties, it was decided to give NOC/Consent to the Ports and Jetties only and not to individual transport agencies. The Board has taken policy decision that after April 1, 2011, the Board will impose the responsibility for scientific handling of coal and to issue appropriate NOC's at their end, imposing necessary conditions about proper handling of coal, so as to prevent any sort of pollution in the surrounding area and to utilize mechanical equipments for coal handling and other activities to maintain the Ambient Air Quality in that particular area. The concerned Ports / Jetties are now required to provide proper infrastructure facilities including concrete roads and direct the transporters to use the covered vehicles for handling of coal and other waste and hazardous material.
- The Board has approved the provision for gratuity amount that has been increased from ₹30 Lakhs to 82 Lakhs for the financial year 2010-2011 to 2015-2016.
- The Board has decided that, after receipt of EIA Study Report and the report on remediation measures, the Board will inform the Director General of Shipping to take appropriate remedial measures and to recover the cost of remediation incurred by the Board on cleanup activities of Collision of Two ships in Arabian Sea. It was further decided to constitute Emergency Preparedness Cell with proper Techno-Legal personnel to deal with such type of circumstances in future by making necessary budgetary provision for emergency preparedness.
- It was decided to disburse the amount to the extent not exceeding 5 percent in total as per the policy of the Board and the tri-party agreement to CHWTSDFs.
- The Board has sanctioned ₹50 Lakhs to Pune Municipal Corporation for use of In- Pipe Technology for conducting trial in sewerage, drainage plan of one sewage treatment plant for the duration of four to six months to develop technical data and to ascertain the suitability thereof for Indian conditions.

153rd Meeting (29/03/2011)

- The Board has approved its Annual Report for the financial year 2009-10
- The Board has approved the financial budget for the year 2011-12
- Considering the importance for assessment of environmental status in individual industry the Board adopted following policy decision in respect Environment Statement to be submitted by the industries.

1. The Regional Officers/Sub Regional Officers shall ensure about the submission of latest statement before processing any consent application.
2. All environment statement should be accepted along with latest consent copy for comparison of the pollution parameter.
3. Every Regional Office/ Sub Regional Office will accept the environment statement online and discourage the hard copies.
4. From 1st April, 2011 no consent shall be processed without proper certification about environment statement from concerned Sub Regional Officer.
5. Commitments about improvement in pollution control technologies made by industries in Environment Statement shall be imposed as one of the conditions while granting/ renewing the Consent.

- The Board authorized Member Secretary and In charge of Hazardous Substance Management Division to exercise the powers for grant of registration under the provisions of Batteries (Management & Handling) Amendment Rules 2010. The suspension, cancellation or refusal of registration will be issued with the approval of Member Secretary.
- It was decided to make uniform fee structure for both Government and Non Government Health institutions and recommended the Board Office to submit the proposed revision in fee structure to the State Government for approval.
- It was decided to forward a proposal for crediting 10% of Cess funds received to the Board to the Maharashtra urban infrastructure development fund from the year 2009-10 for next five years for providing environment friendly facilities in urban areas.
- The Board accorded its approval for participation of MPCB in the Pilot Project of Ministry of Environment and Forest (MoEF) on the Emission Trading Scheme as an instrument for environmental regulation.
- The Board decided to revise the charges which will be not on the basis of capital investment (land, building, plant & machineries) of the project proponent but all the expenditure for conducting the public hearing is to be spent by the project proponent.
- A budgetary provision of ₹75 Lakhs for preparation of Rural Environment Development Plan for 15 villages has been sanctioned by the Board.

4. Committees constituted by the Board

In order to ensure smooth functioning the Board, as provided under section 9 of the Water (Prevention and Control of Pollution) Act 1974 and section 11 of the Air (Prevention and Control of Pollution) Act 198, has constituted various committees for efficient and effective implementation of the Acts and Rules.

During the year 2010-11, the following committees were set up to conduct specific work.

4.1 Research Advisory Committee (RAC):

Customs & Excise Duty Exemption Certificate is granted by Department of Scientific & Industrial Research (DSIR) to the Board considering the functions of the Board prescribed under section 17(1) (d) of Water (Prevention and Control of Pollution) Act, 1974, which includes Research and Development. The Board is utilizing the duty exemption certificate mostly for procurement of scientific instruments and equipments. The Constitution of RAC is the statutory requirement of DSIR for obtaining customs and excise duty exemption certificate.

In this context, the Board has approved the constitution of **'Research Advisory Committee'** under the Chairmanship of Chairman of the Board in 151st meeting held on **October 01, 2010** and the Committee is constituted vide O.O. No.E-11/ 2011 vide No. MPCB/PSO/RAC/B-394, dated. 17.01.2011 comprising of following members along with Terms of References as under:

1.	Hon. Chairperson, MPCB	Chairperson
2.	Member Secretary, MPCB	Member
3.	Representative of MIDC (CEO or his representative / Jt. CEO (Env.), MIDC	Member
4.	Representative of CPCB (Member Secretary or Addl. Director (Lab), CPCB)	Member
5.	Dr. Sengupta, Ex. Member Secretary, CPCB	Member (Expert)
6.	Prof. A.R. Kale, Ex. HOD, Env. Dept., JNU, Delhi	Member (Expert)
7.	Director, NEERI, Nagpur	Member (Expert)
8.	Dr. Sandhya Mainkar-Nirgude, Aurangabad	Member (Expert)
9.	Prof. A.D. Sawant, Ex. Pro Vice Chancellor, Mumbai University	Member (Expert)
10.	Chief Accounts Officer, MPCB	Special Invitee
11.	Principal Scientific Officer, MPCB	Member Convener

Terms of References

1. To recommend specific priority Research and Development (R&D) areas for Board to be undertaken internally by Laboratories and Field Offices and through outsourcing out of Cess funds of the Board.
2. To examine and recommend the R & D Project proposals covering the scope as specified under Section 17 of Water (Prevention and Control of Pollution) Act, 1974 and Section 9 of

the Environment (Protection) Rules, 1986 or Section 12 of Environment (Protection) Act, 1986, including budget, manpower, scope, etc. and implementation strategy.

3. To suggest and/or recommend specific Research Projects with external financial aid (e.g. CPCB, MoEF, etc.).
4. To examine & recommend the sampling and analysis procedures, charges related to laboratory working, administration & management, etc.
5. To recommend estimated budget provisions for R & D activities.
6. To propose specific areas for training of the Board employees.
7. The Committee shall remain in force for two years and Chairman / Member Secretary is authorized to reconstitute / extend the period suitably.
8. The Members of Committee shall be entitled to allowance as per Clause 12 of Govt. Notification of Finance Department vide No. Travel-1010/C.No.2/Service-5, dated March 03, 2010.

4.2 Laboratory Committee:

The Board is having Central Laboratory at Navi Mumbai and Regional Laboratories at Pune Aurangabad, Nashik, Nagpur, Thane, Chiplun and Chandrapur established as a State Water Laboratory and State Air Laboratory under the provisions of Water (P&CP) Act, 1974 & Air (Prevention and Control of Pollution) Act, 1981 and Rules made there under. These laboratories are performing analysis of Water, Air, Hazardous Waste, (HW), Bio Medical Waste, (BMW), and Muncipal Solid Waste (MSW) under the provisions of Environment (Protection) Act, 1986.

The activities of the Board's Laboratories are increased in manifold. To examine the proposals of establishment of new laboratories and also other activities like development of laboratories, manpower, instruments, equipments, etc. there is a requirement of Committee which may take decision on above issues time to time.

In the Board's 151st meeting held on **October 01, 2010**, decision was taken to reconstitute the Laboratory Committee comprising of following members and Office Order is issued vide No.E-79 dated 20.10.2010 along with the Terms of References as below:

1.	Hon. Chairperson, MPCB	Chairperson
2.	Secretary, Environment (Board Member) or his nominee	Member
3.	Member Secretary, MPCB	Member
4.	Member Secretary, Maharashtra Jeevan Pradhikaran (Board Member) or his nominee	Member
5.	CEO, MIDC, Mumbai (Board Member) or his nominee	Member
6.	Prof. M.H. Fulekar, Dept. of Life Sciences, University of Mumbai, Mumbai.	Member (Expert)
7.	Shri P.P. Nandusekar, Ex-PSO, MPCB	Member (Expert)
8.	Chief Accounts Officer, MPCB	Special Invitee
9.	Principal Scientific Officer, MPCB	Member Convener

Terms of References

1. To examine proposals of establishment of new laboratories or sections in existing laboratories of the Board and recommend it to the Board for the approval.

2. To examine proposals of laboratory developments, manpower, instruments, equipments etc. and recommend it to the Board for approval.

3. To examine and recommend budget provisions for laboratory activities and laboratory development.

4. To examine and approve analysis norms, sampling and analysis charges, analytical procedures, etc.

5. To review laboratory performance at least twice in a year and recommend improvements, if any.

6. To recommend specific project proposals to be undertaken by laboratories and field offices out of cess funds of the Board.

7. To examine and approve the project proposals covering scope as specified under Section 17 of Water (Prevention and Control of Pollution) Act, 1974, under Section 11 of Air (Prevention and Control of Pollution) Act, 1981 and Section 9 of the Environment (Protection) Rules, 1986 or Section 12 of Environment (Protection) Act, 1986, including budget, manpower, scope etc. and recommend the implementation strategy.

8. To evaluate tenders (technical and financial) pertaining to laboratory development, including procurement of instruments and equipments for reasonableness, rates etc. (exceeding financial limits of Member Secretary and/or Chairman) and recommend for Board's approval (except repairs to laboratory equipments and vehicles).

9. The Committee shall remain in force for THREE years and shall meet at least once in three months.

10. The Members of Committee shall be entitled to allowance as per MPCB rules for attending the meeting (Section 9(3) of Water Act, 1974).

4.3 Committee constituted for Implementation of procedure for issuance of grant / renewal of registration scheme of Industrial Units possessing Environmentally Sound Management facilities for reprocessing / recycling of the Hazardous Waste in MPCB

Industrial units having Environmentally Sound Management facilities for reprocessing / recycling of Hazardous Waste as listed in Schedule-IV. As per rules 8(1) & 9 of Hazardous Waste, (MH & TM) rules, 2008, industrial units require to obtain registration from Central Pollution Control Board (CPCB), New Delhi, as reprocesser / recycler of Hazardous Waste by submitting application in prescribed From-5 for grant or renewal of the registration.

The CPCB vide their letter dated 29/10/2010 informed MPCB that effective from September 01, 2010, the CPCB delegated powers to state pollution control Board for the grant / Renewals of registration of Industrial Units possessing Environmentally Sound Management facilities for reprocessing / recycling as per Rules 8(1) & 9 of Hazardous Waste, (MH&TM) rules, 2008. Accordingly the Board constituted a registration committee to examine the above registration process.

The committee consists of following members:

1.	Shri R.K. Garg, (Former Managing Director, Indian Rare Earths Ltd, 4,Vikram Jyoti, Deonar,Mumbai-400088.)	Chairman
2.	Shri D.J. Bharati, Deputy Secretary, Environment Department, Govt. of Maharashtra, Mumbai- 400032	Member
3.	Dr. B.N. Thorat, Prof. Chemical Engg. Dept, UDCTI, Matunga, Mumbai.	Member
4.	Shri. T.G. Tawale, Dy.General Manager, HPCL, Chembur, Mumbai- 400071	Member
5.	Dr. Rakesh Kumar, Deputy Director, National Environmental Engg.Research Institute (NEER) Nehru Marg, Nagpur.	Member (Expert)
6.	Dr. Y.B. Sontakke, Incharge HSMD/ Ro(HQ) MPCB, Mumbai	Member Convener
7.	Dr. G.S. Dang Scientist 'F', Indian Institute of Petroleum, P.O.IIP, Mohkampur, Dehradun- 248005	Special Invitee (As & When required)

Terms of Reference of the Registration Committee

1. To evaluate the Environmentally Sound Recycling Technologies for recycling of Hazardous Wastes listed in the unit.

2. To evaluate the adequacy of the pollution control facilities installed in the Unit.

3. To evaluate whether the quantity of hazardous waste requested by the unit is possible with the available facilities.

4. To evaluate the storage capacity (Raw Material & Product) of the unit.

5. To evaluate the claim of the applicants about the type and quantity of residue generated during the recycling process.

6. To recommend for grant of registration by stating type and quantity of the hazardous waste that can be processed.

7. To recommend for deny of registration stating the reasons and / or lay down additional conditions for improvements / modifications etc.

8. Registration committee will recommend the registration matters to the Member Secretary of the Board.

4.4 Consent Appraisal Committee (CAC) and Consent Committee (CC):

The CAC/CC has been constituted to verify, decide and clear consent applications of certain categories. The CAC/CC may call meetings with industry personnel to discuss various pollution aspects, problems of industry and suggest suitable remedies for control of pollution. In some cases, launching of prosecution under appropriate sections is also resorted to. Sometimes CAC/CC members also visit the industry to inspect the measures taken by the industry for pollution control and decide whether to grant the consent or refuse it.

As provided under section 9 of the Water Act 1974 and section 11 of Air Act 1981 and Hazardous Wastes (M & H) Rules, 1989 and in exercise of the powers conferred on the Chairman of the Board the Consent Appraisal Committee is constituted as under and decided the scope of powers for grant consent to Member Secretary, Chairman & CAC.

1.	Chairman Maharashtra Pollution Control Board	Chairman
2.	Secretary Home (Transport).	Member
3.	The Technical Advisor Maharashtra Industrial Development Corporation	Member
4.	Member-Secretary Maharashtra Pollution Control Board	Member-Secretary
5.	Scientist & Head NEERI Mumbai	Special Invitee

Terms of Reference

This committee considers the applications for Consents/Authorizations under Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Hazardous Wastes (M & H) Rules, 1989 as under:

1. "RED" category: Projects with capital investment above ₹100 crores.
2. "ORANGE" category: Projects with capital investment above ₹500 crores.
3. "GREEN" category: i) All Projects with capital investment beyond ₹1,000 crores
   ii) All Municipal Corporations

4.5 Consent Committee (CC):

As authorized by the Board the Member Secretary of the Board constituted the Consent Committee on the subject matter which comprises following members:

1.	Hon. Chairperson, MPCB Maharashtra Pollution Control Board	Chairman
2.	Water Pollution Abatement Engineer Maharashtra Pollution Control Board	Member
3.	Air Pollution Abatement Engineer Maharashtra Pollution Control Board	Member
4.	Regional Officer, I/c, PCI-II Maharashtra Pollution Control Board	Member
5.	Shri. R.G.Pethe Retired Water Pollution Abatement Engineer Maharashtra Pollution Control Board	Member
6.	Dr. B.N. Thorat Prof. Chemical Engineering, Dept. of Chemical Engineering, UDCTI, Mumbai.	Member
7.	Shri D.T. Devle Sr. Law Officer, MPC Board, Mumbai.	Special Invitee
8.	Regional Officer (Project & Planning) Maharashtra Pollution Control Board	Convener

Terms of References

The CC shall consider the applications for consents/authorizations under Water (P & CP) Act, 1974, Air (P & CP) Act, 1981 and Hazardous Wastes (M & H) Rules, 1989 as under;

1. 'Red' Category: This category would include projects with capital investment worth above ₹25 Crores and upto ₹50 Crores.

2. 'Orange' Category: This category would include projects with capital investment worth above ₹200 Crores and upto ₹300 Crores.

3. 'Green Category: This category would include projects with capital investment worth above ₹1,000 Crores and upto ₹1,500 Crores.

4. 'Infrastructure Projects: This category would include projects with capital investment worth above ₹100 crores and upto ₹200 Crores.

4.6 Sand Dredging committee:

The Government of Maharashtra vide its G.R. No. ENV 1094 /SEAC/CR.170/d-1 dated 03/06/2000 has stipulated that the sand dredging activities, shall obtain environment clearance from the State Government. Subsequently, the Government Of Maharashtra, Environment Department has informed the Board that the sand dredging activities shall also obtain consent from the Maharashtra Pollution Control Board vide letter dated 02/02/2008.

Sand Dredging committee comprises of following Officials to scrutinize the consent applications received for dredging activites;

1. Shri V.B. Waghjale, RO (P&P)
2. Shri Ajay Deshpande, RO I/c. PCI-II
3. Shri.D.T.Devale, Sr. Law Officer,
4. Shri Toke, Field Officer

Performance of CAC, CC & Sand Dredging committee during the year:

	CAC	CC	Sand Dredging
No.Of meetings Conducted	10	21	7
Total Applications disposed	340	604	37

5. Air and Water Quality Monitoring Network

5.1 Water Quality Monitoring Network

Officials in action

The State Pollution Control Board is responsible for restoration and maintaining the wholesomeness of aquatic resources. The ever increasing population of the State followed by increasing demand of water for irrigation, human and industrial consumption etc., has not only resulted in depletion of water resources but has also added to further deterioration of water quality. The main sources of river water pollution, as observed by the Board, are the occasional discharge of untreated sewage and industrial effluent in rivers across the state.

Water quality monitoring is aimed at rational planning of pollution control strategies and setting their priorities. The Maharashtra Pollution Control Board regularly monitors the sources (water) in order to keep a check on the trend in water quality, pollutants in terms of their nature and concentration. Also regular monitoring helps to identify the extent of pollution control measures needed and further analyze effects of the pollution control measures implemented.

As provided under section 17 of water (Prevention and Control of Pollution) Act, 1974 & Air (Prevention and Control of Pollution) Act, 1981, it is one of the important functions of the Board to collect and disseminate information regarding water and air pollution.

The Board has classified the river water into four classes according to the best designated use of water. The classification of the same is as given in the following table.

Water Quality Standards for Best Designated Usages				
Category of Fresh Water	A - I	A-II	A-III	A-IV
Best Usage	Unfiltered Public water supply after approved disinfection	Public water supply with approved treatment equal to coagulation, sedimentation & disinfection.	Not fit for human consumption, Fish & Wildlife Propagation.	Fit for Agriculture, Industrial cooling & process water.
Chemical Qualities: Maximum allowable concentration				
Toxic Substances				
Arsenic (As)	0.3 mg/l	0.3 mg/l	1.0 mg/l	0.1 mg/l
Cadmium (Cd)	0.01 mg/l	0.01 mg/l	-	-
Chromium (Cr)	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.2 mg/l
Cyanide (CN)	0.05 mg/l	0.1 mg/l	0.05 mg/l	0.2 mg/l
Lead (Pb)	0.1 mg/l	0.1 mg/l	-	0.1 mg/l
Boron (B)	-	-	-	2.0 mg/l

Mercury (Hg)	0.001 mg/l	0.001 mg/l	0.001 mg/l	-
Gross alpha activity	3 PCI/l	10-9 uc/ml	3 PCI/l	3 PCI/l
Gross Beta activity	30 PCI/l	10-8 uc/m	30 PCI/l	30 PCI/l
Substances affecting health				
Fluoride (F)	1.5 mg/l	1.5 mg/l	-	1.0 mg/l
Nitrates (NO3)	45 mg/l	45 mg/l	-	-
Substances affecting the potability of water				
pH	6.5 to 8.5	6.0 to 8.5	6.5 to 9.0	6.5 to 9.0
T.D.S.	-	T.D.S.	T.D.S.	-.
Total Solids	1500 mg/l.	1500 mg/l.	-.	-
Total Suspended Solids	25 mg/l	-	-	-
Total Hardness (Caco3)	50 mg/l	-	-	-
Total Residual Chlorine	-	-	-	-
Electrical conduct at 25. C	-	-	1000 x 10-6 mhos	3000 x 10-6 mhos
Free Carbon Di Oxide	-	-	12 mg/l	-
Free Ammonical Nitrogen	-	-	1.2 mg/l	-
Oil & Grease	-	-	0.1 mg/l	-
Pesticides	-	-	0.02 mg/l	-
Biotic Index	-	-	6.0 mg/l	-
Total Ammonical Nitrogen	1.5 mg/l	1.5 mg/l	-	50 mg/l
Chlorides (Cl)	600 mg/l	600 mg/l	-	600 mg/l
Sulphates	400 mg/l	400 mg/l	-	1000 mg/l
Copper (Cu)	1.5 mg/l	1.5 mg/l	-	-
Manganese (Mn)	0.5 mg/l	3.0 mg/l	-	-
Iron (Fe)	1.0 mg/l	5.0 mg/l	-	-
Sodium	-	-	-	-
Zinc (Zn)	15.0 mg/l	1.5 mg/l	5.0 mg/l	5.0 mg/l
Phenolic Compounds	0.002 mg/l	0.002 mg/l	0.05 mg/l	-
Alkyl Benzene sulphates	1.0 mg/l	1.0 mg/l	-	-
Mineral Oil	0.3 mg/l	0.3 mg/l	-	-
Ammonia	1.5 mg/l	1.5 mg/l	-	-
B.O.D. (5 days 20 . C)	2.0 mg/l (Monthly average of atleast 10 samples)	5.0 mg/l(Monthly average of atleast 10 samples)	10 mg/l	30 mg/l
C.O.D.	-	-	-	150 mg/l
D.O.	Not less than 5 mg/l(Monthly average of 100 samples)	4.0 mg/l	Not less than 3 mg/l	Not less than 2 mg/l
Bacteriological Standards:	Coliform Bact. 250	Not greater than 5000		
(MPN/100)				

The Board has a network of 200 surface water quality monitoring stations and 50 stations are fixed for ground water monitoring across the State. The region wise monitoring stations for water quality are shown in the following table.

Region	Water (NWMP)		
	Surface Water		Ground Water
	MINARS	GEMS	
Mumbai	12	0	0
Navi Mumbai	2	0	0
Thane	26	0	5
Kalyan	10	0	0
Raigad	17	0	1
Pune	45	2	6
Nashik	31	0	6
Nagpur	11	0	11
Amaravati	6	0	2
Aurangabad	10	1	5
Kolhapur	16	1	13
Chandrapur	9	1	1
Total	195	5	50

All these stations are monitored under **National Water quality Monitoring Programme (NWMP)**. All surface water stations are now monitored once in month.

The ground water monitoring stations are monitored half yearly.

For effective implementation of these monitoring programmes, handling of data collection, collation and dissemination activities and to streamline the monitoring and surveillance activities, MPCB has formed Pollution Assessment Monitoring and Surveillance (PAMS) division with following responsibilities.

- Implementations of NAMP / NWMP in the state.
- Implementation of SAMP/SWMP in the state.
- Operation and maintenance of MMV and CAAQMS.

- All other activities related to air and water monitoring.
- Data collection, collation and compilation of air and water quality including updating CPCB & MPCB web-sites, informing media with approval of I/c PAMS/MS.
- Special surveys like noise monitoring during Diwali and Ganesh festivals.
- Other projects like Status of River , Fisheries and VOC monitoring.
- Calibration and audit of the sampling programs.

At present, the data generated through these monitoring programs is collected at the Pollution Assessment Monitoring Surveillance (PAMS) Division at the Head Quarters. Soft data is compiled and up loaded to Environment Data Bank (EDB) of Central Pollution Control Board (CPCB) and uploaded on the website of MPCB.

The report of data on Ambient Air Monitoring in five major cities i.e. Mumbai, Pune Aurangabad, Nasik and Nagpur are sent to ZEE TV and ETV daily, for displaying it in public interest.

Water Quality Monitoring Network

For planning of water pollution control program, it is imperative to understand the nature of pollution, extent of pollution and control measures required. To achieve this, a scientific water quality monitoring was done during the year 2010 -2011.

Considering the necessity of regular monitoring of drinking water sources used by local authorities, the Board has started monitoring 137 new stations for the drinking water sources throughout the State from January, 2007.

On February, 2008, CPCB has sanctioned 50 new stations under NWMP from existing SWMP stations - 45 surface water stations with monthly monitoring frequency and five ground water stations to be monitored once in six month i.e with the half yearly monitoring frequency.

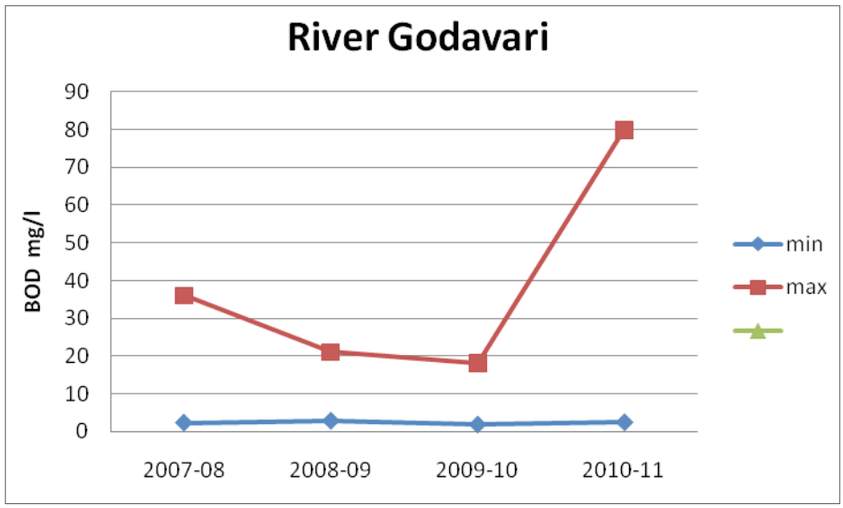
Water Quality Monitoring Programme:

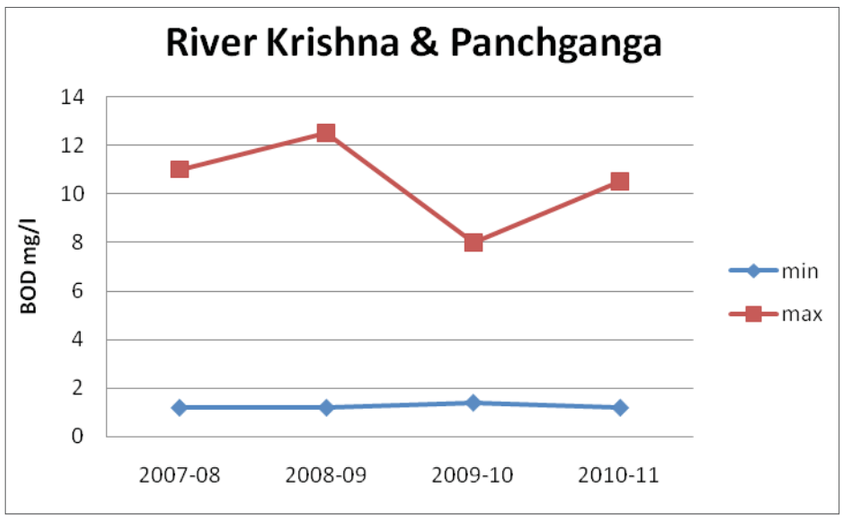
Water Quality Monitoring Programme	No. of Stations operated during 2008-09	No. of Stations operated during 2009-10	No. of Stations operated during 2010-11
Surface water monitoring stations under NWMP	93	166	200
Groundwater monitoring stations under NWMP	30	30	50
Surface water monitoring stations under SWMP	107	34	0
Groundwater monitoring stations under SWMP	20	20	0
TOTAL	250	250	250

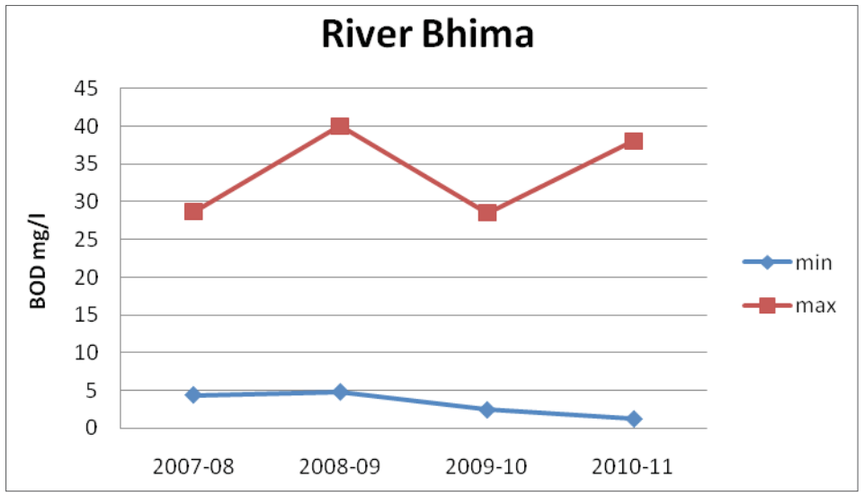
Trend of BOD in water quality of major rivers in Maharashtra

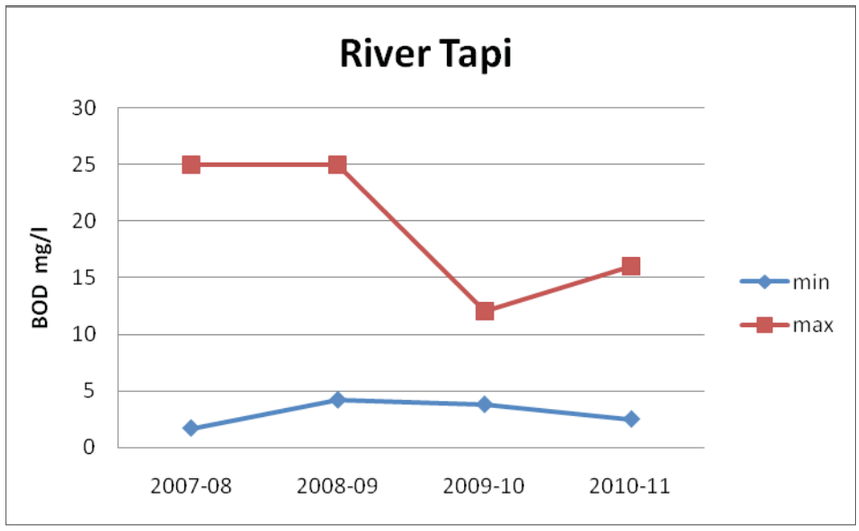
In Maharashtra Godavari, Krishna- Panchganga, Bhima and Tapi are the major rivers. The graphs showing the trend of BOD in water quality of these rivers from 2007-08 to 2010-11 are presented below.

It can be seen that compared to previous three years there is high rise in maximum level of BOD in Godavari River in 2010-11, whereas there is decreasing trend in maximum level of BOD in Krishna Panchganga and Tapi river. The increasing trend in maximum level of BOD is seen in Bhima river over the past 4 years. The rise in B.O.D. level is due to occasional discharge from local bodies. The concerned local bodies are already instructed and notices have been issued for taking necessary control measures.









5.2 Air Quality Monitoring Network

For strengthening and developing a systematic State Air Monitoring Program (SAMP) & to support the NAMP, MPCB has started NAMP stations in 65 locations all over Maharashtra.

In the same way SAMP stations are also initiated in different industrial cities. Previously, there were 65 NAMP stations (59 operated by MPCB and 6 operated by NEERI), 12 SAMP stations and 8 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in operation in Maharashtra State, which has been augmented to 77 NAMP stations,3 SAMP stations and 8 CAAQMS.

5.3 Air Monitoring Programme at a glance:

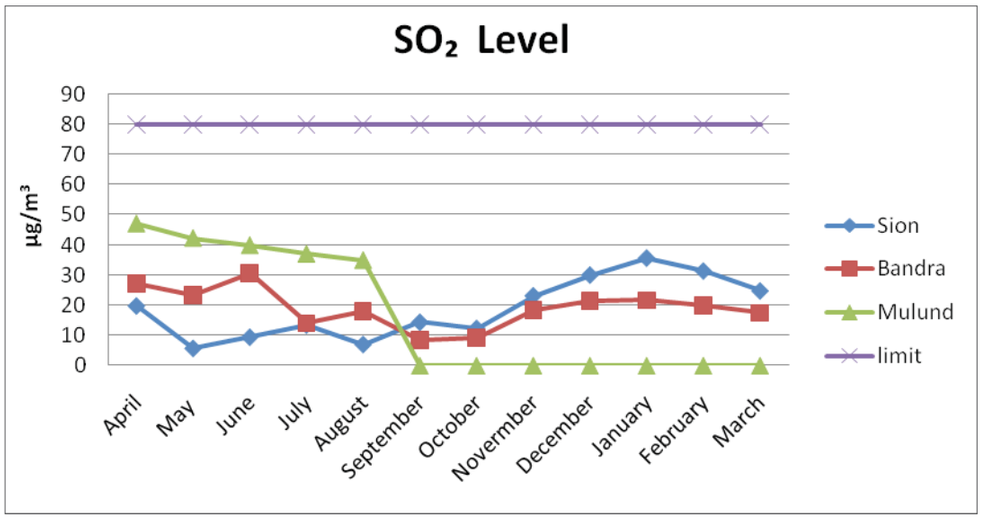
Air Quality Monitoring Programme	No. of stations in operation during 2009-2010	No. of stations in operation during 2010-2011
NAMP	65	77
SAMP	12	3
CAAQMS	8	8
Total	85	88

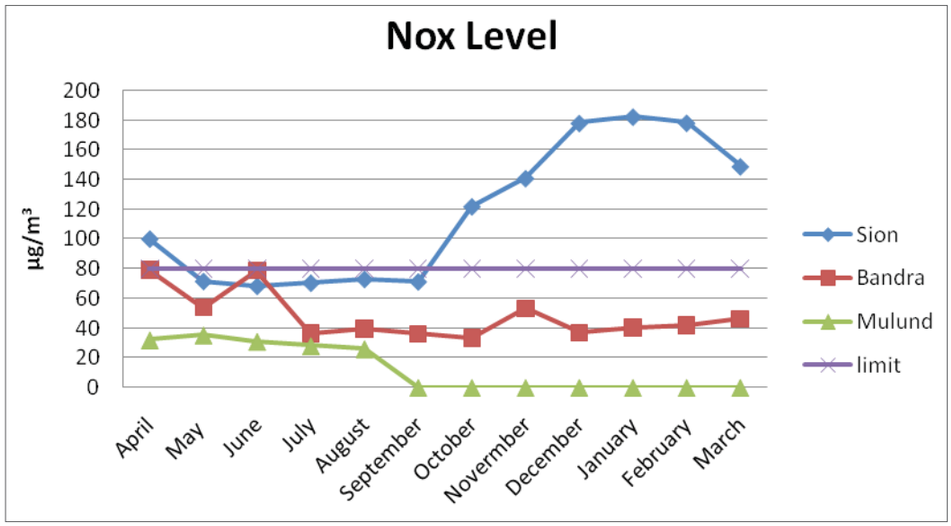
5.4 Ambient Air quality in Mumbai

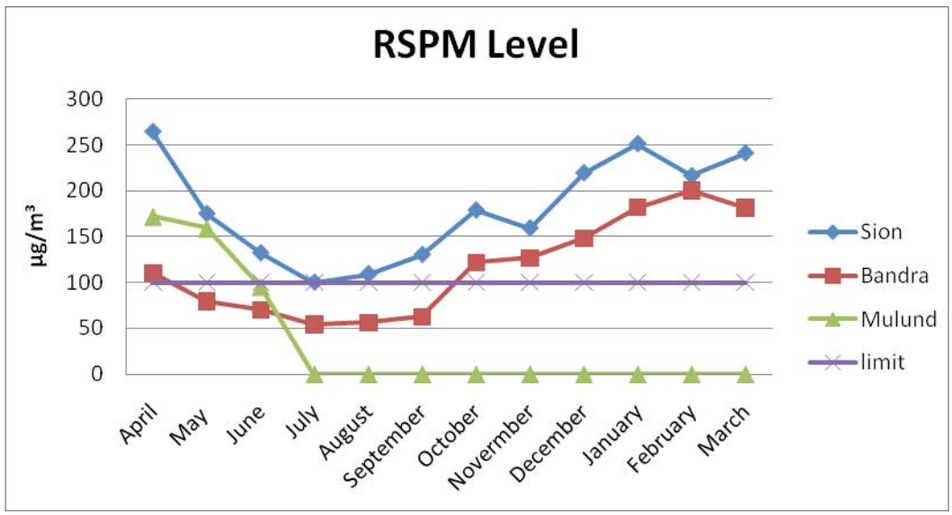
Maharashtra Pollution Control Board monitors three continuous monitoring stations in Mumbai. During 2010-11 these stations were monitored for Sulphur dioxide, Nitrogen oxide and Respirable Particulate matter.

The trend of parameters observed during the year is depicted in following figures. Mulund station was not monitored during Sept 2010-March2011. The SO_2 concentration remained within 40µg/m³ throughout the year at Sion and Bandra.

However, NOx crossed the limit at Sion from October 2010 to March 2011, which may be attributed to vehicular congestion during the period. An increasing trend of RSPM level is also seen from October 2010 onwards at Sion and Bandra.







The Maharashtra Pollution Control Board has monitored ambient air quality in different areas (class) as shown in the following table.

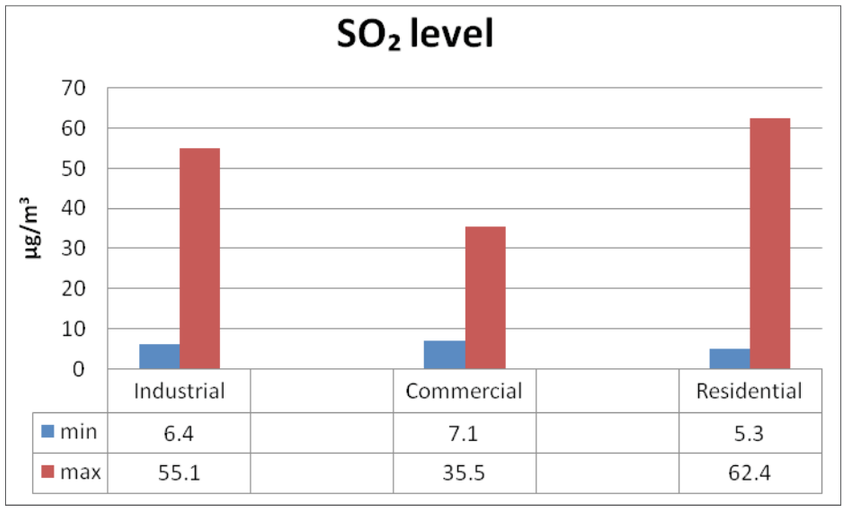
The table with locations where parameters exceeded the limit is presented below. It indicates RSPM level exceeded the limit at 56% of the residential locations, 15% of the industrial locations and 26% of commercial locations.

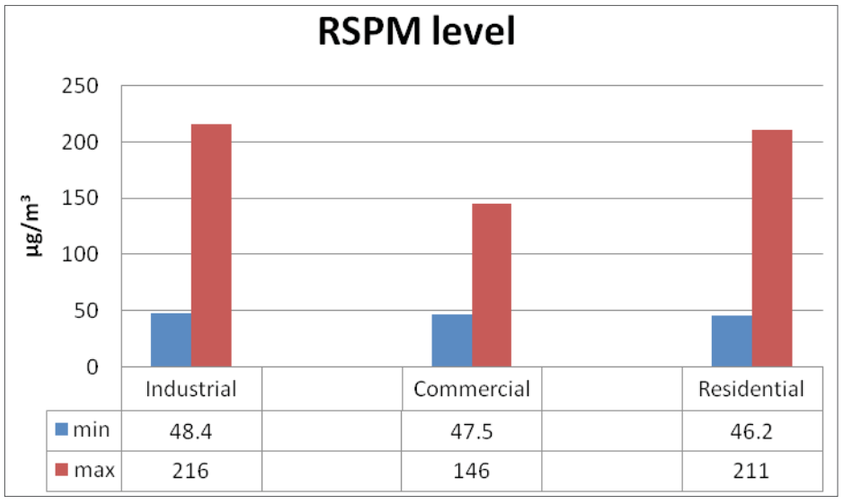
This shows the quality of air deteriorated more in residential areas during the year. At traffic intersection in Sion, Mumbai, NOx level also exceeded the limit.

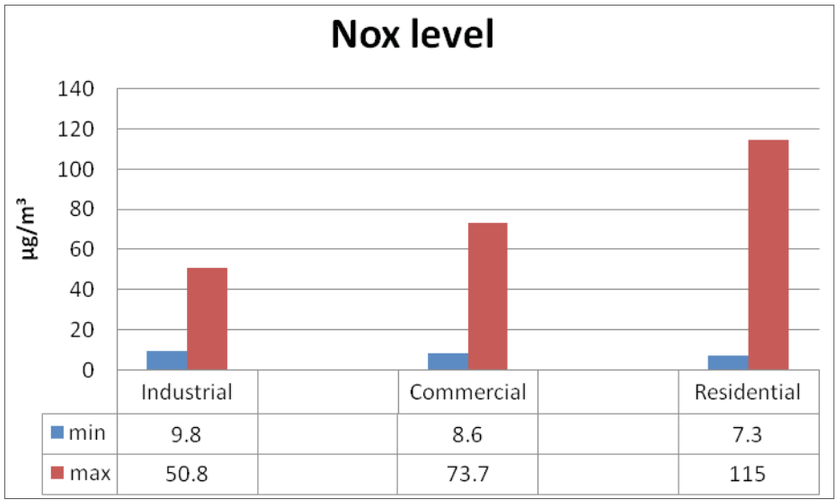
Class	Locations monitored	Locations where parameters exceeded the limit		
		SO_2	NOx	RSPM
Industrial	19	-	-	3
Residential	37	-	1	21
Commercial	15	-	-	4

The comparison of ambient air quality in different class in terms of parameters like Sulphur Dioxide, Nitrogen Oxide and Respirable Particulate matter is shown in following figures.

It is clear from the figure that maximum level of SO_2 and NOx was recorded in residential area while the maximum concentration of RSPM was recorded in industrial area.




RSPM level
µg/m³
250
200
150
100
50
0
Industrial
Commercial
Residential
min 48.4 47.5 46.2
max 216 146 211


Nox level
µg/m³
140
120
100
80
60
40
20
0
Industrial
Commercial
Residential
min 9.8 8.6 7.3
max 50.8 73.7 115

6. Present Status of Environment Problems and Control Measures

6.1 Assessment of water quality of rivers

Major rivers in the state of Maharashtra are Godavari, Krishna, Bhima, Tapi, Purna, Wardha-Wainganga. To assess water quality of these rivers in terms of physical, chemical and biological parameters, the Board has a wide monitoring network across the State. The Board has also developed a system as per National Water Policy Information to ensure that the quality of river water is monitored regularly. According to this system the data on water quality is collected, compiled and disseminated on website of the Board.

The Board has observed that with the increasing urbanization, industrialization along the banks of river and Pilgrim places established in the surroundings of rivers like Godavari, Krishna and Bhima the water quality of these rivers is affected. The Board has found out that excess use of water for irrigation along with use of agrochemicals has resulted into salinity of water particularly in Western Maharashtra.

The Board has also come to a conclusion that the main sources for contamination of water are discharge of untreated sewage from Municipal bodies, industrial effluent, solid wastes from various activities, agriculture run off including pesticides and fertilizers, erosion of soil and sedimentation in water bodies. The Board is taking all the necessary measures to curb the elements responsible for contaminating water.

In its efforts to ensure the quality of river water is maintained, the river water is classified depending upon the best designated use of water such as A-I, A-II, A-III and A-IV.

- **Status of the Water Quality of river Godavari**

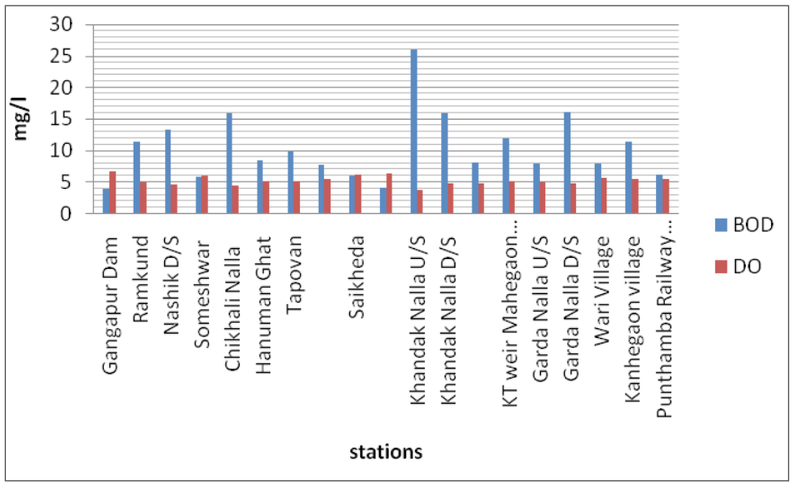
River Godavari

Godavari is the second largest river in India originating from Trimbakeshwar, Nasik in Maharashtra. Nasik region is spread over the upper Godavari and Tapi River Basin. The tributaries of Godavari and Tapi River are Darna, Kadwa, Mula, Prawara and Girna, Panjaraka, Gomai, Bhurai respectively.

The Board monitors the quality of river water regularly under a centrally sponsored project NWMP.

During the year, the quality of river water was assessed through 36 monitoring stations. The result obtained showed deterioration in water quality at all locations where the Biological Oxygen Demand (BOD) exceeded the limit and did not adhered to the standard of A-II class of water. The Board in its assessment found out that the river passing through Nasik City is 82% polluted by domestic waste water and 18% by industrial effluent. The necessary remedial measures are being taken by the Board. Also industries have taken adequate measures for control of water pollution.

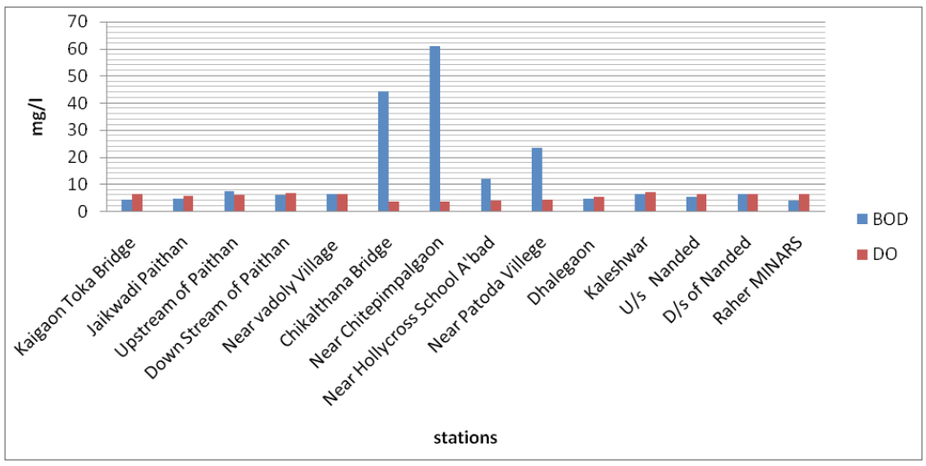
The following figure gives the profile of the Biological Oxygen Demand (BOD) and the concentration of Dissolved Oxygen (DO) parameters present in the river Godavari in Nasik Region. The analysis results indicate the highest chemical oxygen demand (COD) and BOD level at Kolhar on the river Pravara.



BOD and DO profile of river Godavari in Nasik Region (2010-11)

The water quality of river Godavari including tributaries like Manjra, Sukna Bindusara has been assessed through 19 locations in the Aurangabad region. The result shows that with the necessary remedial action taken, the COD level has been reduced at most of the locations except at Chite-pimpalgaon on the river Sukna. Also at the locations of rivers Sukna and Kham it is noticed that there is a decrease in the BOD levels.

However, the BOD concentrations exceeded the limit at 11 locations and the D O concentration did not confirm to the standards, at four locations. Also the rivers Sukna and Kham were found to be polluted during the year perhaps due to occasional discharge of wastes. All the necessary remedial measures are being taken by the Board in the region.



BOD and DO profile of river Godavari in Aurangabad Region (2010-11)

- **Status of the Water Quality of River Krishna (Kolhapur Region)**

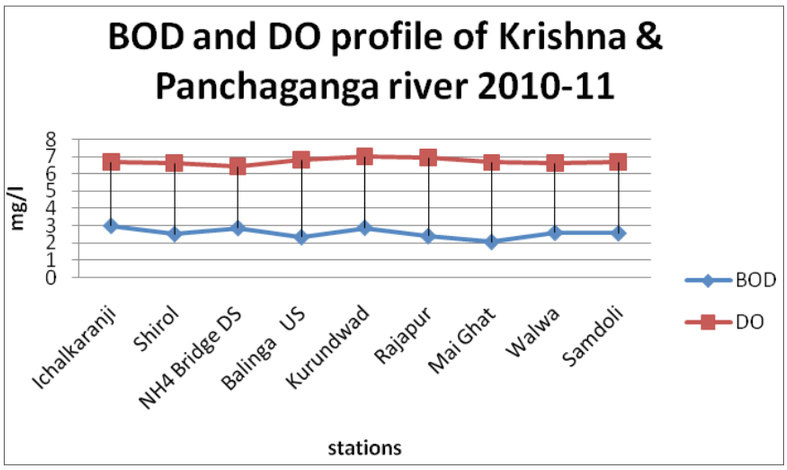
River Krishna

The river Krishna originates in the Western Ghats at an elevation of about 1337 m North of Mahabaleshwar, about 64 km from the Arabian Sea. Other rivers flowing through Kolhapur region are Panchganga, Vashishti, Gad and Muchkundi. Water quality of the rivers in the region has been monitored through 14 locations.

It was found that of these, water quality of the rivers Gad and Muchkundi in Ratnagiri district did not have any deterioration.

The results of analysis of river water shows that water quality of the all the rivers, as mentioned above, remained satisfactory during the year with no significant difference in the levels of B.O.D as compared to last year. It was also observed that except at Walwa on Krishna River, the concentration of TC remained satisfactory at all other locations on the river Krishna, Panchganga Vashishti, Gad and Muchkundi.

It can be said that with all the necessary efforts of the Board, the overall water quality in Kolhapur region remained more or less within the standards.



- **Status of River Pollution in Thane Region**

River Ulhas

The important rivers flowing through Thane region are Vaitarna, Ulhas, Tansa and Surya. The Maharashtra Pollution Control Board regularly monitors the water quality of these rivers as they are the sources for availing 'drinking water' for the region.

The regular monitoring the water quality generally indicate that the standards as specified by the best uses in the particular stretches are meeting.

River Surya flows from Palghar and provides water

to MIDC area of Tarapur and the nearby towns of Virar, Palghar and Vasai. The effluent discharges are not permitted into the river water and thus the source of water supply is protected by the Board.

However, the Analysis reports have shown that BOD level did exceeded the limit, slightly in A-I stretch of water of river Pelhar and Surya during the year for which necessary control measures are being taken by the Board.

- **Status of River Pollution in Navi-Mumbai Region**

Kasardi is the only river flowing through the jurisdiction Navi-Mumbai region. The river stretch falls under A-II class of water. This river is a notified river and also perennial. MIDC Taloja is situated along the bank of river. CETP pipeline carrying treated effluent is laid along the bank of river. This pipeline ultimately leads to Waghivli creek. The quality of the river water is regularly monitored.

Incidences of river water pollution have occurred during accidental discharge of untreated / partially treated and treated effluent due to breakage of effluent collecting pipeline or treated effluent carrying pipe.

It is also observed that there is no direct discharge of trade effluent by any industry. MIDC has undertaken the replacement of old effluent carrying pipeline network and it is in progress. During this work the incidence of breaking of chamber and old pipeline may cause the pollution of Kasardi River. The river water of Kasardi monitored at downstream indicates deterioration in water quality.

- **Status of River Pollution in Pune Region**

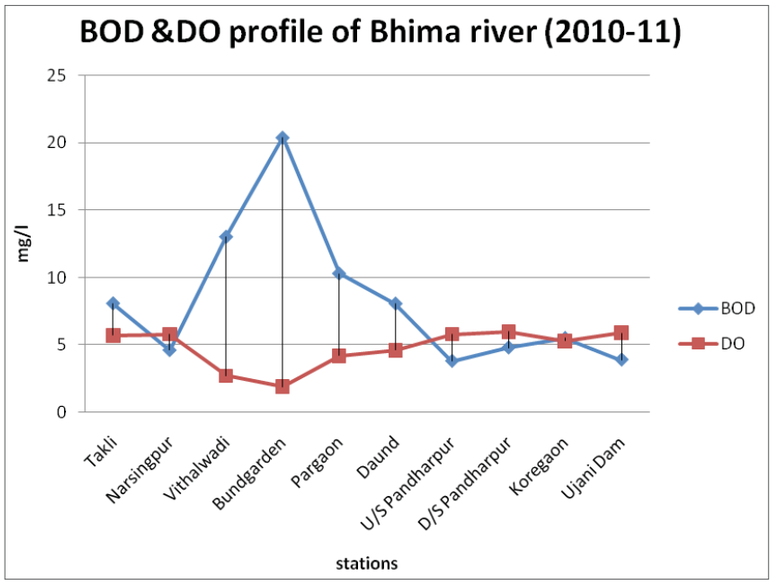
River Bhima

River Mula, Mutha, Pavana and Indrayani flow through Pune and Pimpri-Chinchwad areas and merge into the river Bhima. During the year the water quality has been assessed through 36 monitoring stations. The Board observed that in Pune, nearly 300 villages from Pune city and 26 villages from Shirur taluka were getting polluted water as chemical effluents released from industries were mixed in the flow of the river Bhima.

The release of 700 million litre of untreated sewage water and industrial effluents from Pune and Pimpri-Chinchwad areas into the Bhima is affecting life in the villages downstream.

The main sources of pollution of the river water are untreated household sewage, Industrial waste, excessive sand mining from the river bed, seepage of pesticides and fertilizers used in modern farming, No water flow according to the season and silt in the river bed.

To curb this pollution, action plan has been prepared by civic administration which covers all sources of water pollution and the points from where domestic and industrial effluents are discharged into the rivers from Lonavla to the Ujani dam area.



- **Status of Rivers Pollution in Amravati Region**

The important rivers flowing through Amravati region are Wardha, Penganga,Purna, Katepurna, Pedhi, Man etc. These rivers are important sources of 'drinking water' for the region. The Maharashtra Pollution Control Board regularly monitors the water quality at these important water resources. The Amba nala passes through the dense, residential and commercial area of Amravati city, and the river Morna passes through the Akola city.

The water quality of river has been monitored through 16 locations fixed on rivers Wardha, Penganga,Purna, Katepurna, Pedhi, and Man. Total 86 samples were collected for analysis. The results indicate that BOD exceeded the limit at all locations except Wardha Dam at Simbhora. The highest deterioration has been noticed at the bridge Dadhi-Pedhi on the river Pedhi. It is observed that these rivers are encroached by hutments and dwellers from all sides and the domestic sewage adds to the pollution.

Further, the natural water streams are also obstructed due to human activities resulting in drying of these rivers. The necessary measures are being taken by the Board.

- **Status of River Pollution in Nagpur Region**

River Wardha

In Nagpur Region the rivers Wardha, Wainganga and their tributaries like river Wena, Kanhan, Pench, Nag and Pili are Perennial Rivers of A-II Class. The area is also having many lakes. The water supply to the Nagpur City is about 520 MLD and the sewage generation is around 420 MLD.

It is observed that the Nagpur Municipal Corporation has inadequate infrastructure to collect and treat the entire sewage generated from the city.

This has resulted into discharge of untreated / partially

treated domestic effluent into the rivers like Nag and Pili. Whole stretches of these rivers are polluted and river water is not suitable for any use.

Similarly to some extent industrial discharge is also responsible for deteriorating water quality. However, the discharges of the effluent from the industry are not on regular basis.

Deteriorated water quality of river Nag is mainly responsible for affecting the water quality at Gosikhurd Dam constructed on the river Wainganga at Gosikhurd Village since substantial quantity of untreated sewage is released via the river Nag and Kanhan due to heavy hydraulic load of the untreated sewage.

The Board had discussed the issue at various levels including the Legislative Assembly of Government of Maharashtra. The Hon'ble High Court of Mumbai, Nagpur Bench has taken cognizance of this issue of pollution of Gosikhurd dam water due to discharged of untreated sewage through Nag River.

To restore and maintain the wholesomeness of river Nag and Pili, MPCB is regularly collecting river water samples under NWMP **(10)**, SWMP **(2)** & MINARS **(6)** to ascertain the water quality of river.

From the results it is observed that water quality of rivers namely Kanhan, Wena, and Wardha is exceeding the permissible levels of BOD, but not alarmingly. Stretches of these rivers are deteriorated largely due to release of untreated sewage from Municipal Councils. The BOD levels are also exceeding the permissible levels in water of river Nag and Pili.

- **Status of River Pollution in Raigad Region**

The rivers namely Patalganga, Kundlika, Amba and Savitri are of great importance for water supply to the industries as well as are the sources of 'drinking water'.

The river **Patalganga** originates from the hilly range of Sahyadri near Khopoli and flows to the west side through Khopoli city, Khalapur Taluka and ultimately joins the Dharamtar creek near Kharpada village.

Many industries are established in the vicinity of the said river. The river became not only the main source of water supply to these industries but is also the source for the supply of 'drinking water' to nearby villages.

River Patalganga

The river **Kundlika** originates from the mountain range of Sahyadri flow from city, Roha and ultimately merges in the creek. The MIDC has established an industrial estate at Dhatav on the bank of this river. The river Kundlika is a prime source of water for these industries and also to the nearby villages and Roha city. However, the intake of water supply is at the upstream of the industrial estate.

The River **Savitri** originates from the mountains at Mahabaleshwar and flows towards Poladpur and meets to the creek after Mahad town. Onwards the creek is known as Bankot creek. The water is supplied from this river to Navenagar of Mahad, industrial estate and to some nearby villages.

The river **Amba** originates from the mountains range of Sahyadri, flows through Sudhagad Taluka and ultimately merges in to Dharamtar creek at Nagothane. Though there is no major

industrial estate established, there are some industries present on the bank of this river. The river is a source of water supply for these industries, R.C.F. and Alibag city.

It is observed that the general sources of pollution of these rivers are discharges of untreated domestic effluent from the adjacent towns, accidental discharges from industries, unauthorized disposal of Hazardous waste/ solid waste on the bank and vicinity of river which may find its way into the river in rainy season. Also washing of chemical tankers in many places on the banks adds to the pollution.

The water quality of the river Patalganga along with the tributaries Balganga, Bhogeshwari and Amba has been assessed through fourteen locations. From the results it is seen that the water quality of river Patalganga seems to be improved during the year compared to last year as it is noticed that there is a reduction in the BOD levels and coliform at most of the places. However at few places there is a marginal increase in BOD level. At Shilphata and Khalapur there is a rise in Coliform.

River Kundalika has been assessed through seven locations. The results indicate improvement in water quality except at Gofan village.

The water quality of river Savitri was monitored at five locations where it has been observed that water quality is deteriorated due to increase in COD and Total Coliform level as compared to last year. The highest COD (2693mg/l) is recorded at Ovale village.

6.2 Ground Water Quality

The analyses results of ground water obtained during the year from Regional offices indicate deterioration in ground water quality of Aurangabad, Pune, Sangli and Latur Districts, as Total Hardness and Sulphate concentration were found on higher side and also exceeded the permissible limit. Out of monitored stations for ground water, the deterioration in the quality of ground water is seen at 24% of the locations. However as compared to last year there is improvement in ground water quality during the year.

The ground water quality has been monitored at two locations in Raigad Region. The sulphate level exceeded the limit at Ladivali a place in Panvel taluka.

In Aurangabad Region fourteen locations have been monitored for ground water. The deterioration has been noticed at six places where the parameters such as Total Hardness and Sulphate exceeded the limit. The highest concentration of Total Hardness (960 mg/l) and Sulphate (1380 mg/l) was recorded at Kathpur Well water in Aurangabad.

Ground water in Latur area is also assessed at the places, which are 20 mtrs, 70 mtrs and 150 mtrs away from the Municipal Solid Waste site where the Sulphate concentration was found 575mg/l, 684 mg/l and 752 mg/l respectively.

The ground water in Kolhapur Region was monitored at four locations near industrial estates where no deterioration has been seen. However the ground water in Sangli district monitored at three locations showed high level of Total Hardness and Chlorides which were in the range of 818mg/l- 1360mg/l and 575mg/l- 1285 mg/l respectively.

In Ratnagiri and Chiplun area ground water remained satisfactory.

In Amravati Region six places were monitored for ground water. The ground water remained satisfactory at all places. The Total Hardness is slightly increased at Bore well at Shakuntal Housing Society, Buldana.

The ground water monitored at five places in Nasik Region indicates that there was not much deterioration in water quality. The parameters, such as Total Hardness, Chlorides, Nitrate and Sulphate were found within limit.

In Pune Region the ground water quality was monitored at fifteen locations. However deterioration is seen at the locations near Sugar and Chemical industries in Pune District only, where Total Hardness, Chloride and Sulphate levels were exceeding the limit.

6.3 Water quality of lakes in Nagpur and Gondia during Ganesh Festival

The Ganesh festival is celebrated in Maharashtra with great devotion. The immersion of idols in water bodies is an important religious custom at the culmination Ganesh festival celebrations.

On account of the immersion, materials like clay, bamboo, grass, wood, metals, jute, colors, painted cloth, flowers, incense sticks, dhoop, amphor, ash etc. are released into the water bodies. Added clay results in siltation of the lakes while immersed biodegradable materials contaminate the quality of the lake water.

During Ganesh festival the water quality was analyzed for five lakes in Nagpur and two lakes in Gondia. It is seen that the conductivity of the water is increased after immersion of idol in the lakes of Nagpur whereas it decreased in the lakes of Gondia. Except at the lake Sakkardara in Nagpur and Rani Talao in Gondia the concentrations of BOD and COD in the water of other lakes were increased after immersion of idol. After immersion, the BOD concentrations in the lakes of Nagpur were almost double.

A table showing the impact on water quality before immersion and after immersion of Ganesh idol is presented below.

Lakes in Nagpur

Sr. No.	Parameters	Ambazari Lake		Gandhisar Lake		Sonegaon Lake		Futala Lake		Sakkardara Lake	
		Before idol immersion	After idol immersion	Before idol immersion	After idol immersion	Before idol immersion	After idol immersion	Before idol immersion	After idol immersion	Before idol immersion	After idol immersion
1	pH	8.4	8.63	7.97	7.33	8.1	7.66	8.	7.83	8.2	7.73
2	Turbidity NTU	1	1	1	2	1	2	1	2	1	
3	Conductivity	1362	546	1232	910	1246	732	1232	1100	1248	796
4	DO	4.7	3.7	4	3.08	5.2	4.6	5.1	4.4	3.8	5.74
5	BOD	7.3	12	7.2	12	6.4	11	6.2	14	9	9
6	COD	24	45	34	45.6	17	38.8	15	40	33	25.6
7	SS	22	22	20	34	19	32	20	26	18	24
8	TDS	1021	345	1015	736	1024	508	1026	945	1015	538

Lakes in Gondia

Sr. No.	Parameters	Rani Talov		Murri Talov	
		Before idol immersion	After idol immersion	Before idol immersion	After idol immersion
1	pH	6.95	8.71	7.29	8.25
2	Turbidity NTU	3	1	1	2
3	Conductivity	34	832	390	912
4	DO	4.2	4.68	6	4.91
5	BOD	7.5	5.80	6.2	7.80
6	COD	33	16	24	23
7	SS	32	20	22	39
8	TDS	243	743	230	758

6.4 Sea water quality

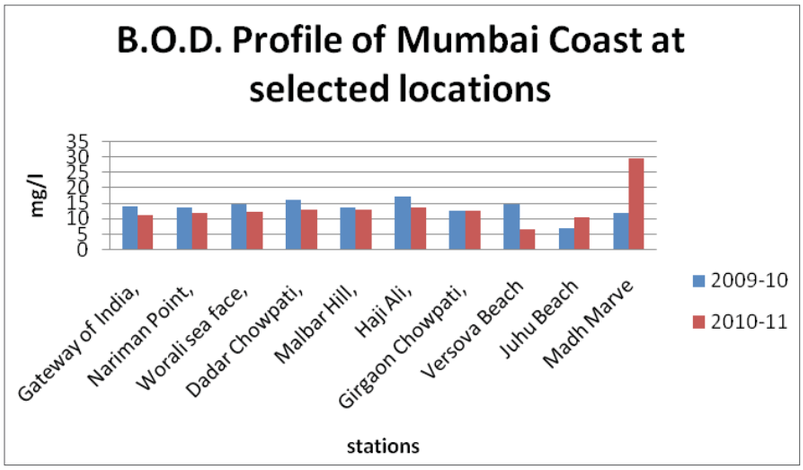
Coastal area pertaining to Raigad Region was monitored at six locations, where DO was confirming to the standard at all locations on Arabian Sea. However the level of BOD though improved over last year exceeded the limit at all locations except at Ambet Creek. Also there is a rise in COD levels, as compared to last year, at Murud and Kasid in Arabian Sea and is observed in the range of 60-364 mg/l.

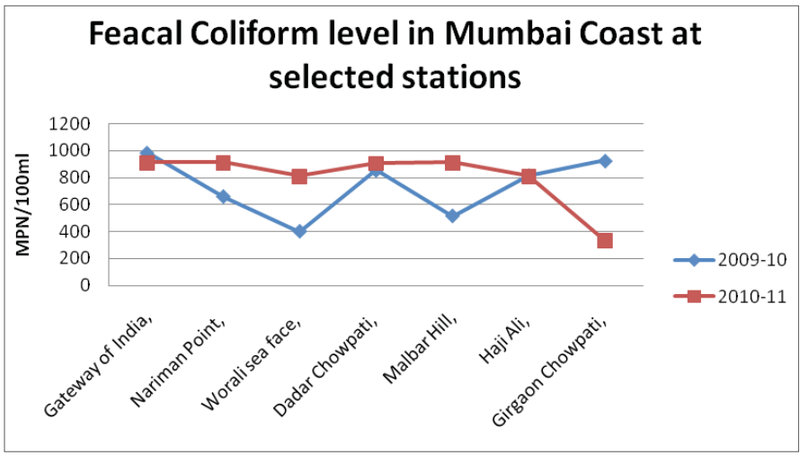
Part of Arabian Sea in Ratnagiri was monitored at three locations and it is noticed that there is no deterioration in water quality. However in waters of Karbavane creek in Chiplun the BOD and DO values did not confirm to the standards. Compared to last year Karbavane creek was observed to be polluted.

Vashi creek at Vashi Bridge and other two locations near Airoli Bridge and ONGC have been monitored to assess the saline water in Navi-Mumbai Region. It is observed from the analysis results that sea water near ONGC is highly polluted. The DO level though found within limit at Vashi Bridge and Airoli Bridge, the Faecal coliform concentration and BOD level also did not confirm to the standards. Higher concentrations of Faecal coliform and BOD recorded at Vashi Bridge were 1800MPN/100ml and 16mg/l resp. i.e. not adhering to SW-II class of water.

15 locations were monitored for assessing saline water in Thane and Tarapur area. At versova of Ulhas creek and at Jesal park of Bhayandar creek the highest BOD level (13mg/l) has been recorded. However DO was confirming to the standard at all locations. Except Bassien creek at vasai fort and Arnala Sea, the faecal coliform exceeded the limit at all locations and the highest concentration 1214 MPN/100ml was noticed at Mumbra creek. The highest COD (220 mg/l) was observed at Murbe creek in Tarapur which may be due to leakage/overflow of sump-1. At Navapur and Dandi the results show increasing trend in COD level, which may be due to discharge of primary treated effluent from sump 3 into BPT

Sea water quality in Mumbai Region was monitored at 11 locations fixed along the sea coast of Mumbai. The analysis results indicate though D.O. levels were satisfactory, the levels of B.O.D. exceeded the limit at all locations. The concentration of feacal coliform was found within the limit of SW-IV class of sea water at Girgaon Chowpati, Madh and Gorai beach only. Compared to last year, increase in feacal coliform concentration is seen at almost all locations of Mumbai Coast. Comparison with last year's data also indicates improvement in B.O.D. level except Juhu beach and Madh.





6.5 Air Quality

Ambient air quality has been assessed through fifty-five locations under NAMP, eight locations under SAMP and eight locations under CAAQM. It has been observed that there is rise in level of SO_2 in few commercial and residential areas as compared to last two year's ambient air quality monitored at different locations under NAMP, SAMP Project & CAAQM Stations. However compared to last year the level of NOx is reduced in industrial areas the rise is seen in its level in residential and commercial locations.

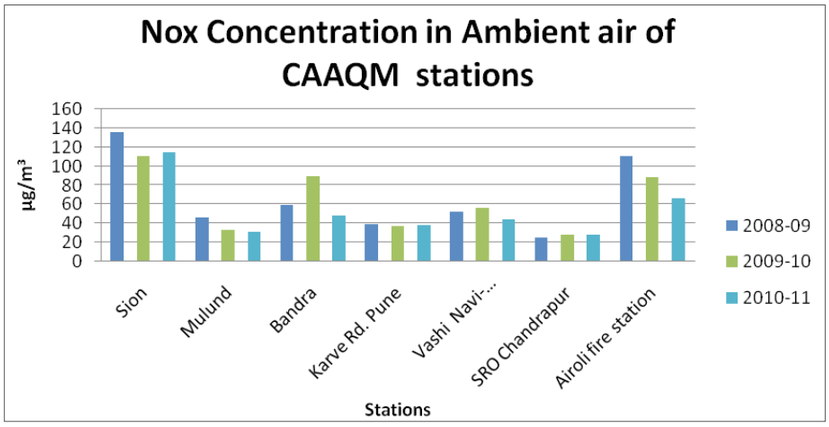
Though the level of RSPM increased during the year in industrial areas there is a decrease in RSPM level in residential and commercial areas. Out of the seventy –one locations, RSPM exceeded the limit at twenty-seven locations whereas NOx exceeded the limit only at one location in Mumbai.

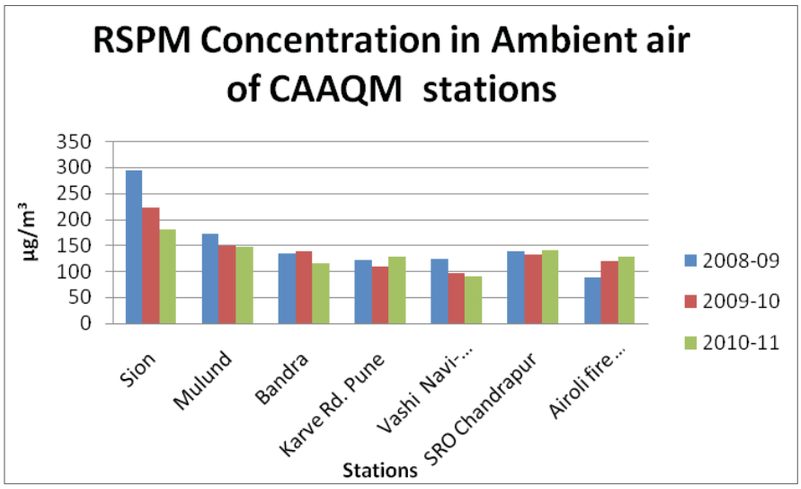
During the year Maximum air quality deterioration has been noticed in residential areas.

Ambient air quality monitored during past two years under NAMP, SAMP project and CAAQM stations is presented below.

Class	No. of locations monitored	Range of SO_2 µg / m3 2009-10	Range of SO_2 µg / m3 2010-11	Range of NO_x µg / m3 2009-10	Range ofNO_x µg / m3 2010-11	Range of RSPM µg / m3 2009-10	Range of RSPM µg / m3 2010-11
Industrial	19	7.5-62.9	6.4-55.1	14-54.7	9.8-50.8	57-199	48.4-216
Residential	37	5.5-55.2	5.3-62.4	6.8-111	7.3-115	50-223	46.2-211
Commercial	15	6.2-23.4	7.1-35.5	7.7-39.3	8.6-73.7	55-173	47.5-146

Under Continuous Ambient Air Quality Monitoring program the concentration of NOx and RSPM observed during last three years is shown in the following figures. It can be seen that there is considerable reduction in NOx levels during last three years at Sion, Mulund, Karve Road Pune and Airoli fire Station in Navi-Mumbai similarly the RSPM level has also reduced at Sion, Mulund, Bandra in Mumbai and at Vashi and Airoli fire station in Navi-Mumbai.





- **Raigad**

  Raigad region accommodates highly polluted areas like Panvel, Khopoli and also major industrial areas like Patalganga, Roha and Mahad.

  The ambient air quality was monitored at five industrial locations, four residential locations and one commercial location. With all efforts, there is improvement in the quality of air in Roha and Mahad locations as the levels of SPM and RSPM were found well within limit as compared to last three years. During the year Kharghar, Panvel city and Khopoli were found to be most polluted places in the Region. Necessary measures are being taken to reduce the pollution.

  It is noticed that the problem of major Air Pollution arises due to heavy traffic density near Panvel and Kamothe area. Moreover there is typical problem of non-availability of buffer zone between the residential and the industrial zone, resulting in the said problems.

- **Aurangabad**

  In Aurangabad region eleven locations were monitored in all categorized as six Residential locations, two commercial and three industrial locations for assessment of air quality in the Region. It has been noticed that there was an improvement in levels SPM and RSPM almost at all places. However RSPM exceeded the limit at industrial as well as residential location in Jalna. The RSPM also exceeded the limit at residential and commercial locations in Latur.

  Also the fact remains that in Aurangabad there are many industries such as Steel industries, Stone crushers, Distilleries and Thermal Power Plants. Most of the industries have installed air pollution control systems. The major sources of air pollution are vehicular pollution, bio gas burning, construction activities, mining activities, stone crushing industries, D. G. sets and industrial boilers and furnaces. The reason behind increase of such pollution is being traced for taking further necessary control measures.

- **Kolhapur**

  Ambient air quality in Kolhapur region was monitored at seven locations in all, three in Kolhapur, three in Sangli and one in Chiplun. The analysis results indicate improvement in ambient air quality in Kolhapur as compared to last year.

However the air quality was much deteriorated at Kupwad (industrial location) and at Rajwada chowk a commercial place in Sangli where all the parameters were far exceeding the limit. Compared to last year, places in Sangli were most polluted during the year. The reason behind increase of such pollution is being traced for taking further necessary control measures.

- **Navi-Mumbai**

  Two Continuous Ambient Air Quality stations and three stations under NAMP Project have been monitored in Navi-Mumbai Region. The results indicate that there is certainly rise in RSPM concentration compared to last year. At MIDC office Taloja the average SPM level recorded was 499µg/m³. The reason behind increase of such pollution is being traced for taking further necessary control measures.

- **Amravati**

  The ambient Air quality monitored in Amravati and Akola cities has shown rise in RSPM values at all the locations as compared to last year. The RSPM exceeded the limit at commercial and residential locations. The reason behind increase of such pollution is being traced for taking further necessary control measures.

- **Thane**

  MPCB has identified industrial zones in Tarapur to monitor National Ambient Air Quality. These are N-zone, T zone and K zone where there are chemical industries. At present, MPCB is monitoring at its own building.

  Due to heavy vehicular traffic in the city and various construction activities the air quality is deteriorated in Thane Region. Boiler and stone crushers are also the major sources besides vehicular pollution. Thane, Bhayendar, Tarapur areas were monitored for ambient air, where it has been observed that RSPM level exceeded the limit at industrial locations in Bhayandar and Tarapur.

  The ambient air quality monitored at Thermal Power Plant was well within the limit.

  Most of the textile and chemical industries are using coal as fuel for boiler. This results in emissions of high particulate matters and gases like SO_2, NOX etc. Some of the industries have provided the scrubbing system for process emission and some of the coal fired boiler industries have provided multi cyclone separator / wet scrubber. However, due to inadequate capacity / improper operation and maintenance of air pollution control equipment, the problem of air pollution exists.

  The details of fuel burning patterns and SO_2 emissions are as below

  i) No. of Coal fired boiler industries:- ---------- 32

  ii) Total Coal consumption by the factories:------- --804 T/D

  iii) Total furnace oil consumption by the factories:---170 T/Day

  iv) Total LDO consumption by the factories:- ----------51.27 T/Day

  v) Amount of SO_2 due to burning of coal/FO/LDO:- --25.74 T/Day

  It is observed that as there are many Engineering Units, and therefore there is a heavy movement of vehicles plying in and around the industrial area. In order to control vehicle

pollution, MIDC needs to improve Road network. Currently, MIDC Tarapur industrial area is having asphalt road network of 63.0 km and the works of making concrete road network has been taken up by MIDC authority and have completed a stretch of 3.0 km.

Major textiles units in the area are using coal as fuel in addition to CPP contributing particulate matter emissions. Total coal consumption in MIDC by the factories is 80.6 MT per day. Chemical & Pharmaceutical industries which are using furnace oil as fuel are the cause of SO_2 emissions.

- **Ambient Air quality in Pune and Solapur**

Under public interest litigation in Hon'ble Supreme Court of India pollution in some cities was under consideration. Pune and Solapur cities were included in this petition. As per the directives of Hon'ble Court action plans had been prepared to curb air pollution in these cities.

During the year the Ambient air quality was monitored through four locations in Pune, one location in Pimpri-Chinchwad and two locations in Solapur under NAMP a program sponsored by CPCB. The air quality observed during the year is depicted in the table below. The values are expressed in annual mean concentration.

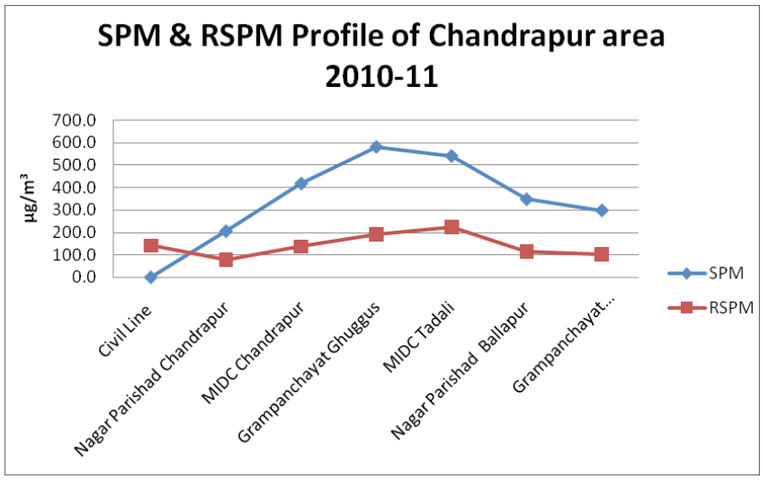
From the table it is seen that SO_2 level was well within the limit at all stations. However maximum level of NOx exceeded at two commercial locations in Pune city and one location in Pimpri-Chinchwad. Much variation is seen in RSPM concentration which ranges from 12 µg/m³ to 386µg/m³. The variation represents seasonal impact especially in the precipitation months.

Name of City	Class of area	SO_2(µg/m³)			NO_x(µg/m³)			RSPM (µg/m³)		
		Minimum	Maximum	Average	Minimum	Maximum	Average	Minimum	Maximum	Average
Voronoko School, Solapur.	Residential	14.2	18.3	16.7	29.2	41.5	34.7	42.3	110.5	70.6
WIT Campus, Solapur.	Residential & Commercial	13.5	18.7	16.6	28.2	42.1	34.9	40.1	115.6	73.2
PCMC Bldg., Pune.	Commercial	7	45	26	10	149	49	12	386	87
Bhosari, Pune	Industrial	11	95	31	12	85	40	15	237	91
Swargate, Pune	Commercial	8	56	22	9	92	54	32	315	86
Nal Stop, Pune	Commercial	9	62	21	11	76	43	28	228	89
Karve Road, Pune	Commercial	5	32	11	19	110	39	42	276	129

- **Ambient Air Quality in Chandrapur**

Chandrapur district is famous for its sprawling coal mines. The mineral based industrial Chandrapur district is famous for its sprawling coal mines. The mineral based industrial development and rapid urbanization in this district has resulted in pollution and environmental degradation. It was perceived that pollution, mainly air pollution, at Chandrapur is a serious threat to environment and public health needing urgent intervention by all concerned. MPCB has therefore prepared **'An integrated action plan to control pollution at Chandrapur'** covering various aspects of the environmental degradation and the pollution. The proposed plan stipulated implementation of the time bound actions through an effective and well orchestrated interdepartmental coordination.

MPCB has been monitoring ambient air quality (AAQ) within and around industrial, residential and commercial establishments of Chandrapur District. The ambient air quality observed during the year indicates that the parameters SO_2 and NOx are within the limit. However SPM and RSPM concentration remained above the limit at most of the locations except Nagarparishad Chandrapur, which is presented in the following figure. The highest SPM is seen at Grampanchayat Ghuggus whereas the highest RSPM is recorded at MIDC Tadali.



- **Ambient Air Quality observed during Ganesh Festival in Nagpur Region:**

  Ambient air quality monitoring has been carried out in Nagpur, Gondia,\Wardha and Bhandara cities to observe the changes in air quality during Ganesh festival. The air quality parameters like SO_2, NOx, RSPM and SPM were assessed. The analysis results are depicted in the following table. These results indicates that though the parameters SO2, and NOx remained well within the limit, the parameter RSPM exceeded the permissible limit before as well as during Ganesh festival in Nagpur city. However RSPM levels exceeded during Ganesh festival in Gondia, Wardha and Bhandara cities.

  A table illustrating minimum, maximum level of parameters is presented below:

Parameters	Nagpur				Wardha				Gondia				Bhandara
	Before Ganesh festival		During Ganesh festival		Before Ganesh festival		During Ganesh festival		Before Ganesh festival		During Ganesh festival		During Ganesh festival
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
SOX	11	26	12	39	13	35	10	34	14	21	26	40	42
NOX	19	40	19	58	22	47	18	47	27	34	37	54	55
RSPM	26	23	14	133	21	88	11	33	23	33	68	401	644
SPM	95	568	51	393	67	364	30	213	77	99	146	622	754

6.6 Industrial Pollution Control

The status of industries under Central Action Plan as on March 2011 is shown in following table.

It is observed from the table that 66% of the industries were complying with the standards and 16% industries were closed. However it was also found that 18%. Industries did not comply with the standards. The Board has initiated action against them.

Sr. No.	Region	Total No. of Units	Total No. of Units Closed	Total No. of Units Complying with the Standards	Total No. of Units not Complying with the Standards
1	Mumbai	6	0	6	0
2	Navi - Mumbai	43	7	34	2
3	Thane	98	10	88	0
4	Raigad	82	5	65	12
5	Kalyan	37	6	28	3
6	Pune	126	8	103	15
7	Nashik	113	19	43	51
8	Nagpur	38	8	20	10
9	Amravati	19	8	8	3
10	Aurangabad	112	20	78	14
11	Kolhapur	137	39	60	38
12	Chandrapur	21	1	16	4
	Total	**832**	**131**	**549**	**152**

- **Comprehensive Environmental Pollution Index (CEPI)**

  The Central Pollution Control Board (CPCB) has identified five industrial areas of Maharashtra viz: Dombivali, Tarapur, Aurangabad, Chandrapur and Navi Mumbai as critically polluted. Accordingly MPCB, in discussions with the stake holders, as per the CPCB guidelines has prepared an action plan for pollution control in these industrial areas.

  CPCB has considered these action plans and accordingly Ministry of Environment and Forest (MoEF), Govt. of India, has lifted the moratorium on the new industrial development in the four industrial areas namely Dombivali, Navi Mumbai, Tarapur and Aurangabad. MoEF and CPCB have emphasized the need of effective monitoring and evaluation of various actions proposed under CEPI action plans.

  The action plan envisages initiatives of various stake holders including Government and Industrial Sector and therefore, it is necessary to develop a monitoring mechanism for the effective and timely implementation of the action plan.

- **Aurangabad**

  Aurangabad city identified as one of the critically polluted areas in the country by Ministry of Environment and Forest (MoEF), Government of India and Central Pollution control Board (CPCB). In this context, MoEF and CPCB had directed regional office to prepare Action Plan to reduce the CEPI rating.

  The Regional Office, Aurangabad initiated strict actions to comply with the directives with respect to the Action Plan prepared and for the same the survey was conducted in Waluj Industrial Area in the July 2010.

  The first phase of survey focused on following objectives:

  I. To identify the units those having inadequate water and air treatment and scientific collection and disposal facilities for hazardous wastes.

  II. To identify the units those do not have adequate land for the disposal of treated effluents.

III. To verify the efficiency of pollution control systems and

IV. To identify those units who have not provided solvent recovery plant and proper storage facility for the solvent.

Further refining the survey objectives, sector wise meetings were arranged for the units under category of bulk drugs, pharmaceuticals, chemical, breweries & distilleries, electroplating, and engineering to discuss following points:

I. Optimum Utilization of Raw Material (as per stochiomatrical requirement),

II. Reuse & Recycle of Chemicals,

III. Solvent Recovery,

IV. Isolation of high TDS, BOD and COD streams,

V. Reduction of water,

VI. Efficiency of Pollution Control Systems,

VII. Environmental Compliance,

VIII. Submission of Material Balance per batch of per ton of product,

IX. Adoption of Cleaner Technology, etc

During the survey, 43 industries were indentified that did not comply to the norms and show cause notices were issued to 26 units and proposed directions to 17 units. Further interim directions were issued to 17 units.

These units were directed to revamp their old ETP for controlling seepages and leakages in MIDC and to upgrade existing ETP which do not meet the prescribed standards. Installation of solvent recovery plant and if already installed in place, it should achieve recovery upto 95%-98% for bulk drug manufacturing, pharmaceutical and chemical units.

The next task was identification and separation of high concentrated streams and there by treating it separately from these units. Also to upgrade and increase the efficiency of the existing air pollution control system by installing wet scrubber or ventury scrubber wherever required.

In this regard the industries have been directed to submit the detail proposal on aforementioned 9 points.

Further meetings were conducted sector wise on 15.02.2011 and 17.02.2011 to verify the compliance of proposals submitted by individual industries on above mentioned points to reduce the CEPI score and further necessary instructions were given to industry for compliance of the same.

Vision 2020:

District Collector, Aurangabad had taken up the work to prepare the VISION Document for Aurangabad District. The Regional Office, MPC Board, Aurangabad was part of the working group for preparation of the VISION Document-2020 as Maharashtra Pollution Control Board is the only authority regulating the environmental pollution related activities in Aurangabad district. MPCB through regular monitoring of agencies of industries and urban councils undertakes Prevention and control of pollution of water, air and land resources.

Regional Office, Aurangabad has prepared a Report on VISION 2020 to identify shortcomings, challenges in respect of existing infrastructure in the district and issues in the service level in the field of Environment with vision statement "Economic and sustainable development of district by ensuring quality of water bodies along with healthier & cleaner air to breathe and clean and calm surrounding".

The said report is incorporated in the VISION Document 2020 prepared by the District Collector, Aurangabad.

SMART SHENDRA:

MPCB had prepared report on Status of Environment and action taken by MPCB to implement the Smart Community Project as proposed by Japanese Government and Government of India by sustainable development for the upcoming new industrial area at Shendra.

- **Navi-Mumbai**

Following industries have adopted Cleaner technology for minimization of waste and to reduce CEPI

Sr. No.	Name & Address of Factory	Particular project/treatment plant of Air/Water/clean Technology	Results after Cleaner technology
1	M/s. BASF India Ltd. Plot No. 12, TTC Industrial Area, MIDC Turbhe, Navi Mumbai.	Fuel switch over from Furnace oil to bio-briquette.	2300 T/Annum CO2 emission reduced. 235.77 KL furnace oil saved. SO2 Emission reduced 20kg/day. Planned to run Briquettes fired boiler for 90% of duration.
		Replacement of the use of methyl bromide (ODS) with a greener chemical Di-methyl Sulfide.	Bromine gas emissions reduced.
2	M/s. Pfizer Ltd, TTC Industrial Area, MIDC Turbhe, Navi Mumbai.	Fuel switch over from furnace oil to Briquettes for 12 TPH Boiler	Reduce So2 emission & recovered extra heat from exhaust gas by introducing economizer. Obtained carbon credit of 12200 MT.
3.	M/s. NOCIL Ltd, Plot No. C-37, TTC Industrial Area, MIDC Pawne, Navi Mumbai.	The source effluent stream from the Accelerator plant is segregated and treated to recover the intermediate product. The product is then recycled back in to the process.	Beside recovery of valuable product, there is COD reduction of the source stream by 50%.
		In the Antioxidant process, the acid catalyst being used was getting lost through the aqueous stream. By carrying out process modifications and incorporating necessary charges in the equipments	The catalyst is now extracted and recycled back into the process.

4	M/s. Cabot India Ltd., Plot No. 3, TTC, MIDC, Ghansoli, Navi Mumbai.	Utilization of heat content of tail gas for captive power generation (4 MW)	Previously tail gas (mixture of co-40-45% & other gases O2, CO2, N2 etc) was flared. Tail gas temp. is approximately 2200C. Now by investing approx. 40 to 50 Crores 4 MW capitive power plant installed & commissioned.
5	M/s. Coromandel Fertilizers Ltd. Plot -22/1, TTC, Mahape, P.O Navi Mumbai.	Solvent Replacement. (Replacement of CCT by Toulene)	Previously CTC (Carbon tetra Cholide) Solvent was used which is Ozone depleting substance. CTC solvent requirement was approx. 450Kg per ton of endosulphan. Phase wise CTC was replaced with new solvent toluene. At present use of toluene is 100kg per ton of endousulphan.
6	M/s. V.V.F. Ltd. Plot No. V – 41, MIDC Taloja.	Change of Fuel from furnace oil to CNG	
7	M/s. ONGC Ltd., Uran Plant, Uran, Dist. Raigad.	1) Flare Gas recovery unit has been installed & run so as to ensure zero flaring of Hydrocarbons. 2) BLABO process is used for cleaning of crude oil storage tanks to insure minimum oily sludge generation.	
8	M/s Asahi Glass Limited, T-7, Taloja MIDC	Fuel changed from Furnace oil/LDO to LPG	

- **Tarapur**

Tarapur was declared as critically polluted area by the CPCB on the basis of CEPI index, on which Regional office has prepared comprehensive action plan which covers the long term and short term action plans, so as to achieve pollution under control. The Tarapur action Plan was submitted to MOEF / CPCB on October 26, 2010.

The Ministry of Environment and Forest (MoEF) has lifted this moratorium for only Tarapur Industrial area in Maharashtra. The Implementation of this Action Plan is under Progress. All solvent using Industries and Textile processing Units have been instructed for recovery of solvent and reuse and recycle of treated effluent respectively. MIDC shall carry out massive tree plantation program on empty / reserved plots, and on boundary of MIDC area. If outlet quality is not achieved, advanced technologies such as MBR / RO are to be enforced. The Board has also pursued the matter with the Mahanagar Gas limited / GAIL to make available CNG to MIDC Tarapur, and replaced RCC drainage by HDPE.

- **Dombivali**

The Dombivali Industrial Cluster, based on CEPI, was declared as highly polluting industrial estate, ranking second in Maharashtra and fourteenth all over India. The Board had prepared an action plan to bring down CPI score which was implemented and complied, due to which the CPCB has removed the name of Dombivali Industrial Cluster from the list of highly polluting industrial estate.

- **Emission Trading Scheme:**

  The Ministry of Environment and Forests (MoEF) has initiated a new innovative approach on Environmental regulation through Emission Trading Scheme (ETS). The technical committee is constituted by MoEF for execution of the pilot project. The Emission Trading Scheme is basically designed as an add-on technical innovative initiative at the Continuous Emission Monitoring System (CEMS).

  Maharashtra Pollution Control Board is implementing pilot project on Emissions Trading Scheme (ETS) in Maharashtra. M.P.C. Board in its 153 Board meeting held on 25/03/2011 and 29/03/2011 accorded its approval for participation in the pilot project on ETS.

  The project will involve field activities including data collection, CEMS inspection, monitoring, calibration, beside HQ work related to co-ordination progress, reviews, QA/QC, data hosting etc. The field activities need to be dealt by concerned SROs under overall control and supervision of RO. It is proposed to initially cover 5 CEPI areas under ETS scheme, though CEMS being considered for all designated industries in the State.

Success stories:

- **M/s. Ispat Industries Ltd., A-10, MIDC Kalmeshwar, Dist. Nagpur**

  IN Ispat Industries Ltd. manufacturing of Cold Rolled & Sheets, pickling & galvanizing are the major activities carried out from which industrial effluent is generated. Daily quantity of industrial effluent is 180 CMD.

  Industry is having Acid recovery plant for pickling waste and primary, secondary & tertiary treatment plants for effluent from CRM & CCL section. Treated effluent from CRM section disposed by solar evaporation pond.

  Due to seepages and leakages of effluent this office received complaint, MPC Board directed to send effluent to CETP Butibori for further treatment. Now, industry is regularly sending the primary treated effluent to CETP Butibori. Similarly, entire effluent and sludge accumulated in the solar evaporation pond is sent to CETP Butibori.

  Industry is in process to achieve zero discharge of effluent by establishing appropriate treatment plant such as Riverse Osmosis.

- **M/s. Dinshaw's Dairy Pvt. Ltd., Gittikhadan, Gorewada Road, Nagpur**

  M/s. Dinshaw's Dairy Pvt. Ltd., Nagpur is engaged in manufacturing of process milk & dairy products. Industry is having ETP for treatment of industrial effluent, but due to improper operation & maintenance complaint was received by this office regarding discharge of polluted effluent into nalla causing a foul smell.

  Maharashtra Pollution Control Board's officials investigated the matter and based on the facts, a closure direction was issued. After submission of proposal regarding up-gradation of ETP, MPC Board issued conditional restart direction and directed industry to send primary treated effluent to CETP Butibori for further treatment.

  Now, the industry is regularly sending treated effluent to CETP Butibori.

  In this regard the Regional Office, Nagpur has issued 29 nos. of closure direction including power cut as well as water supply disconnection to defaulting industries during April-2010 to March-2011due to non-compliance of consent conditions.

- **Performance of CETP in Nagpur**

In Nagpur Region only one CETP is in operational at MIDC Butibori having capacity of 5.0 MLD. The industries located in MIDC Butibori and Hingna are sending their treated effluent to CETP Butibori. Besides this three industries located out of MIDC are also sending their primary treated effluent to CETP Butibori for further treatment and disposal.

The Board is regularly monitoring the CETP and from the analysis report it is seen that, the treated effluent samples are not meeting to the prescribed standards. This is due to poor operation and maintenance of CETP, which needs more attention. The BOD and COD values at the outlet are found exceeding the standards most of the times. Due to difference in analysis results of the CETP authority and MPCB a joint vigilance samples is collected from the CETP. The Board has also obtained BG of Rupees Five Lakhs towards the operation and maintenance of CETP.

For disposal of treated effluent from CETP the HRTS system is developed by NEERI, Nagpur and maintenance of same is being done by MIDC Nagpur and huge plantation of Eucalyptus is done on about 25 hector of land near CETP. Looking into the industrial scenario in the region the operators of CETP is also proposing to enhance the CETP capacity from existing 5 MLD to 10 MLD.

It is proposed to set up the CETP at Hingna of 2 MLD capacity in future. The land is already allotted by MIDC and processes are going on. Allotment of work to carry out feasibility is being finalized by Industries Association.

Performance of CETP (2010-2011)

Name of the CETP	pH		BOD		COD		TAN		O & G	
	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet
Butibori CETP Pvt. Ltd.,Plot No.P-13,MIDC Butibori,Nagpur	8.05	8.02	357	91	936	255	17.4	13.0	15.70	5.02

- **CETP TTC MIDC:**

Thane- Belapur CETP in MIDC area was set up under the guidance from MoEF, MPCB, and MIDC under the World Bank scheme. The plant of 12 MLD capacity (Phase-I) was commissioned in March 1997.

In order to tackle extra load generated by the industries in TTC industrial area, an Additional common effluent treatment plant having the capacity of 15 MLD (Phase -II) was envisaged and commissioned in 2006.

CETP scheme was implemented mainly to tackle the problem of liquid effluents generated specifically from small scale industrial units (SSI) for those who were having techno-economic problems. The facility was also made available to all medium and large scale industrial units with aim to get advantage of hydraulic load and to utilize common single disposal system.

MIDC has provided underground effluent collection system to collect the treated effluent from industrial units for further treatment at CETP of the industrial area. Quantity of Industrial and domestic effluent generated in MIDC industrial Area is about 26 MLD. Domestic effluent of Pawane village ,Indira nagar, Turbhe are also treated in this CETP, further this treated effluent is finally discharged 7 km away into the TTC creek as per recommendations of NIO.

- **Details of CETP are as mentioned below:**

Sr. No.	Units	12 MLD Plant	15 MLD Plant
		Unit Capacity in CuM	Unit Capacity in CuM
1	Equalization Tank	2375*2Nos.	2,500*2Nos.
2	Inlet Chambers	8	10
3	Flash Mixer	6	10
4	Clariflocculator	1,716	1,980
5	Aeration Tank	15,500	16,000
6	Clarifier	2643	3200
7	Sludge Sump	70	125 (2 Nos.)
8	Thickner	280	310 (2 Nos.)
9	Filtrate Sump	45	160
10	Sludge Drying Beds	400 Sq. Mt.*7 Nos.	-----
11	Centrifuge Decanter (15 CuM/hr)	1 Nos.	2 Nos

CETP (TTC)

- **CETP TALOJA MIDC:**

CETP at Taloja is designed to handle 10 MLD of effluent. Trade effluent from the industries is collected by means of network of closed pipelines. The effluent quantity reaching the CETP is within the installed capacity in the dry season. However in monsoon the effluent quantity is higher and perhaps some quantity of untreated effluent are likely to be discharged into river Kasardi. Nevertheless with the rain water the effluent gets diluted and the impact is not significant. Up-gradation in the existing aeration tank by installing Diffused Aeration System, carried out at a cost of ₹1.25 crores in May 2005 has resulted in treated effluent quality being well within prescribed standards and there is also increase in effluent treating capacity from 10 to 12 MLD.

CETP has provided de-canter and filter press for sludge removal (hazardous waste) This hazardous waste generated from CETP in the form of sludge is regularly sent to CHWTSDF at MWML, Taloja for further disposal.

Diffused aeration system provided at CETP Taloja

CETP has augmented the quantity of effluent treatment by providing additional CETP of 10 MLD capacity adjacent to the existing CETP, thus the total capacity of effluent to be treated will be 22 MLD.

The treated effluent from CETP is disposed into the creek through a closed 7 kilometers long pipeline by means of gravity into Panvel creek. The blockage / breaking of effluent collection pipelines to CETP and treated effluent disposal pipeline from CETP to the final disposal point is a cause of effluent entering adjacent rivers. Vigilance is maintained by MPC Board, and any such incidence is brought to the notice of MIDC officials and MIDC staff is directed by MPC Board to carry out repairs at the earliest.

Common Effluent Treatment Plant (as on 31/03/2011)

Sr. No.	CETP	Date of Commission	Total No. of Member Industry	Quantity of Effluent MLD	Project Cost	Subsidy Released	
						Central Govt.	State Govt.
1	Thane Belapur CETP	Phase -I Nov-97 Phase-II Mar-2006	3137	Phase -I 12.0 Phase-II 15.0	Phase -I ₹4 Crs Phase-II ₹8.25 Crs	₹256 Lac	₹256 Lac
2	Taloja CETP Co-op Society Ltd	Phase -I Dec-99 Phase-II Feb-2008	930	Designed capacity 22.50 MLD Presently Receiving 18.00 MLD	Phase-I ₹6.16 Cr. Phase-II ₹15.71 Cr.	₹304.41 Lac (MoEF)	MPCB ₹99.35 Lac. MIDC ₹397.40 Lac

Performance of CETP (2010-2011)

Name of the CETP	pH		BOD		COD		TAN		O & G	
	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet	Average Inlet	Average Outlet
TTC CETP	7.41	7.25	640.0	62.83	1782.2	171.04	40.26	15.19	6.37	3.20
Taloja CETP Co-op Society Ltd	6.30	6.70	387.5	100.41	912.66	301.0	96.90	82.92	4.35	1.4

6.5 Pollution Complaints Attended and Control Measures Taken

1. Complaints regarding Air Pollution:

The Regional office Thane has received repeated complaints regarding air pollution at Ghodbunder Road area against M/s. Ravi Steel & M/s. Shanti Textiles therefore the board has issued directions u/s 33A of the water (P&CP) Act 1974, Air (P&CP) Act 1981 to both the industries, also filed a criminal case in the court of law under the provision of water (P& CP) 1974.

2. Complaints against M/s. Thoufeeq Fish Meal & Oil Co. Pvt. Ltd.:

The Ratnagiri office was receiving number of complaints against M/s. Thoufeeq Fish Meal & Oil Co. Pvt. Ltd. regarding bad odor. The industry has installed deodorizing unit consisting of drier vapor condenser & burning of uncondensed vapors in boiler at a temperature about 600OC. Industry has also carried out the up-gradation of plant and machinery the installation of parallel production machinery, boiler, generator and dust collectors & have increased the stack height to boiler. This has resulted in to reduction of trade effluent generation & the foul smell. Now the problem is solved and there is no such complaint.

6.6 Environmental Problem and Control Measures

3. Oil Spill Incidence:

The oil spill was resulted due to the collision between MSC Chitra and M V Khalija III on Saturday, August 07, 2010 at round 9.50 a.m. The collision had caused considerable damage to the Marine Ecosystem and to 110 Km shoreline of four districts, Mumbai City, Mumbai Suburban, Thane and Raigad. It travelled to the shore, damaging shoreline, beaches and Mangroves. The fallen containers have created a problem for transporting channel and have a threat of severe environmental accident.

The MPCB team visited the Coast Guard Office and discussed the issues and threats likely to be caused due to the oil spill and Hazardous Cargos. A legal action has been initiated against the defaulters under the Environment (Protection) Act, 1986.

The coast guard carried out anti-pollution operations by spraying dispersants on the thick oil slick. MPCB has coordinated the cleaning of the oil spill with various National and International agencies. Owners of MSC Chitra have appointed The International Tank Owners Pollution Federation Limited (ITOPF) to assist and advice on pollution cleanup measures. ITOPF experts and MPCB officials carried out extensive surveys and recommended cleanup operations.

The Maharashtra Pollution Control Board has taken proactive step to provide financial assistance to the four district collectarate to mobilize the working manpower in affected areas.

Funds were released District-wise for the cleanup operations is as below:

Thane:	₹10 Lakhs,
Raigad:	₹30 Lakhs,
Mumbai (city):	₹10 Lakhs
Mumbai Suburb:	₹15 Lakhs.

As the Owner MSC Agency India Pvt. Ltd. is liable to reinstate or restore damaged or destroyed elements of the environment, MPC Board has prepared budget of Rupees Three Crores.The Maharashtra Pollution Control Board has assigned work to NEERI and NIO for conducting Environmental Impact Assessment (EIA) Report on pollution due to oil spill and other hazardous substances.

The Maharashtra Pollution Control Board has issued work order to carry out EIA Study on pollution due to oil spill and other hazardous substances to NEERI and NIO. The amounts sanctioned were as follows:

NEERI:	₹64.5 Lakhs
NIO:	₹1.66 crore
Total:	₹2,30,50,000/- (Two Crores Thirty Lakhs and fifty thousand only)

MPCB has continuously monitored and collected samples from twenty–five locations. Out of 1150 samples analyzed, 48 were detected oil positive and 5 were detected pesticide positive. The Coast Guard was made assured about severity of incidence and probable impact of oil and hazardous cargoes on environment.

Hon'ble Central Minister for Environment and Forest and MPCB Officials

IOC, TERI, D.G. Shipping Personnel, officials of the MPC Board, District Collectorate Offices, Local Bodies and Police Department etc. were involved in clean up operations. Bioremediation process was implemented by TERI for cleanup of beaches affected by the oil spill. The monitoring of the Phosphine gas is carried out at Raigad, Navi Mumbai & Mumbai by United Phosphorus Limited and UICT, Mumbai. The hazardous material washed ashore is safely disposed off through M/s United Phosphorus Limited, Vapi, Gujarat and to M/s MWML, Taloja, Navi Mumbai.

Considering the treat of Environmental Damage to the Maharashtra coast due to oil spill, MPC Board has prepared Oil Spill Contingency Plan which is finalized and in process of implementation.

Site visits by Hon'ble Ministers and Officials

7. Environmental Studies and Surveys

7.1 Noise level Survey during Ganesh Festival (2010)

In its efforts to curb the menace of noise pollution especially during festive season, the Maharashtra Pollution Control Board (MPCB) initiated survey across the state of Maharashtra to assess the noise levels during Ganesh festival. The survey was done for five days beginning September 18 to September 22, 2010, wherein the noise levels were monitored at various locations.

- **Objective of the survey:**
  - To monitor the ambient noise levels for five days from 1800 hrs to 24 hrs at various locations in different cities of Maharashtra.
  - To determine the maximum and minimum noise levels at various locations.
  - To find out the noisiest location, so that the mitigation measures can be taken in future.
  - To involve youths (students) who could communicate to the target audience and thus help in MPCB's endeavors in creating awareness about the environment and the ill-effects of Noise Pollution and further explaining noise measurements in decibel.
- **Methodology of the survey:**

  During the five days i.e September 18 to September 22, 2010, the noise levels were monitored, at a certain distance from Ganesh Pandals, those closer to residential buildings. All the measurements were done using recalibrated Sound Level Meters (Type II)

  The noise measurements were made at the fast response mode keeping in view the quickly changing nature of noise levels, using 'A' filter. The main purpose of this exercise was to determine how these noises affects normal human beings residing in those areas or staying closer to the area and disturb the environment as well.

  Total 89 locations were covered under 12 major cities of Maharashtra for the present study.
- **Results**

  The study shows that with all the efforts though there was some awareness about noise pollution at all locations, on the last day of monitoring i.e. on September, 22, noise at all the locations crossed the threshold limits mentioned in EPA (1986) and there was an increase in the overall noise levels.

  The following observations were made at different locations:
  - Among all the 25 locations in Mumbai, Bhandup was the noisiest suburb.
  - In Navi Mumbai, CBD was found to be the noisiest place.

- Earlier noise levels in Thane were monitored at five locations, but this year four new locations were added. All these four locations fall under silence zone. Results show that the noise levels exceeded the permissible limits (50dB) at these locations. Higher noise levels were observed at Gaondevi Mandir and Court Naka area, which also falls under silence zone.
- In Pune, Lakshmi Road and Karve Road were found to be noisier as compared to other locations.
- From results it is interpreted that in Nashik, all the five locations were more or less equally noisy but above the limits.
- In Aurangabad district, Gulmandi was observed as the noisiest place.
- However, in Nagpur all the five locations were found to be less noisy as compared to other locations in the state and among all these five, Reshimbag was the noisiest.
- Results show that all the three locations of Kalyan were very noisy and crossing even 90 dBA.
- Among the three locations of Amravati, Rajkamal square location was observed as the noisiest location.
- In Jalgaon district, Shastri Tower chowk was found to be the noisiest place all through the five days.
- In Kolhapur district, Mahalaxmi mandir was the noisiest area.
- In Satara, noise levels at all the three locations were quiet comparable.

- **Conclusion:**

  It could be very well said that with efforts on environment awareness programs and campaigns conducted by the Board and other Regulatory Agencies there is significant decrease in noise levels in some of the cities like Thane, Pune, Nashik and Satara.

  Cities like Mumbai, Navi Mumbai and Kolhapur showed significant increase in noise levels. Besides this, cities like Nagpur and Jalgaon showed similar range of noise levels as it was in year 2009 for which necessary measures are being taken by the Board.

7.2 Testing of Fire crackers to assess the compliance of Noise Level Standards prescribed under Environment (Protection) rules, 1986.

- **Introduction**

  MPCB for last few years is trying to create public awareness towards the high noise levels generated during Diwali by fire-crackers and its adverse effects on health. As a part of the awareness activity, MPCB in association with Mumbai Police and the NGO “Awaaz Foundation” had organized a testing of fire crackers on October 26, 2010 at Bhakti Park, Wadala, to assess the compliance of noise levels standards prescribed under Environment (Protection) Rules, 1986.

Noise standards for fire crackers have been notified vide GSR No.682 (E) dated 5th October, 1999 under the Environmental (Protection) Act. As per this notification, the manufacture, sale or use of fire crackers generating noise levels exceeding 125 dB (AI) or 145 dB (C)pk at a distance of four meters from the point of bursting are prohibited for individual fire crackers. For fire crackers in series, these noise limits are suitably made more stringent depending upon the number of crackers in series.

- **Observations:**

  Samples of different types of crackers from various companies available in the market were procured and were tested in an open space at Bhakti Park, Wadala. The noise measurements were made at a distance of four meters from the fire crackers. For the measurements, Type I noise meters were used, one for peak measurements and another for Impulse measurements.

  The values of the noise levels are given below:

Testing of fire crackers at Bhakti park Wadala Mumbai (26/10/2010)

Sr. no.	Name of company	Brand name of fire cracker	Sound pressure level impulse(max) in dB(A)	Sound pressure level Peak (max) in dB(C)
	Single cracker		Max. allowable decibel=125	Max. allowable decibel=145
1	Gem fire works	Laxmi Bomb	119	142.4
2	Standard fire works	Kargil bullet	103	139.5
3	Raj industries Buldhana	Border star Bomb	102.4	**147**
4	Shama fire works Jalgaon	vulcano	127.4	**147**
5	Standard fire works	Singing bird	**130**	129
6	Standard fire works	AK-47	110	144.9
7	Gem fire works	60 multicolor shots	117.8	144.5
8	Standard fire works	Thunder Bomb	**130.6**	**147**
9	Coronation fire works	Whistling pipe	90.9	102.9
10	Ajanta fire works	Cheetos	123.9	124.1
11	Standard fire works	Krishna Bomb	96	144.9
12	Standard fire works	Sky-buster-130	**125.3**	146
	Crackers in series		**Max. allowable decibel=105**	**Max. allowable decibel=105**
13	Shri Daivam fire works Shivkashi	2000 WALA	**119**	**142.4**
14	Coronation Booth	Lavangi	**108.8**	**141.3**
15	Anil fire works	Musical Mala	**110.4**	**115**

7.3 Noise level Survey during Diwali Festival

The Maharashtra Pollution Control Board (MPCB) took the initiative of monitoring the noise levels across the state of Maharashtra, for two days November 05 and 07, 2010 on the days of Lakshmi Pujan and Bali Pratipada during Diwali. This was done its efforts to assess the noise levels all over the Maharashtra state.

- **Objectives**
  - To monitor ambient noise levels for two days on November 05, 2010 (Lakshmi- Pujan) and November 07, 2010 (Balipratipada & Bhaubeej) for 24 Hrs at various locations in different cities in Maharashtra.
  - To determine the maximum and minimum noise levels at various locations for the above mentioned days.
  - To identify the noisiest places and their causes so that necessary mitigation measures could be taken.
  - To involve youths (students) who could communicate to the target audience, the significance of environment and the ill-effects of noise pollution and thus help in MPCB's endeavors in creating awareness about Noise Pollution.
- **Methodology**

  Noise levels were monitored during Diwali for two days on November 05, 2010 (Lakshmi-Pujan) and November 07, 2010 (Balipratipada & Bhaubeej) continuously for 24 Hours to find out the maximum and minimum noise level during the day and night as well. As we know standards for ambient noise levels during day and night are different, hence the noise levels were measured accordingly as follows:
  - Day shift from 0600 Hrs. to 2200 Hrs.: 0600 to 1400 Hrs. & 1400 to 2200 Hrs.
  - Night shift from 2200 Hrs. to 0600 Hrs.

  Precalibrated Sound Level Meters (Type II) were used for monitoring the noise levels. All the measurements were made at fast response mode using 'A' filter, keeping in view the quickly changing nature of noise levels.

  The main purpose of noise monitoring was to find out the impact of noise generated during Diwali by various activities like bursting fire crackers, Sound systems, Music Systems etc. on human being and the way it disturbs the environment. The present study covered 12 cities having 115 locations all over the Maharashtra. These locations comprised of mixed categories of area including Residential, Commercial and Silence zone.
- **Results**

  By comparing the results obtained in last three years, a decrease in noise levels is predicted in some of the cities like in Aurangabad, Nagpur, Ulhasnagar and Kolhapur

  Results obtained by noise monitoring during Diwali shows a rise in the noise levels due to bursting of crackers. On the day of Laksmi Pujan almost at every location rise in noise levels were observed at late night from 22-00-24-00hrs on both the days' i.e at November 05 and November 07, 2010. Cities like Thane, Navi Mumbai and some parts of Mumbai were observed with rise in noise levels this year.
- **Conclusion**

  In present study, it is concluded that with the efforts on environment awareness programs and campaigns conducted by Maharashtra Pollution Control Board and other Regulatory Agencies there is significant decrease in noise decibel levels at certain locations, decibel levels were lower this year in cities like Aurangabad, Nagpur, Ulhasnagar and Kolhapur.

  This shows that citizens are aware of the adverse effect of noise pollution and have reduced bursting of crackers in their surroundings.

  However, there is rise in noise levels in some of the cities for which necessary measures are being taken.

8. Environmental Training

In order to enlighten and upgrade the knowledge and skills pertaining to Pollution Control and Environment Protection, the Board deputes its staff and officers for training courses related to prevention, control, and abatement of various types of pollution. Refresher course not only educates them further but also enhances their professional standards.

During the year training was imparted on the following fields:

- Hazardous Waste Information System
- Prevention and Management of chemical accidents
- Air Quality Modelling
- Solid waste Management
- Quality assurance and control in water quality monitoring & analysis
- Environmental Health and Safety
- Hydrological Investigation for conservation and Management of lakes
- Water quality Management
- Industrial waste water treatment techniques
- Environmental Impact Assessment

Apart from these, non-technical personnel were also deputed to acquire training in certain areas to improve their efficiency in the field of administration and accounts and data management.

The list of various training courses / workshops / seminars / lectures attended by the staff and officers of the Board held in India and abroad during the year 2010-2011 is summarized in **ANNEXURE III**.

8.1 Workshop on Pharmaceutical Standards:

Tarapur MIDC industrial area / Palghar industrial area is having large number of Pharmaceutical industries. In order to create awareness among the manufacturers at state level, a workshop called 'Implementation of standards' was organized on September 30, 2010 at Tarapur Industrial Manufacturers Association, MIDC Tarapur. During this state level workshop with the Pharmaceutical industry and various stakeholders elaborated presentation on dimension of standards, steps in developing standards and minimum National standards (MINAS) were made to disseminate information among them.

8.2 Green Campus Initiative:

For the overall progress, it is very essential to conserve the Environment and further safeguard it. The development paradigms have tried to create setting policies that promotes development without much damaging the environment. The concept thus hinges on creating a balance between development needs and preserving the environment.

Strategic environmental planning aims for development while implementing policies at the macro (national / international) level. At the same time, there is also increasing emphasis and need for the efficient management of resources at a local level to scale the environmental impact at the macro level. The concept of, 'Think Globally, Act Locally' has also started being incorporated at micro level to make developmental strategies environmentally viable and sustainable in the long run.

A round table on Eco-Campus Initiative for the major academic and educational institutions was organised at Yeshwantrao Chavan Centre in the presence of Hon'ble Minister, Environment Department, Government of Maharashtra.

9. Environmental Awareness and Public Participation

The Maharashtra Pollution Control Board in its endeavor to create awareness about Environment among the general public, regularly undertakes initiatives and various Public Relations activities are organized for communicating the messages of conserving the environment and help to reduce the pollution.

Some of the activities organized by the board are listed below:

9.1 World Earth Day:

The Maharashtra Pollution Control Board celebrated the World Earth Day on April 22, 2010. On the occasion of this day, messages for creating awareness among the general public on environment and the significance of World Earth Day, were published in leading Newspapers like 'Loksatta', 'Maharashtra Times' and 'D.N.A.' Also on the day messages were telecasted in over one thousand BEST buses, having TV sets installed and plying through the city of Mumbai. In all the messages were telecasted on 2000 TV sets for creating awareness about environment related issues.

The Maharashtra Pollution Control Board also announced the "Vasundhara Awards 2009" to recognize exemplary work carried out by Industries, Urban Local Bodies, Schools and Non-Government Organizations (NGOs) working towards the cause of conservation of environment in the State of Maharashtra. The award consists of a trophy, citation and a cash prize to be presented at a formal ceremony publicly acknowledging the work of the recipients. Information brochure and guidelines were prepared for Industry and Urban local Bodies and for the categories Schools and NGO's. The awards were given on MPCB's Foundation Day that is celebrated on September 07, 2010.

9.2 World Environment Day

Every year June 05, is celebrated as the World Environment Day. The Board celebrated WorldEnvironment Day on June 05, 2010 at Yashwantrao Centre in Mumbai.

On this occasion Hon'ble Chief Minister Mr. Ashok Chavan, Hon'ble Environment Minister Mr. Suresh Shetty, State Minister for Environment Mr. Sachin Ahir and Chief Secretary of the State Mr. J.P.Dange were present at the venue. As a part of the celebration film festival was organized during

June 05 -07, 2010. During the two-day film festival around 40 films of international standards related to environment protection and pollution control were screened. All the connoisseurs of environment and movie buff made their presence at the festival. On this day 'Vasundhara Walkethon' an awareness campaign for environment protection, was also organized.

"Vasundhara Awards 2009" were presented to Urban Local Bodies at the hands of Hon. Environment Minister of the State Mr. Suresh Shetty for various categories. Two books on environment "Gatha Dnyanachi"and "Nisarga Bandh", were released which was followed by the inauguration of new web site of the Board.

On the occasion of the day Hon'ble Chief Minister Mr Ashok Chavan inaugurated a stall called "Ambassador of environment" which was set up to promote environment consciousness among general public. In this stall photos of visitors were clicked with the help of web camera and along with their computerized signature they pledged to become an environment ambassador.

On this occasion with the help of Samsara media, messages were telecasted in over one thousand BEST buses, having TV sets installed and plying through the city of Mumbai. In all, the messages were telecasted on 2000 TV sets for creating awareness about environment related issues during.

MPCB had also provided financial aid to young enthusiastic Mandals. These organizations had organized Painting competition, Rangoli competition, & many more other competitions to create awareness about environment.

The message for save energy save environment

9.3 International Day for Preservation of Ozone Layer

The Board in association with Department of Chemical Engineering ICT Mumbai and WFCFD had organized a Lecture series related to protection of ozone layer on September 16, 2010 at K.Venkatraman Auditorium, Institute of Chemical Technology Matunga(E) Mumbai. The inaugural function was chaired by Prof. G.D.Yadav , Director ICT Mumbai. Shri Radhyeshyam Mopalwaar, Member-Secretary Maharashtra Pollution Control Board was Chief Guest of this function.

Mr. Sukumar Devotta, former Director NEERI Nagpur in his lecture on Chemicals & Environment-Alternatives to CFC's explained the uses of CFC's in general and the short term and long term alternatives, particularly using in AC and Refrigeration sector. He also highlighted the challenges in both Montreal Protocol and Kyoto Protocol.

Prof. Milind Rane, IIT Mumbai, delivered a lecture on 'Energy efficient refrigeration and air conditioning systems, while Mr Surendra Shah from M/s. Panasia Pvt.Ltd. enlightened the audiences on the topic 'Natural cooling using Indian traditional Wisdom-No refrigeration.'

This program was attended by M.P.C.B. officials, officials from State Environment Department, students and representatives of various companies.

- **Ozone Day 16th Sep 2010 at Aurangabad**

From Left to Right – Mr.R.R.vasave (SRO), Mr.Kishanrao Lavande(Addl Collector), Mr. Rahul Mahiwal CEO , ZP. A'bad , Mr. S. S. Patil, Asso. Prof., Mr. A.D. Mohekar, R.O. MPCB.

The Regional Office, Maharashtra Pollution Control Board, Aurangabad organized a one day seminar on 'International Day for Preservation of Ozone Layer on September 16, 2010 at Hotel Lemon Tree, Aurangabad. The event was organized as a part of the awareness campaign on Preservation of Ozone Layer and had a huge audience from all over Industrial area of Aurangabad district. M.P.C.B., had taken the initiative of organizing the event.

9.4 Pandharpur Yatra (Eco-friendly journey of pilgrims)

In Maharashtra lakhs of devotees visit Pandharpur for the annual pilgrimage as a ritual during the month of July. The Pandharpur yatra, begins from Dehu and Alandi in Pune to the Vithoba Temple at Pandharpur in Solapur District. MPCB took this opportunity to create awareness about conserving environment among the masses.

MPCB in association with Maharashtra Kala Sansanskruti Manch had organized a public rally from Pune (Aalandi) to Pandharpur for creating awareness about environment, on the theme called 'Parya warna chi waari Pandhari chya Daari' (Meaning Rally for the cause Environment Awareness).

Messages for awareness were communicated through Bharud, Kirtan,Pravachan, gan-gavalan and powada wherein the performing artiste were trying to create awareness among the public in general by providing information on ill effects of pollution , significance of environment, on different subjects related to environment. The Closing ceremony of rally (wari) was held at Pandharpur in presence of Hon'ble Chief Minister Mr Ashokrao Chavan, Mr Laxmanrao Dhobale, Guardian Minister (Solapur), Minister for forest Mr Baban Rao Pachpute, Inventer of Param Computer Mr Vijay Bhatkar, Founder of M.I.T. organization Mr Vishwanath Karhad were also present at the ceremony.

9.5 Eco-Friendly Festivals

Ganesh Chaturthi falls on the fourth day of the waxing moon according to the Hindu month of Bhadrapada and normally in the month of August / September according to the calendar.

The festival is celebrated across the state of Maharashtra with fun and frolic. MPCB has taken the initiative to reduce the pollution caused during 'Ganesh Utsav' and has been appealing to opt for Eco-friendly Ganesh idols.Traditionally, clay was used to make Ganesh idols. Over the years however, plaster of Paris (POP), which is lighter and cheaper, has become the favored material to mould these idols. POP contains chemicals such as gypsum, sulphur, phosphorus, and magnesium. The dyes used to color these idols contain mercury, cadmium, arsenic, lead, and carbon. Plastic and thermocol accessories are used to decorate these idols. Such materials are not biodegradable, hence are toxic. The immersion of idols made from non-biodegradable or toxic materials has many environmental repercussions like rise in acidity as well as traces of heavy metal in water bodies. The toxic waste kills plant and animal life in the water. In Mumbai, dead fish washed ashore after the immersion is a common occurrence.

Plastic and thermocol waste, including polythene bags containing offerings, is usually immersed with the idols. This obstructs the flow of streams as it does not decompose and leads to flooding during the rains. People who use water polluted by these immersions experience a host of health problems such as infections of the lungs, and diseases of the skin, blood, and eyes.

To reduce environmental degradation during Ganesh utsav celebrations, MPCB has been propagating some alternatives as mentioned below:

- Avoid the use of idols made from POP. Always opt for those made of unbaked natural clay, natural fiber, or even recycled paper. Ensure that the dyes used to color the idols are organic or vegetable in origin. Some years ago, natural clay idols were not easily available and were to be specially ordered. Today, with MPCB's initiatives such eco friendly idols are available and more and more people are encouraged every year to use them.
- Do not use thermocol or plastic as decorations or accessories for your Ganpati idol. Instead, use cloth, wood, paper, and other natural materials that are safer when immersed in water.
- Immerse the idol in a tub or a tank specially made for the purpose. Later, you can discard the water by pouring it into your garden.
- If there is an artificial tank in your area specifically created for immersion purposes, use this instead of a natural source of water such as a lake or a stream.
- Some people use a metal or stone idol. They symbolically immerse this in a bucket of water, or even carry it in procession to the sea, hold it under the water, and then bring it back home.
- Collect offerings of flowers and other organic material and put them in a compost pit. These can be used to fertilize your garden. If you must immerse them, wrap them in newspapers instead of polythene bags.

- Singing and dancing are an integral part of the Ganesh Chaturthi celebrations. However, loud music is not just disturbing, but a major health hazard. Moderation is the key to a safe and enjoyable Ganesh Chaturthi.

MPCB, GoM & Environment Department had organized a meeting with some of the Ganesh MPCB, GoM & Environment Department had organized a meeting with some of the Ganesh Mandals & group of Ganesh Murtikar Sangh in the city to encourage celebrating Eco-friendly ganesh utsav. This meeting was attended by Environment minister Mr.Suresh Shetty, State Environment Minister Mr. Sachin Ahir, Environment Secretary MS. Valsa Nair Singh and official members of MPCB. Shri Pramod Palav, a known sculpture from of Sindhdurga district practically explained how to make an eco friendly Ganesh idol.

MPCB and Loksatta had co-ordinately organized Eco friendly house hold Ganesh utsav decoration competition in six districts viz: Mumbai, Pune, Nashik, Nagpur, Ahmad Nagar, Aurangabad. More than 600 participants had participated in this event.

To celebrate Eco friendly Ganesh Utsav MPCB had screened film of 40 seconds in Hindi & Marathi in State's 205 Digital Cinema Theatres for period of one month. These films were screened for one month before commencement of Ganesh Utsav.

In order to propagate the concept of eco friendly Ganesha MPCB had also utilized the Mass Media in order to reach to the large number of people.

MPCB and the Channel Zee 24 Hrs co-coordinately organized a State level Competition-2010 for domestic House hold Eco friendly Ganesh Utsav.

MPCB had organized Eco friendly Ganesh Utsav Competition with the support of IBN Lokmat news channel. On account of this IBN Lokmat had produced a special program which was telecasted for five days for a duration of half an hour. In this program Interviews, discussions of people, groups who had arranged special programmes during Ganesh Festivals were telecast.

MPCB & Star Maza news channels had organized special competition to celebrate Eco friendly Ganesh Utsav in housing societies of city. This competition was organized for Mumbai, Pune , Nashik & Nagpur. On account of this Star Maza had arranged half an hour's special program.

- **Govinda or Dahi Handi**

Govinda or **Dahi Handi** is a traditional sport organized on Krishna Janmashtami to celebrate the birth of Krishna. It is very popular in Mumbai and surrounding area of Thane.

Youths in the city (called Govinda) gather together under Dahi Handi for making a human pyramid to catch and then break an earthen pot (a matki or handi) hung high in the air with the help of a rope. The sport is based on the legends about Krishna stealing makhan (butter) or dahi (curd) from handis.

Govinda was started somewhere in the eighteenth

century in Girgaum in Mumbai. Originally the sport was a religious ceremony to celebrate the birth of the lord Krishna.

MPCB and Ideal Pustak Triveni had organized Eco-Friendly Dahihandi in Mumbai in August 2010. On the occasion of the day a rally was organized that toured from Shivaji Park, Dadar across the city in the open / Roof less Double Decker Best Bus wherein film stars joined and conveyed the social message of reducing noise pollution. The rally began with performance of a street play for reducing Noise Pollution. The rally was concluded at Ideal Book Depot, Dadar. The rally also visited Govinda troups in Navi Mumbai, Mumbai, and Thane.

- **Diwali festival**

To celebrate pollution-free Diwali, M.P.C.Board and Environment Department GoM jointly distributed the eco-friendly lamps to all Ministers, State Ministers, Secretaries and all government staff, having messages appealing to celebrate pollution free Deewali. These lamps were prepared by Binar Art &Craft institute Mumbai.

In Mumbai at Andheri Marol, posters on guidelines to celebrate pollution free Diwali were displayed on prominent places by 'Samata Yuva Manch' a social organization. An awareness campaign was also organized at GATEWAY OF INDIA in this regard.

To observe Pollution-free Diwali messages were given through TV Channels, Radio and mobiles. The Board has made financial assistance to various institutions, Newspaper, Organizations, for creating Environmental Awareness through their medium.

10. Implementation of the rules under Environment (Protection) Act, 1986

10.1 Hazardous Waste (M, H &TM) Rules, 2008:

A. Functioning of Treatment, Storage and Disposal Facility (TSDF):

All operations involving the Treatment, storage and disposal shall comply with the guidelines / regulations issued by CPCB / Ministry of Environment & Forests (MoEF) and as stipulated in authorization under the Hazardous Waste (MH&TM) Rules, 2008 by the MPCB.

CPCB has published guidelines in respect of operations of The Common Hazardous Wastes Treatment, Storage and Disposal Facility (CHWTSDF), which are required to be followed by CHWTSDF operators. In order to bring uniformity in checking compliance / monitoring the operations of TSDF by SPCB /PCC asper the guidelines, CPCB has framed 'Protocol for performance Evaluation and Monitoring of the Common Hazardous Waste Treatment Storage & Disposal Facilities including Common Hazardous Waste Incinerators'.

With respect to this, as per requirement of the protocol, Operators of the CHWTSDF facilities are required to submit information about performance of the CHWTSDF operations in Annexure-IV of protocol, in every quarter to Central Pollution Control Board. Whereas the State Pollution Control Board (SPCBs) & Union Territories (UTs) are required to send information of the CHWTSDF operators as per Annexure –VI of the Protocol in every quarter to Central Pollution Control Board.

The MPC Board has submitted all Quarterly report (Annexure-VI of the protocol) of the performance evaluation of four CHWTSDF Operators in Maharashtra State to Central Pollution Control Board, New Delhi.

The Operator of CHWTSDF facility is responsible for:

- Accepting hazardous wastes at CHWTSDF from the generators authorized by SPCB/PCC.
- Establishing a system for optimal movement of hazardous wastes transportation, Treatment and disposal operations which may include resource recovery/ recycling, as the case may be.
- Fingerprinting analysis to confirm the wastes shall be the responsibility of the Operator.
- Operating the CHWTSDF as per conditions stipulated in the authorization issued by SPCB/PCC.
- Ensuring waste treatment and / or disposal as per Hazardous Waste

(Management, Handling & Transboundary Movement) Rules, 2008

- Undertaking cleanup operation in case of contamination resulting from CHWTSDF pollution and the odour arising out of CHWTSDF Operations and subsequent abatement.

- Compliance of regulations concerning occupational safety and health of CHWTSDF employees.

At present there are four CHWTSDF in operation where direct land filling, Incineration, land filling after treatment of Hazardous waste is being carried out.

From 5428 hazardous waste generating units , hazardous waste received at all four sites is 9,23,703.48 MT.

The Operation details are as under:

Sr No.	Criteria	Taloja (MWML)	TTC	Rajangaon	Butibori
1	**Details of the facility**	M/s. Mumbai Waste Management Limited, Plot No. P-32, MIDC, Taloja, Tal: Panvel, Dist: Riagad	M/s. Trans Thane Waste Management Association P-128, Shil-Mahape Road, Next to L&T Infotech Ltd. Mahape, Navi-Mumbai-400105	M/s. Maharashtra Enviro Power Ltd. Plot No. 56, MIDC Ranjangaon, Taluka- Shirur, Dist – Pune.	M/s. Vidharbha Enviro Protection Ltd. Sr.No.7 to 15, 131 & 162, Butibori Industrial Area, Mouza-Mandawa, Taluka-Hingana, Dist- Nagpur.
2.	**Consent to Establish issued on**	02.01.2002	02.01.2002	27.10.2005	27.10.2005
3	**In Operation / Under construction**	Commissioned since 2001	Commissioned since Jan 2004	SLF- Commissioned Since Jan 2007 Incinerator- Commissioned since November 2008	SLF- Commissioned since Feb 2007 Incinerator- Commissioned since November 2008
4	**Capacity of the Facility**	SLF- 120,000 MT/ Year	SLF- 10,000 MT/Year	SLF- 60,000 MT/Year	SLF- 60,000 MT/Year
		1. INC - 2 .5 TPH. 2. INC- 2.5 TPH	INC-No Facility (Incinerable HW sent to Taloja)	INC-3 TPH	INC-3 TPH

Sr No.	Criteria	Taloja (MWML)	TTC	Rajangaon	Butibori
5	**Total Waste Quantity received up to March 2011 at CHWTSDF** (since commissioning of the facility)	710200.00 MT	71325.22 MT	100650.09 MT	41528.17 MT
6	**Number of Members registered to CHWTSDF sites up to March 2011**	3080	1459	1457	396

- **M/s. Mumbai Waste Management LTD. (CHWTSDF), MIDC Taloja:**

  M/s. Mumbai Waste Management Ltd., (MWML) has been established at Taloja by MIDC under public-private partnership as part of common infrastructure for environment protection in industrial areas. They provide common services for environmentally sound management for disposal of hazardous wastes (HW) in the State of Maharashtra as envisaged in the hazardous waste management rules, notified under the Environment (Protection) Act, 1986.

  MIDC has allotted 100 acres of land near MIDC Taloja, approximately 10 Kms from Mumbai- Pune Highway near the village Ghotgaon. Land is given for development of CHWTSDF at concession rate on lease for 20 years for operation and 30 years for environmental & post monitoring. The MIDC, MPCB and the MoEF have given capital subsidy to M/s. MWML as incentives so that the tariff for their services is reduced and operations are techno-economically viable. The total cost of the project ₹42.3 Crores. While the area of the operation is regulated by MPCB, the tariff for their services is regulated by MIDC, as per the agreement with MWML.

Land Fill site at MWML, Taloja

The Common Hazardous Wastes Treatment, Storage and Disposal Facility (CHWTSDF) established by M/s. MWML is first of its kind in India wherein integrated facilities are available for environmentally sound management of hazardous wastes.

Common HW Incinerator at M/s. Maharashtra Enviro Power Ltd., Ranjangaon. Dist: Pune. (Plasma Incineration Technology)

MPCB has issued conditional consent to establish u/s 25 of Water (P & CP) Act 1974, u/s 21 of Air (P & CP) Act 1981, And Authorization Under Rule 5 of the Hazardous Waste (M & H) Rules 1989 as amended ,notified under Environment (Protection) Act 1986 to M/s. MWML for operation and maintenance of the CHWTSDF established at Taloja.

Area of Operation: Initially entire state of Maharashtra was covered by this CHWTSDF. The new facilities are now developed in other parts of the state. However , the area of jurisdiction of site and collection of HW as per the order of MPCB is restricted to Mumbai, Thane, Raigad, Kolhapur districts & the state of Goa.

Treatment & Disposal methods provided at the facility: The facility has provided following treatment and disposal methods depending on the nature and quality of the waste as per CPCB guidelines.

- Direct Land fill
- Land fill after treatment
- Incineration

The CPCB has issued following criteria for landfill disposal:

Calorific value	Less than 2500 cal/gm
Flash point	More than 60deg C
pH	Between 4 to11
Organic content	Less than 20%
PFLT Test	Pass
Reactive cyanide	Below detectable limit.

The following type of waste can be disposed by direct landfill:

- Silt sludge
- ETP Sludge
- Lime sludge
- Inert material.
- Insulation material.

The following type of waste can be disposed by landfill after treatment:

- Acidic waste
- Cyanide waste
- Phosphating waste.
- Sulphur waste
- Heavy metal bearing sludge.

The following types of waste can be disposed by Incineration:

- Paint sludge.
- Tarry waste
- Waste /used oil/oily sludge
- Solvent waste.
- Contaminated Cotton waste/carbon waste.
- Spent resin
- Distillation residue
- Pharma products waste.
- Pesticide waste.
- Narcotics
- Expired postal stamps etc.

Hazardous Waste disposal by incineration:

Hazardous waste is disposed by incineration. Such type of waste is either in solid or in liquid form. The liquid waste is stored in drums whereas solid waste is stored in polythene bags. The first incinerator was commissioned in the year 2004; the second incinerator was commissioned in October 2008.

The Protocol for Performance Evaluation, and Monitoring of the Common Hazardous Waste Treatment storage and Disposal facilities including Common Hazardous Waste Incinerators was amended and published on October 06, 2009

The Hazardous waste incinerator installed at MWML, Taloja is based on the design of M/s Alstom Power Inc. U.S.A .The thermal capacity of the plant is 5.5mKcal/hr

HW Incinerator at CHWTSDF
Mumbai Waste Management Ltd.

The system consists of the following equipments:

- Primary Cumbustion Chamber
- Secondary Cumbustion Chamber
- Spray Dryer Assembly
- Cyclone Separator/Multicyclones
- Reagent System for Dry Scrubbing
- Bag Filters
- Packed Bed Liquid Scrubber
- ID Fan of Higher Capacity
- Chimney

ANALYSIS REPORT

Stack Emission Monitoring of M/s. MWML, Taloja

(BMW & H.W. Incinerator)

Parameter	19.04.10 (BMW)	19.04.10 (H. W.)	25.05.10 (BMW)	25.05.10 (H. W.)	30.11.10 (HW)	28.12.10 (HW)	28.01.11 (BMW)
Particulate Emission (mg/Nm3)	04	3.0	23	2.0	32	8	85
Sulfur Dioxide	BDL	1.07	BDL	BDL	6.40	3.20	5.33
HCL	BDL	2.43	BDL	BDL	2.43	3.65	3.65

TTC Waste Management Association:

- The TTC Waste Management Association (TTCWMA) in the year 2004 set up the second hazardous waste management facility for Collection, Transport, Storage, Treatment and Disposal of composite hazardous waste at TTC industrial area in Maharashtra.

- The TTCWMA maintains highest standards of quality of disposal methods by confirming to environmental friendly, safe, economic methods. There are 1340 members of TTCWMA. Approximately 53000 MT of hazardous waste material was disposed by secured landfill method at this site .The capacity of this secured landfill site is 50000MT of old cell,1,20,000 MT of new cell and 1,00,000 MT for future one. This TSDF site is located in TTC industrial area hence it is very convenient for transportation and disposal of hazardous waste from TTC industrial area.
- The authority of TTCWMA has provided all technical vigilance system to protect the environment.

B. Implementation of HW (MH&TM) Rules, 2008:

1. **Creation of HWM Cell at MPCB (HQ):** For better management and implementation of HW (MH&TM) Rules, 2008, a separate HWM Cell has been created at MPCB HQ, which handles following functions:

a. Implementation of Hazardous Waste Rules:

- Scrutiny of Annual Returns under Form 4 / Form 13 filed by industries/ Auctioneers (Conduct scrutiny of documents submitted and compare quantities of Waste generated with Inventory figures & verify the quantity disposed off at various disposal sites).
- Scrutiny of Returns under Form 6 filed by Registered Recyclers.
- Verification of report /application/return to ensure that Hazardous Waste generated is safely disposed off.
- Updating of the HW Inventory based on information / feedback receivedfrom Regional offices of the Board and submit it to CPCB and MoEF every year.
- Submit complete scrutiny report on Annual Returns.

b. Compilation of Import of Hazardous Chemicals:

Following observations are made from the HW inventories:

Region-Wise HW Totals (MTPA)
Hazardous Waste Generation Update as of March 31, 2011

Regions	SLF (MTPA)	RCL (MTPA)	INC (MTPA)	Total
Mumbai	37902.74	309524.06	18252.31	365679.11
Raigad	70208.10	143578.25	37324.81	251111.16
Navi Mumbai	66058.97	33147.56	40579.48	139786.00
Thane	52717.82	65298.49	17379.17	135395.48
Kalyan	72573.74	178983.94	9692.48	261250.16
Pune	54994.59	79806.31	41317.75	176118.66
Kolhapur	22235.06	22672.71	11485.52	56393.29
Nashik	24755.97	60229.51	16011.72	100997.20
Aurangabad	44989.80	65739.06	21623.91	132352.77

Amravati	6791.17	5837.06	423.47	13051.70
Chandrapur	24437.26	50382.00	10315.04	85134.29
Nagpur	37200.31	39164.43	11750.21	88114.95
Total	**514865.53**	**1054363.37**	**236155.87**	**1805384.77**

Authorizations – Region wise (Total no. of Hazardous Waste generating units) (As on 31St March 2011)	
Regions	**Total No. of Units**
Mumbai	375
Raigad	333
Navi Mumbai	680
Thane	715
Kalyan	822
Pune	965
Kolhapur	326
Nashik	447
Aurangabad	279
Amravati	73
Chandrapur	114
Nagpur	299
Total	**5428**

Registration for import of Metal and Metal-bearing wastes (Part-D of Schedule-III) on behalf of end user under Hazardous Wastes (Management, Handling & Transboundry Movement) Third Amendment Rules, 2010

As per the Hazardous Waste Hazardous Wastes (Management, Handling & Transboundry Movement) Third Amendment Rules, 2010, imports of Metal and Metal-bearing wastes (Part-D of Schedule-III) on behalf of end user can be done only after obtaining registration from the state pollution control Board. It is now become mandatory to the importers to obtain registration form state pollution control Board for the import activity.

MPCB has issued registration to **350** importers for import of Metal and Metal-bearing wastes (Part-D of Schedule-III) on behalf of end user under Hazardous Wastes (Management, Handling & Transboundry Movement) Third Amendment Rules, 2010.

Ship breaking activity and Collection, reception, storage, transport and disposal of hazardous waste mentioned under Schedule-I of Hazardous Wastes (Management, Handling & Transboundry Movement) Rules, 2008

The ship demolition / breaking activity in Maharashtra is limited at Lpakri Bunder and Powder Works Bunder at Darukhana in Mumbai Port Trust Area. Mumbai Port Trust (MbPT) has earmarked 19 plots for ship breaking activity in Mumbai.

MbPT has assured MPCB, that the number of plots for ship breaking in their area shall not be increased in future. Besides, there is no regular allotment of plots to the ship breakers, as is being done in Alang, Gujarat, as the area is under the control of Gujarat Maritime Board.

Generally, smaller ships arrive at Mumbai for breaking and plots are given to the ship breakers on arrival of the ship for breaking. Though authorizations have been granted to ship breakers who operate in MbPT area, MPCB is keeping a strict vigil to ensure the ship breakers do not extend their activities at the existing location or on any other coastal stretches of Maharashtra. It has been accordingly informed to the Maharashtra Maritime Board to comply with the direction of the Apex Court in this regard.

Till date MPCB has issued authorisation to forty nine (49) Ship Breakers for Ship breaking activity and Collection, reception, storage, transport and disposal of hazardous waste mentioned under Schedule-I of Hazardous Wastes (Management, Handling & Transboundry Movement) Rules, 2008.

Procedure for issuance of grant / renewal of registration scheme to Industrial Units having Environmentally Sound Management facilities for reprocessing / recycling of the Hazardous Waste

Industrial units having Environmentally Sound Management facilities for reprocessing / recycling of Hazardous Waste listed in Schedule IV As per rules 8(1) & 9 of Hazardous Waste, (MH&TM) rules, 2008, requires to obtain registration from Central Pollution Control Board (CPCB), New Delh,i as reprocessor / recycler of Hazardous Waste by submitting application in prescribed form for grant or renewal of the registration.

1. **The Procedure for grant of registration as per Hazardous Waste, (MH&TM) rules, 2008 in CPCB is as under:**

   Every person desirous of recycling or reprocessing the hazardous waste specified in Schedule-IV may make an application in prescribed form accompanied with a copy of each of the following documents for the grant or renewal of the registration:

   - Consent to establish granted by the State Pollution Control Board under the Water (Prevention and Control of Pollution) Act, 1974 (25 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (21 of 1981);
   - Certificate of registration issued by the District Industries Centre or any other government agency authorized in this regard;
   - Proof of installed capacity of plant and machinery issued by the District Industries Centre or any other government agency authorized in this behalf; and
   - in case of renewal, certificate of compliance of effluent, emission standards and treatment and disposal of hazardous wastes, as applicable, from the State Pollution Control Board or the Concerned Zonal Office of Central Pollution Control Board.

2. CPCB has constituted a registration committee for grant or renewal of the registration of the Industrial units having Environmentally Sound Management facilities for reprocessing /recycling of Hazardous Waste listed in Schedule IV comprising of experts in the field of environmental chemistry, Govt. / State Govt. Engineering Institutions, Industrial association representatives, Petroleum refinery Institutions.

3. Effective from September 01, 2010, the CPCB has delegated powers to state pollution control Boards for the grant / Renewals of registration of Industrial Units possessing Environmentally Sound Management facilities for reprocessing / recycling as provided under Rule 8 of Hazardous Waste (MH&TM) Rules, 2008.

MPCB has constituted registration committee for grant or renewal of the registration similar to CPCB registration committee Comprising of experts in the field of environmental chemistry, Govt /State Govt Engineering Institutions, Industrial association representatives, Petroleum refinery Institutions.

MPCB has conducted four meetings of registration committee and registration has been granted to 18-units for the reprocessing of Used Oil, Waste Oil, E-Waste, Non Ferrous Metal & lead bearing wastes.

10.2 Lead Acid Batteries Management:

Ministry of Environment and Forests, Government of India in the Gazette of India published Batteries (Management and Handling) Rule, 2001, which are amended on May 04, 2010. The rules are applicable to every manufacturer, importer, re-conditioner, assembler, dealer, recycler, auctioneer, consumer and bulk consumer involved in manufacture, processing, sale, purchase and use of batteries or components thereof.

As provided under the rule, it is mandatory to file a half-yearly return latest by 30th June and 31st December of every year to the Maharashtra Pollution Control Board by every manufacturer, importer, re-conditioner, assembler, recycler, auctioneer, consumer and bulk consumer involved in manufacture, processing, sale, purchase and use of batteries or components thereof.

Dealers shall file a half-yearly return latest by 31st May (for sale during October-March) and 30th November (for sale during April-September) of every year to the Maharashtra Pollution Control Board.

For obtaining registration, applicant shall apply to the Ministry of Environment and Forests for importing the new Lead Acid Batteries and for obtaining registration of facilities possessing environmentally sound management proactive for recycling of used lead acid batteries applicant shall apply to the Maharashtra Pollution Control Board. According to amendment of the Batteries (Management and Handling) Rule published in the Gazette of India on May 04, 2010, it is the responsibility of Battery Dealers to apply for obtaining the registration from Maharashtra Pollution Control Board. Implementation of these rules result in scientific management of the hazardous waste & recycling of Lead with secured method.

Action taken by the Maharashtra Pollution Control Board:

The Maharashtra Pollution Control Board plays an important role in implementing a successful battery recycling and management program.

MPCB has issued letters to identified Manufacturer, Re-conditioner, Assembler, Importer ,Dealer, Recycler Bulk consumer & Auctioneer to comply by rules & submit Half Yearly returns in form I, IV,V, VII, VIII & IX respectively.

MPCB has submitted Annual returns to CPCB as per section 12 of Battery Rules.

MPCB has published Public Notice in the daily Lokmat (Marathi) & Daily Indian Express (English) on 13.08.2010 regarding implementation of the amended Battery (M&H) Rules 2001 dated 4th May 2010.

Dealers of the Batteries are applying for obtaining registration from Maharashtra Pollution Control Board & process is going on.

From return filed by the manufacturer, importer, re-conditioner, assembler, dealer, recycler, auctioneer, consumer and bulk consumer, it is noticed that many of them have not filed a half-yearly returns & some of them have filed a half-yearly return irregularly.

Maharashtra Pollution Control Board has decided to conduct mass awareness campaigns regarding implementation of the Batteries (Management & Handling) Rules, 2001, amended on 2010 in the five regions of Maharashtra State.

Apart from the major battery manufacturers, there are 78 new lead acid batteries importers who have obtained registration from Ministry of Environment & Forests under the Rule 4 of the HW Rules for sale of lead acid batteries in India. There are 78 such importers of lead acid batteries in the State of Maharashtra. Also there are 41 Lead acid Battery recycling units having valid registration from CPCB. Most of the units have submitted half yearly returns on recycling of the batteries. The information from the remaining units is being collected.

MPCB has decided to organize mass awareness workshop for Battery Manufacturer, Assembler, Re - conditioner, Dealers, Bulk Consumer and Recycler in the state of Maharashtra at five different cities.

The information collected by MPCB from the Battery Manufacturer, Assembler, Re-conditioner, Dealers, Bulk Consumer and Recycler from different regions of Maharashtra is enclosed in table No. 1.

Table No.1.

Information on implimentation of Battery (M&H) Rules, form the period of April 2010 to March 2011.

Lead Acid Battery Manufacturer, Re-conditioner, Assembler			Lead Acid Battery Dealer			Lead Acid Battery Bulk consumer, Auctioneer.		Lead Acid Battery Recycler		Lead Acid Battery Importer	
Total No of Manufacturer, Assembler, Re-Conditioner	Production of lead acid batteries in unit numbers/ year	Collection of lead acid batteries in unit numbers/ year	Total No of Dealers	Sale of lead acid batteries in unit numbers/ year	Collection of lead acid batteries in unit numbers/ year	Total No of Bulk Consumer, Auctioneer	Collection of lead acid batteries in unit numbers/ year	Total No of Battery Recycler	Collection of lead acid batteries	Total No of Battery Importer	No. lead acid batteries Imported numbers / year
72	1414653	1020519	1050	5183264	140837	1822	797088	41	127762.0 MTA	78	35812

10.3 E-Waste Management

The e-waste comprises of Electronics, Equipments and Electricals (EEE) Waste. The State of Maharashtra has played a proactive role in establishing facilities for collection, transportation, storage and disposal of EEE waste generated from various sources such as IT Industries, consumers of Municipal areas, Industries, Traders, Importers, etc. The waste is collected by authorized facilities and processed through environmentally sound technologies.

The guidelines were published in the year 2008 by Central Pollution Control Board and MoEF, Govt. of India has already issued draft Rules on the management of E-waste. The central government is in process of finalizing the Rules. The Maharashtra Pollution Control Board has considered e-waste under the provision of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and has notified the facilities for better management of e-waste in the State.

The estimated quantum of e-waste generation of Maharashtra is about 50,000 MT/Year as per survey. The waste processed during the 2010-11 is about 289 MT in authorized waste sites.

The following facilities are authorized by the Board for environmentally sound management of e-waste in State of Maharashtra.

Sr. No.	Name of the Industry	Capacity
1	**M/s. Earth Sense Recycle Pvt Ltd,** A-7 , Gala no: 1, 2 & 3, Ground Floor, Prerana Complex, Anjur Phata, Vill: Val, Tal: Bhiwandi Dist: Thane	**360 MT/A**
2	**M/s. Eco Recycling Ltd.,** Eco House, Nr. Top Glass Enclave, Bhu Pada, Nr.Range Office, Sativali Road, Vasai	**7190 MT/A**
3	**M/s. Hitech Recycling India Pvt. Ltd.,** Surevy No. 571/572, Near Silver Court Hotel, At Post: Bhugaon, tal: Mulshi, Dist: Pune.	**1000 MT/A**
Total:		**8550 MT/A**

10.4 Municipal Solid Waste Management

Municipal Solid Waste (Management and Handling) Rules, 2000

Until the environment movement emerged in early sixties, most of the waste was disposed of with little or no control, as open dumps. Perception in the field has drastically changed over the period of last 10-15 years. EP Act 1986, MSW Rules 2000, formations of the Waste management cell at root levels, are emerging means to seek control over the escalating waste scenario, by building and strengthening up the waste management system of the country.

Moving towards modern disposal ways needs step-by-step approach: first phasing out uncontrolled generation; following the rules of 3 R's; segregation at source; adopting sustainable processing and disposal technologies which can be easily maintained; and then gradually making more stringent environmental standards/rules for the waste management system.

Maharashtra State has 249 local bodies, comprising of 23 corporations, 16- A class council, 205- B and C class council, 5- cantonment Boards, generating about 19200 MT of municipal solid waste every day. The Region wise breakup of waste generation is as follows:

Regionwise Municipal Solid Waste Generation in the State of Maharashtra. In (MT/day)

Region	Corporation	"A" Class	"B" Class	"C" Class
Amravati	320.0	53.0	184.0	158.0
Aurangabad	450.0	256.0	144.0	218.0
Kalyan	1135.0	75.0	52.0	--
Kolhapur	355.0	60.0	79.0	55.0
Mumbai	9300.0	-	-	-
Nagpur	770.0	205.0	190.0	91.0
Nashik	761.0	51.0	282.0	155.0
Navi Mumbai	500.0	-	-	8.0
Pune	1490.0	62.0	96.0	109.0
Raigad	-	22.0	20.0	68.0
Thane	1050.0	120.0	100.0	1.0
Total	**16131.0**	**904.0**	**1147.0**	**1022.0**
Total:				**19204.0**

Corporations	: 16131.0 - 83.99%
A Class councils	: 904.0 - 04.72%
B Class councils	: 1147.0 - 05.97%
C Class councils	: 1022.0 - 05.32%
Total	: 19204.0 - 100.00%

Role of MPCB for waste management:

The Ministry of Environment and Forest (MoEF), Government of India, has notified the Municipal Solid Waste (Management and Handling) Rules 2000 vide notification No. SO 908(E), dated September 25, 2000, with duly define separate duties of Urban Development Department, Local Bodies, CPCB and MPCB.

It is mandatory on part of MPCB to issue authorization after receipt of application in Form I, from concern Local Body after verification of status. The Board is also responsible for monitoring the performance of the waste processing/ landfill sites. The Said Rules are notified under Environment Protection Act 1986. The details on implementation, Management and Handling, Specification for Landfill Sites and Standards for Composting, Treated Leachates and Incineration are Scheduled separately at I, II, III, and IV respectively

Waste Treatment Methods

1. Anaerobic digestion
2. Aerobic digestion
3. Vermicomposting
4. Incineration /gasification

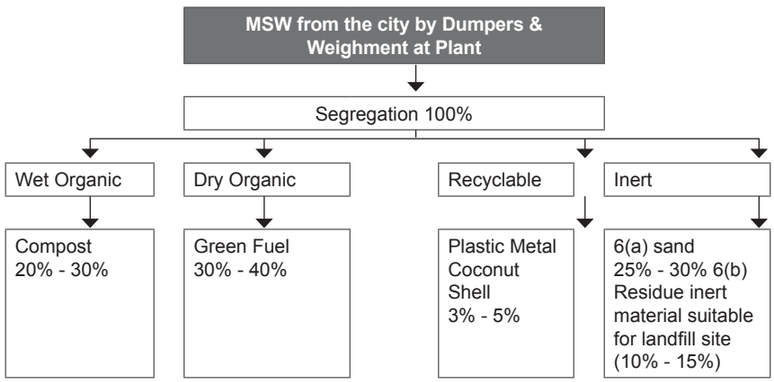
Waste processing technology:

The waste processing technologies adopted in four places of Maharashtra at Nagpur, Mira-Bhayander, Pune and Vasai is a unique combination of Integrated Multi product processing Technology for MSW processing ideally suited for mixed Indian MSW.

The technology involves three key efforts RECYCLE, REUSE, and REDUCE the MSW to such an extent that the RESIDUE inert for landfill is drastically reduced to 20% of the input quantity and thereby saving precious land required for dumping.

Given below is brief description of the process adopted in above four facilities:

Single Line Process Flow Chart:



Segregation:

The first step of the process involves coarse segregation. The segregation efficiency achieved is more than 95 percent. The actual waste fed to the primary segregation unit contains well segregated material except coconut, rubber and debris (concrete) waste.

1. Primary Segregation Unit (PSU)

In PSU, all the MSW is separated into dry, wet and inert materials. Techniques used for PSU are based on the mass and density principles. Plastic is main component separated at this stage which is sent to the recycling industry. From the primary segregation there are three outlets viz., wet (compostable), dry and inert.

2. Secondary Segregation Unit (SSU)

Each outlet from PSU is connected to SSU via belt conveyor. At SSU solid waste is again segregated for different components and conveyed to respective silos with the help of conveyor. Wet material segregated from PSU is further segregated into SSU and conveyed to nearby composting facility and the dry material goes to the RDF section.

a. Composting:

The segregated waste with mostly biodegradable components is processed for getting compost. The piles of the wastes are put in windrow with spray of inoculum for composting. The process completes its cycle in 4-6 weeks. The composted mass is processed to remove any fine grit, glass pieces, plastics etc., through series of trammels and screens. The ready compost is later checked for its quality before packing and selling.

b. Refused Derived Fuel (RDF) Section

Secondary segregated material moves to this unit after drying. The dried material is further cleaned through dust separation process. At this stage the product is devoid of almost all adhered dust. It is finally made into fuel packs through press and sent for dispatch. The quality of the RDF thus obtained is very good with an ash content of 13.8 % and having the value of 3300 Kcal/Kg. The product can thus be freely used as a replacement of Coal or Lignite.

3. Sand

All fine dust and sand particles obtained at various stages in the process stream as shown above are taken here for cleaning. Sand stream is washed to remove dirt and fine quality sand is obtained which is sold separately.

4. Plastic Granules

The plastic after being segregated from mixed MSW is sorted into various grades and is converted into granules. As there is no usage of water in the process, there is no pollution being caused.

Uses: Recycled granules reduce the requirement of fresh plastic and is used in manufacturing of Waste Plastic Bags, Agricultural Pipes, Mouldings, ropes, etc.

5. Inerts for Landfilling

After recovering all the valuables from the MSW, the leftovers, called as inerts which is less than 20% of the entire MSW received, is sent for landfilling.

Modern Waste Processing Plants Working in Maharashtra

Nashik Municipal Corporation has already provided a facility for the municipal solid waste collection, treatment and disposal. Compost making and scientific land filling is also in operation. The compost facility is in operation and generating the revenue of approximate. ₹50 Lakhs per month by selling the compost as manure. Sinnar Municipal council has commissioned their MSW plant. In other areas proposal for the above activities are in process. Waste to energy plant in Pune, Solapur and Mulund (Mumbai), are in the stage of commissioning.

Waste processing facility of Nasik Municipal Corporation

Nagpur Municipal Corporation has set up Green coal plant by processing MSW at Bhandewadi dumping site, Nagpur. Previous old dump of the Municipal Solid Waste are being capped by soil & synthetic liner in order to get rid of foul smell that had become a nuisance.

Wet waste which is wet organic and dry organic is being process for producing compost (From wet organic) and green fuel i.e. RDF from dry organic. From plastic scraps plastic lumps are produced by recycling it. This MSW processing plant has a capacity of 800 MT/day and is operated by M/s. Hanzer Biotech. Inert waste from the compost yard of the processing plant and dry inorganic waste i.e. debris and construction material is, at present, dumped at old dumping yard.

Nagpur Municipal Corporation is developing land fill site at the old dumping ground.


Waste processing facility of Nagpur Municipal Corporation

Initiatives / Efforts taken by MPCB for waste management issues of Maharashtra.

1. The Board has funded the waste management projects at Murud- Janjira, Navapur, Sonpeth, Latur, Jalna, Ambad, Pandharpur, Mahabaleshwar as a Demo Project.
2. It has conducted workshop at Mumbai, Aurangabad and Nasik in collaboration with Maharashtra Chamber of Commerce, Industry and Agricultue. The workshop was attended by stake holders in the field, thereby creating awareness amongst the waste generators.
3. The Board has received ₹5.10/- Lakhs from MoEF, Govt. of India for conducting awareness campaigns among the top management and technical staff dealing with MSW management at Local Bodies.
4. The Local Bodies have adopted new technologies in the waste management, the waste to energy at Solapur Municipal Corporation and Pune Municipal Corporation. The fuel palates manufacturing is carried out by Mira-Bhayender, Vasai-Virar, Nagpur and Pune.
5. The Maharashtra Pollution Control Board is continuously insisting for source segregation of MSW for better management among the all Local Bodies and providing proper treatment and disposal facilities.
6. Thirty-One (31) Municipal councils in Aurangabad Region have installed vermi composting plant for waste generating from vegetable and fruit market. Nanded Municipal Corporation has provided one Bio gas plant in Banana market.
7. Sawantwadi Municipal Council is partly treating solid wastes from hotels, vegetable market, fish market & slaughter house by bio-methanisation process. Solid waste from households is partly treated by vermi-composting & rest of the waste is dumped at the dumping site.
8. Municipal Council, Katol and Kalmeshwar have installed bio methanation plant for processing of Municipal Solid waste generated from Market and is operating efficiently by producing bio-gas. The Bio-gas plant of 5 TPD is under construction at Uran Municipal Council.
9. Navi Mumbai Municipal Corporation has developed a scientific MSW dumping site .The site is in operation since 2005.All the municipal solid waste is collected and disposed off scientifically at the MSW dumping ground.
10. Vasai-Virar City Municipal Corporation and Mira-Bhayander Municipal Corporation have provided integrated MSW processing plant.
11. Court case filed against Thane Municipal Corporation for violation of municipal solid waste (M & H) rules 2000

12. Akola Municipal Corporation has set up facility for treatment of bio-degradable waste and operated by M/s Bhudan Organic Pvt Ltd having capacity about 50 Mt/day.

13. Dapoli Municipal council has initiated the Zero Plastic waste in its jurisdiction thereby reducing Municipal soiled waste

10.5 Plastic Waste Management:

Environment Department, Govt. of Maharashtra has published Maharashtra Plastic Carry Bags (Manufacturing & Usage) Rules, 2006 on March 03, 2006 which framed under the Maharashtra Non – Biodegradable garbage (Control) Ordinance, 2006 by converting into Maharashtra Non – Biodegradable garbage (Control) Act, 2006 as manufacturing of Plastic Carry bags and its improper handling and use is causing major problems to Environment. Plastic is non biodegradable item.

There is restriction on manufacturing of Plastic carry Bags below 50 microns. The Board has already taken initiative to identify the units which are manufacturing plastic carry bags below 50 microns and taken strict legal actions against violators. During the operations of squads formed by the respective Regional Officers, total 22 units were found manufacturing plastic carry bags having thickness below 50 microns from all over Maharashtra.

The Board has issued the notices of closure and directed them to close the units. After necessary compliance from the industry and the collecting compounding fines of ₹1,15,000/- supported with the Bank Guarantee of ₹25,000/- along with the condition that they would not manufacture plastic carry bags below 50 microns, the orders for restarting the units were issued to the manufacturers .

Total four hundred and ninety one Plastic Manufacturers are registered with Board.

To restrict import and transport of Plastic carry bags having thickness less than 50 microns in the Mumbai and across the parts of Maharashtra state, all the concerned authorities have been informed for initiating actions against such type of products.

In order to create awareness among the common public against the use of plastic bags having thickness less than 50 microns and the consequences (such as fine / penalty) for using plastic bags, MPCB initiated a series of street plays in association with M/s. UNAST. About more than 100 street plays were successfully performed in Raigad, Thane and Mumbai area during the financial year i.e. 2010 - 11.

Ministry of Environment & Forests, Govt. of India has published Plastic Waste (Management & Handling) Rules, 2011. These rules cover about carry bags, Multilayered Plastics & Compostable plastic. The Rules states that, no person shall manufacture, stock, distribute or sale any carry bag made of virgin or recycled or compostable plastic, which is less than 40 microns in thickness; Sachets using plastic material shall not be used for storing, packing or selling Gutkha, Tobacco & Pan Masala.

The Board is implementing the Plastic Waste (Management & Handling) Rules, 2011 read with the Maharashtra Plastic Carry Bags (Manufacturing & Usage) Rules, 2006.

10.6 Bio- Medical Waste Management:

Status of Bio-Medical waste generation & disposal

There are 38251 Health Care Establishment in the State of Maharashtra. Authorizations have been issued to 21358 Healthcare establishments. The quantity of Bio-Medical waste generated is 12014MT/D, which is being treated either in common facilities developed across

the State or in their own facilities of Health Care Establishments. 29397 HCEs are sending their waste to common facilities whereas 3579 HCEs have their own facilities for treatment of Bio-medical wastes.

The Region wise breakup is given below:

Region	No. of HCEs	Authorizations issued	Quantity of BMW generated in MT/D	HCEs having their own facilities	HCEs joined to common facilities
Mumbai	2844	1258	10401	0	2111
Thane	2312	763	1542	35	2277
Kalyan	565	565	0.96	22	565
Navi-Mumbai	821	268	0.68	1	820
Raigad	742	742	40.19	21	721
Pune	8014	8014	6.83	294	7611
Kolhapur	4245	1282	2.74	319	3483
Aurangabad	4380	2960	3.93	827	3553
Amravati	4120	890	2.59	208	1426
Nasik	4776	2618	3.37	391	3962
Nagpur	4732	1333	7.20	1394	2235
Chandrapur	700	665	2.32	67	633
Total	38251	21358	12014	3579	29397

Advisory Committee of Bio-Medical Waste

The first Meeting of Advisory Committee of Bio-Medical Waste Reconstituted u/s 9 of Bio-Medical Waste (Management & Handling) Rules1998 was held on March 08, 2011. The following decisions were taken by the committee.

1. It has been suggested that M.P.C.B. may refer MoEF the matter regarding collection of Bio-Medical waste within48 hours to MoEF for necessary amendment in the Rules, as it cannot be adhered to by the Health Care Establishments in remote areas and use of sodium hypo chlorite itself is not environment friendly.
2. The Committee recommended that the incinerator operating as common facility should be operational for minimum 8 hours on daily basis. New CBMWTSDF can be allowed only if the incinerable Bio-Medical Waste is about 400Kg/day available for proposed facility without adversely affecting operations of existing facilities.
3. The Committee agreed to the need of provision of ETP and in first phase and recommended to stipulate ETP to all hospitals including Government having bed capacity100 & more to install ETP for treatment of liquid waste.

4. The Committee suggested the following monitoring frequency.

Sr.no.	Particular	Frequency
1	CBMWTSDF	Once in a Month
2	HCEs with bed capacity i) Above 200 ii) Above 50 but <200 iii) Less than 50	Once in three Month Once in six Month Once in a year
3	All other HCEs not included in Sr. No.2	Once in a year
4	Medical Education and Research Institute/ veterinary Institute/ Research Institutes/ Animal Houses/ Veterinary Hospitals, Veterinary Clinics, Immunization Centers, Manufacturer of Biological and diagnostics kits	Once in a year

Performance of some Common Bio-Medical Waste Treatment Facilities:

Navi-Mumbai

M/s. MWM Ltd has installed common Bio-Medical Waste Treatment Storage Disposal Facility (CBMWTSDF). Board has issued Authorization under Bio- Medical (Management & Handling) Rules 1998. The Facility (M/s MWM) is collecting Bio-medical Waste from health care establishments located in Navi Mumbai, & Panvel area. The Bio-medical waste is segregated in color coded plastic bags at source and records are maintained by the generators.

This waste is transported regularly by some dedicated vehicles owned by MWML. The vehicles are designed & colored as per the provisions of BMW Rules. The vehicles are also provided with Global Positioning System (GPS) to track movement of vehicles. To avoid any infections basic things like gumboots, hand gloves, masks, cap are provided to employees handling the waste.

The activities involved in the treatment & disposal of Bio-medical waste are Autoclave-Shredding –Needle breaker-Incineration-Secured land fill etc.

Bio- Medical Waste disposal by Incineration:

The facility has provided incinerator for Bio- Medical Waste disposal which consist of following units:

- Belt conveyor for charging
- Main combustion chamber
- Secondary combustion chamber.
- Ventury scrubber
- Quenching chamber.
- I.D. Fan

The quantity of Bio- Medical waste disposed year wise:

Sr. No.	Year	Qty. in MT
1	Jan-2003-Mar-2003	13.93
2	Apr-2003-Mar-2004	105.23
3	Apr-2004-Mar-2005	322.76
4	Apr-2005-Mar-2006	267.23
5	Apr-2006-Mar-2007	300.83
6	Apr-2007-Mar-2008	397.31
7	Apr-2008-Mar-2009	520.13
8	Apr-2009-Mar-2010	743.48
9	Apr-2010-Mar-2011	655.6

Ground Water Monitoring: The facility & MPCB is collecting the water samples of bore well regularly. The ground water monitoring is done by collecting the samples of Bore well located at various places in the premises.

Air Monitoring: The ambient & stack monitoring is done by facility & MPCB regularly.

Stack Emission Monitoring of M/s. MWML, Taloja

(BMW Incinerator)

Parameter	19.04.10 (BMW)	25.05.10 (BMW)	28.01.11 (BMW)
Particulate Emission (mg/Nm3)	04	23	85
Sulfur Dioxide	BDL	BDL	5.33
HCL	BDL	BDL	3.65

Nagpur region:

Nagpur region is having in all 5217 nos. of HCEs out of which 2646 nos. of HCEs are using common facility for BMW and remaining 2571 nos. of HCEs are having their own facility for BMW. There is generation of BMW about 814.96 Kg/day and the same is treated.

There are two common facility for treating BMW, namely i) M/s. Superb Hygienic Disposal and ii) M/s Krupa Wastage.

1. M/s. Superb Hygienic Disposal at Bhandewadi at Nagpur having incineration capacity of 200kg/Hr., has installed double chamber incinerator with Ventury type scrubber system. Scrubbing effluent is being treated in ETP. They have provided ETP for treatment of washing effluent generating from floor washing and vehicle washing activity. Treated effluent is utilized for gardening purpose. Board official carryout vigilance and collect water & air samples on regular basis.

Results of the same are as follows:

Sr. No.	Parameters	Limit	Avg. Inlet		Avg. Outlet	
			Min.	Max.	Min.	Max.
1	pH	6.5 to 9.0	7.49	8.52	2.97	8.58
2	BOD	30 mg/l.	14.0	550.0	8.0	2500.0
3	COD	250 mg/l.	40.0	1173.0	24.0	8768.0
4	SS	100 mg/l.	30.0	320.0	28.0	6580.0
5	TDS	2100 mg/l.	2851.0	31370.0	1690.0	21210.0
6	Chloride	600 mg/l.	420.0	28000.0	460.0	5150.0
7	Sulphate	1000 mg/l.	140.0	323.0	73.0	4945.0
8	Oil & Grease	10 mg/l.	Nil	15.6	3.2	128.0

Sr. No.	Date	Stack attached to	Parameters		
			TPM in 150 mg/Nm3	SO2 in mg/Nm3	Hcl in mg/Nm3
1	26/10/2010	Incinerator	496.0	80.0	0.01
2	27/12/2010	Incinerator	404.0	38.0	---
3	13/01/2011	Incinerator	205.0	32.0	0.11

The above results indicate that the parameters of JVS and stack monitoring exceeded the prescribed standards. A show cause notice is issued to the said facility. Besides autoclave of capacity 500 Lit. & shredder of capacity 100 Kg/Hr. is also provided.

2. M/s Krupa Wastage at Post. Dhegaon Taluka Amgaon District .Gondia is another Bio-Medical treatment facility recently put in to operation. The facility is having incineration capacity is 50 kg/Hr. and installed double chamber incinerator with Wet scrubber system. Scrubbing effluent is treated in ETP. They have provided ETP for treatment of washing effluent generating from floor washing and vehicle washing activity. Treated effluent is utilized for gardening purpose. Also they are having Autoclave and Shredder of Capacity 100 Lit. and 50 Kg/Hr. respectively.

Action taken by Regional office Nagpur

The Regional office Nagpur had issued show cause notices to 128 nos. of defaulting HCEs to make compliance.

Regional office Nagpur had organized a meeting on December 24, 2010 in presence of representative of IMA and CBMWTSDF Bhandewadi to create awareness for implementation of BMW Rules in which the issue regarding disposal of BMW was discussed. The Regional Officer, had directed the facility to collect the BMW from various HCE's regularly and instructed the representatives of IMA to ensure the compliance about the scientific disposal of Bio-Medical Waste generated from the HCE's, in accordance with directives of MPCB.

11. Prosecution Launched and Convictions Secured

11.1 Water (Prevention and Control of Pollution) Cess Act 1977:

The Water (Prevention and Control of Pollution) Cess Act 1977 was enacted by the Parliament on December 07, 1977. The main objective of the Act is levy and collection of cess on water consumed by certain industries run by individuals / group of individuals, and by the local authorities and further to augment the resources of Central pollution Control Board and State pollution Control Boards.

The Act provides for constitution of 'Appellate Authority' comprising of Chairman (Chairman of the Board) and two members to be nominated by the Chairman amongst the Board Members. The Appellate Authority is empowered to entertain appeal against the order of assessment of order imposing penalty. The Appellants are required to prefer an appeal within 30 days from the date of the issuance of Assessment Order.

Accordingly, Appellate Authority was reconstituted vide order No.E-319/2006 dated 8/12/2006 to hear appeals. 62 Appeals were pending before the Appellate Authority since 1992. Out of 62 appeals, the Appellate Authority disposed off 44 Appeals and the remaining 18 appeals are pending for final hearing.

A List of Appeals along with their status is as follows:

Partly heard/Pending Appeals filed before the Water Cess Appellate Authority			
Sr. No.	**Name of the Appellants**	**Total No. of Appeals**	**Status**
1	M/s NRC Ltd, Mohane, Kalyan	14	Part heard
2	M/s Tarapur Automic Power Station, Boiser, Thane	01	Pending (Reminder sent to MOEF)
3	M/s Tata Power co. Ltd. Chembur	01	Pending
4	M/s Ratnagiri Power Generation	01	Pending
5	M/s JNPT	01	Pending
Total:		**18**	

11.2 High Court Orders:

A number of Public Interest Litigations / Writ Petitions have been filed against the Maharashtra Pollution Control Board and Other Regulatory Authorities for effective implementation of various Environmental Laws.

During the year .2010- 2011, the following important orders have been passed in various Public Interest Litigations / Writ Petitions:

a. Writ Petition No. 32 of 2006 filed by The Mumbai Midwaste Action Group V/s Union of India and Ors with Writ Petition No. 41 of 2006

The Mumbai Medwastes Action Group and others and Consumer Welfare Association had filed two public Interest Litigations before the Hon'ble High Court of judicature at Bombay bearing No 41 of 2006 and 32 of 2006. The main contention of the petitioner was ensuring strict compliance of Bio-Medical wastes (Management and Handling) Rules 1998 by the various Govt Authorities as well as Health Care Institutions and creating awareness for scientific disposal of the Bio-Medical Wastes.

Being Prescribed Authority, Maharashtra Pollution Control Board under the Bio-Medical Wastes (Management and Handling) Rules 1998, the Board has taken following strategy for achieving compliance. The Hon'ble High Court has passed 34 Court Orders and the Board had filed 9 Affidavits before the Hon'ble Court. The Board has taken broader view and incorporated the view of Expert Agencies such as Central Pollution Control Board as well as Ramaiah Medical College.

The Technical Branch had compiled data in respect of Authorization obtained by the Health Care Establishments and membership obtained by the Common Bio-Medical Wastes Treatment and Disposal Facility. The Board had convened a meeting along with the Senior Counsel, Govt Officials, and various Govt Authorities such as MCGM, Public Health Department at the Chamber of Senior Counsel to decide strategy to comply with the Hon'ble High Court Orders. In Pursuant to the Hon'ble High court Orders, the non complied Health Care Establishments were closed and issued Proposed direction under section 5 of the Environment (Protection) 1986 (430 Health Care Establishments). Non availability of infrastructure such as Field Staff to achieve substantial result for compliance of Bio-Medical Wastes (Management and Handling) Rules 1998 had been submitted by the Board before the Hon'ble High Court. Based on the said Submission, the Hon'ble High Court has granted approval to fill up staff as per the requirement and appointment of 31 Post of Field Officers have been made to achieve maximum results in implementation of Bio-Medical Wastes Rules 1998.

The status of implementation of Bio-Medical Wastes Rules 1998 was discussed in the 151st Board Meeting held on 1/10/2010. The Efforts and substantial achievement made by the Board Officials were taken on record and all the efforts were appreciated.

The Hon'ble High Court has specifically pointed out that there has been a substantial improvement and about 90% of Health Care Establishments are complying with the relevant statutory provision.

b. Writ Petition No.1372/11 filed by M/s CHT (I) Pvt. Ltd. (Through its G.M.Mr.Parag Kane) against the Regional Officer of the Board at Navi Mumbai & Others.:

Being aggrieved by the directions of closure issued by the Board vide letter dated 9.2.2011, M/s CHT (I) Pvt. Ltd. has filed a writ petition bearing No. 1372 of 2011 against the Board.

The petition was heard by the Hon'ble High Court on February 14, 2011 and had granted stay for implementation and operation of the Direction / Order in the impugned order dtd. 9.2.2011 issued by the Respondent No.1 till the next date.

In the above matter, the Board has filed an affidavit on February 28, 2011 stating therein the circumstances under which the directions of closure were passed by the Board u/s 33A of the Water Act, 1974. During the course of hearing on March 03, .2011 Ms. Sharmila Deshmukh, Advocate appeared on behalf of the Board stated that the State Pollution Control Board would like to inspect the treatment plant on March 07, 2011 and till that time the petitioner should stop production.

Based on the submissions made by our Panel Advocate, the Hon'ble High Court has passed an order dated March 03, 2011 wherein the Petitioner was directed to stop the production in their manufacturing unit till the next date i.e. till 9.3.2011 and the Hon'ble High Court had vacated the interim relief passed on February 14, 2011.

In pursuance of the order passed by the Hon'ble High Court, the Respondent Board has carried out inspection on March 07, 2011 and found that the manufacturing activity was not in operation and was not generated any effluent at the time of visit.

The disconnection of Electricity and Water supply was not done. The Respondent Board has given an opportunity of personal hearing to the Petitioner before the Member Secretary of the Board on March 08, 2011. Based on the submission made by the Petitioner, Conditional Restart Order was issued by the Respondent Board to the Petitioner Co. vide letter dated March 21, 2011.

In view of the Conditional Restart Order issued by the Respondent Board, the Petitioner withdrawn the above petition and accordingly the Hon'ble High Court has disposed off the petition as withdrawn on March 28,2011.

c. Writ Petition bearing No 4830 of 2010, filed by Sagar Sharmik Hatpati VallUttpadak Sahakari Sanstha Ltd V/s State of Maharashtra and Others and Writ Petition No 5749 of 2010, 5750 of 2010 and 5752 of 2010 filed by Shri Nitin Pundlik Parab, Shri Gurunath Yashwant Patkar and Shri Anil Bhagat:

Background of Writ Petition No 5749 of 2010, 5750 of 2010 and 5752 of 2010

Shri Nitin Pundlik Parab, Shri Gurunath Patkar and Shri Anil Bhagat have applied for grant of consent to establish and consent to operate for their sand dredging activities at Taluka – Kudal, Dist-Sindhudurg. In the aforesaid petition, the Hon'ble High Court of Judicature at Mumbai has directed to the Board to decide the applications received in respect of grant of consent from above applicants, if not decided earlier in accordance with the law, within 8 weeks time.

However, while disposing the Writ petition No 4830 of 2010, the Hon'ble High Court directed to the Additional Chief Secretary (Revenue), Govt of Maharashtra to communicate the interim order, directing the sand extraction all over the State of Maharashtra even on the basis of the existing licenses/permits shall be stopped forthwith until further orders, to be communicated to the District Collector throughout Maharashtra forthwith by Fax/E-mail.

Pursuant to the Hon'ble High Court Order dated 23/9/2010, the Revenue Department has issued New Sand Dredging Policy vide Govt Resolution dated October 25, 2010. As per the Clause 4 of the New Policy, it is mandatory to obtain permission from Environment Department as well as NOC from Maharashtra Pollution Control Board as per EIA Notification dated 14/9/2006 and Environment Department letter dated October 24, 2008.

The Ministry of Environment and Forest, Govt of India Notification dated 14/9/2006 empowers to the Competent Authorities to grant Environment Clearance to the Projects listed in the Schedule on the basis of the categorization of those Project as "A" and "B" the threshold limit, which appears to be different than that of criteria laid down under the Govt of Maharashtra EIA Notification dated August 07, 1997 as amended on June 03, 2000. Thereby, the statutory requirement as far as the sand dredging activity is concerned in the Govt of Maharashtra Notification, does not appear in the EIA Notification dated September 14, 2006. Similarly, different criteria are fixed for grant of Environment Clearance to mining projects and that of the storage different than what was given in the Govt of Maharashtra's Resolution dated 7/8/1997 as amended from time to time as under.

The Hon'ble High Court of Judicature at Mumbai in the Writ Petition bearing No 4830 of 2010 while considering the Petition filed by Sagar Sharmik Hatpati Valu Uttpadak Sahakari Sanstha Ltd against the State of Maharashtra and Others for direction against the Responders not to declare the auction and/or contract by inviting tenders in respect of the area reserved within 15 km of Savitri River/Bankot Creek in Raigad District on account of those areas reserved exclusively for the purpose of manual dredging as per the Govt Circular dated 24/12/2004 and 24/3/2005, the Petitioners Society prayed for a Writ of Mandamus against the Respondents to formulate and effect Regulations for issuance of permits for extraction of sand manually.

The Hon'ble Court taking into consideration the wide gap between the Royalty charges received by the State Govt amounting to ₹3.65 crores and the expected charges of ₹33.19 crores, in cases State Govt resort to public auction, the Hon'ble High Court noted from the report of Shri J P Dange, the then Additional Chief Secretary (Revenue) that the method of issuing permits for extraction of sand was causing loss to the State Exchequer and appropriate method would be to auction the sand extraction by inviting Public Tenders. The state Govt was therefore directed to frame a policy of Sand Extraction all over the State of Maharashtra taking into consideration the indiscriminate extraction of sand from different river beds all over the State causing a serious threat to Environment and Rivers Beds by its order dated September 09, 2010. In its order dated September 09, 2010, the Hon'ble High Court of Judicature at Mumbai in the above Petition granted time for framing the policy for Extraction of sand and directed to file affidavit in reply on behalf of the State Govt within the time frame of two weeks along with the policy formulated by the State Govt.

However the State Govt had not framed its Policy and requested for further extension of time to file affidavit in reply on behalf of the State Govt. Hon'ble High Court of Judicature at Mumbai observed while passing order dated September 23, 2010 that extraction of sand all over the State of Maharashtra has become a serious issue posing Environmental Degradation challenge as well as the apprehension to cause damage to the river bed , thereby causing serious threat of flood or diversion of water flow, which also reflected in the report of the former Additional Chief Secretary (Revenue) Govt of Maharashtra. Therefore Hon'ble Court directed to stop the Sand Extraction all over the State of Maharashtra including existing licenses until further orders.

The Hon'ble High Court by its order dated October 26, 2010, had taken on record New Policy for excavation of Sand from Nallas, Rivers and Creeks all over the State of Maharashtra with specific reference to four Districts of Konkan Region after considering the said New Policy dated 25/10/2010. The Hon'ble High Court observed that the said Policy has tried to address almost all substantial issues and provides for adequate measures to ensure that in the process of Excavation of Sand there is no damage to the River Flow, streams, and the Environment. The Policy has tried to plug the loopholes by and large and also seeks to make the Government system accountable for its implementation. A special feature of the said policy is the involvement of village Panchayat and allocation of some Revenue to these local Bodies from the Royalty collected, so as to provide for the maintenance of Roads, Public Health etc, by providing penal provision also to implement the policy.

The Hon'ble High Court directed the state Government that extraction at any surface shall not exceed a depth of 2 meters, but at the same time it shall not be more than 3 feet in Nallas, Canals, River Banks, Streams and the Tributaries. The Hon'ble High Court also made it clear that extraction of sand from the underneath the water by mechanical devices including atomized spats, suction pumps or dressers should not be allowed ordinarily.

The Advocate General to the Govt of Maharashtra pointed out that in every case Clearance from Maharashtra Pollution Control Board is not required and it depends from case to case. Therefore Hon'ble High Court suggested the MPCB to approach the Department of Revenue

and Forest, Govt of Maharashtra for issuance of Circular for its association in the Initial Survey Report in specific cases.

The Hon'ble High Court, while disposing off the Petition and vacating the Interim Order dated 23/9/2010, observed that the State Government has applied its mind to the existing deficiencies and brought out a mechanism for excavation of sand, so as to ensure that it does not cause any damage to the River Banks, Streams and the land as well as Environment ensuring it generates reasonable Revenue. It also observed that successful implementation of the said mechanism solely depends on the Revenue Officials, the Co-operation of Village Panchayat and the contractors' commitment to abide by the terms and conditions of Policy. It dispelled the fear of an emerging sand mafia and all the issues raised in the petition have been sought to be addressed to and provided for in the Policy.

The aforesaid proposal, was kept before the Consent Committee meeting held on September 20, 2010 and during the discussion of the said proposals, the Board has specifically observed that there are discrepancies in the Government of Maharashtra Resolution dated 7/8/1997 as amended on 3/6/2000 and EIA Notification issued by the Ministry of Environment and Forest, Govt of India dated 14/9/2006.

Similarly, different criteria fixed for grant of Environment Clearance to mining projects and such other authorities mentioned therein which created discrepancies or inconsistency in making applicable both the Notifications.

The Environment Impact Assessment Government Resolution of Environment Dept, Government of Maharashtra for sanction of Environment clearance to projects by the State Government is mainly issued on the basis of then EIA Notification dated January 27, 1994 as amended from time to time, when, the State Government was not given any power to grant Environment clearance under EIA Notification of 1994.

It was based on the concept that the Medium and Large scale projects with investment of above Rupees Three crores which are not included in the Notification of India will require Environment Clearance from the state Government. But now the State Government has been given wide powers in respect of 2/3 projects requiring Environment Clearance, which created anomaly in respect of the similar projects, having different requirements in both the Notification and Government Resolution i.e. Govt of Maharashtra Govt Resolution dated 7/8/1997 as amended from time to time and a new EIA Notification dated 14/9/2006 issued by the Ministry of Environment and Forest, GOI.

The aforesaid discrepancies and anomaly were brought by the Maharashtra Pollution Control Board to the notice of the Hon'ble Secretary, Environment Department, Govt of Maharashtra

d. Notable High Court Orders in the Public Interest Litigation bearing No 116 of 2009 filed by Welcom Trust and another V/s Union of India and Others:

The Petitioners had approached the Hon'ble High Court of Judicature at Mumbai in the above Petition, seeking various reliefs other to restrain the State of Maharashtra and Commissioner of Police from granting any loudspeaker permission in the Shivaji Kridasthan as well as in the vicinity of Shivaji Park area between 10.00 pm to 6.00 am on any day or time and further to notify its periphery as a 'Silence Zone' as required in terms of the Noise Pollution (Regulation and Control) Rules 2000. It has been specifically mentioned that it is the duty of the State Government to categorize the area into industrial, commercial, residential or silence zone/s for the purpose of implementation of Noise Standards for different areas under Rule 3(2) of the Noise Pollution (Regulation and Control) Rules 2000. Under sub-rule, an area comprising less than 100 meters around Hospitals, Educational Institutions and Courts may be declared as "Silence Zone" for the purpose of the said Rules.

The said order dated May 05, 2010 also specifically pointed out that the State Government has issued a Government Resolution dated May 21, 2009 and the further Notification dated August 07, 2009, resolving that the local bodies have to demarcate immediately the Silence Zone' and fix up the boards and to give publicity to it around 100 meters area of 'Silence Zone'. The said G.R. also notified various Authorities for implementing the Noise Pollution (Regulation & Control) Rules, 2000. The Hon'ble Court also observed that the power to issue such a Notification vested in the State Government under the said Rules.

Hon'ble High Court referred the Affidavit filed by the Municipal Commissioner, MCGM, pointing out that there are two shrines at Shivaji Park, Dadar, Mumbai namely Ganesh Mandir and Kalimata Mandir. It is also pointed out that considering a number of Educational Institutions and Religious places and structures all over Mumbai, it will be almost impracticable to declare 100 meters around each Educational Institutions and Religious places as 'Silence Zone'. The Affidavit therefore stated that it is decided that the area around authorized private Primary/Nursery Schools and small Educational Institutions, which do not partake character of School, Colleges etc. as well as Religious places, as not normally frequented by large number of Members of public, be not declared as Silence Zones and hence, the Corporation has not declared Silence Zones around Private Primary/Nursery Schools situated in various Buildings around Shivaji Park.

The Hon'ble High Court observed that in its opinion, the Rules do not confer such power on the Municipal Commissioner, who would only be the Authority to notify the Silence Zones in terms of the Rules. Under the Rules, the State Government also issued Government Resolution, which has not made any distinction between the Nursery or Primary School and other Schools or between major shrines and shrine which is not considered by the Commissioner as major. The Hon'ble High Court therefore made it clear that it is for the State Government if at all, it decides to amend the Notification to apply its mind. However at any rate, neither the Corporation nor the Municipal Commissioner can read down the said Notification. The Hon'ble High Court therefore is of the clear opinion that Shivaji Park would fall within the Silence Zone and considering that, the Police Authorities can not issue any License for loudspeakers being used in that area during the time when, they cannot be used.

In the meantime, the Environment Department, Govt. of Maharashtra referred the issue to the Ministry of Environment & Forests, Govt. of India, asking the criteria for Hospitals, Educational Institutions and Religious Places as well as 15 days relaxation in the Silence Zone restrictions, in a year. The Additional Director (S), Ministry of Environment & Forests, Govt. of India by their letter dated 5/7/2010 communicated that the terms 'Hospital' and 'Educational Institution' have been defined in the Noise Rules, 2000, in which definitions are self-contained. In respect of relaxation for Silence Zone, he made it clear that the exemption shall not apply to Silence Zone areas, which has been given to other areas 15 days in a year by the Central/State Government.

Thereafter, one more controversy arise in the petition as to whether Shivaji Park is a Playground as contemplated u/s 37 of the Maharashtra Regional and Town Planning Act, 1966 as contended by the Petitioners or whether it is a Recreation Ground by the Municipal Corporation. Hon'ble High Court vide order dated 3/3/2011 directed the State Government to file Affidavit indicating whether Shivaji Park is a Playground or a Recreation Ground within three weeks time along with the relevant extract of the Development Plan and all other documents, which the State Government considers to be relevant the purpose of the said controversy. Regarding the grievance of the Petitioner about the not declaration of the area as 'Silence Zone' the Hon'ble High Court directed the Respondent to file further Affidavit within three weeks time.

The matter is still pending before the Hon'ble High Court of Judicature at Mumbai for final disposal.

e. Compliance of Various Conditions imposed by the Competent Authority on the MPCB and the provisions of EIA Notification 2006 as decided by the Hon'ble High Court of Judicature at Mumbai in the Writ Petition No 7050/2010:

The Sarpanch, Grampanchayat Tiroda and others had filed Writ Petition bearing No 7050 of 2010 against the Ministry of Environment and Forest, Govt of India and others, aggrieved by the Order dated 11/09/2009 passed by the National Environment Appellate Tribunal, rejecting the appeal preferred by the Petitioners on the ground that it was time barred by the Limitation. They had preferred the Appeal before the National Environment Appellate Tribunal, challenging the grant of Environment Clearance by the Ministry of Environment and Forest, Govt of India dated 31/12/2008 in favor of M/s Gogte Minerals in Village- Tiroda, District Sindhudurg, in the State of Maharashtra, alleging that there are several infirmities in grant of Environment Clearance and non-application of mind etc.

The Petition was heard at length. It was observed that the National Environment Appellate Tribunal rejected the Appeal on the ground that the Appeal was received by the Authority on the 222nd days from the date of Environment Clearance and therefore, it was beyond the Jurisdiction of the Environment Authority to entertain the Appeal for disposal on account of its being time barred. However, the Petitioners specifically pointed out that the Environment Clearance was granted subject to the specific conditions, such as making available a copy of clearance to the concerned Panchayat /Local NGO, if any, from whom suggestions/ representation has been received while processing the proposal, State Pollution Control Board to display a copy of the Clearance at the Regional Officer/ District Industry Centre and Collector's Office for 30 days and also to make available at the Website of the Ministry of Environment and Forest, Govt of India and the State Pollution Control Board.

The Hon'ble High Court specifically observed that the Maharashtra Pollution Control Board in its affidavit has made no averments about the non compliance of condition No (XV) in respect of placing the Clearance on the Website of the Board. Similarly, the Clearance letter was accessible on the Website of Ministry of Environment and forest, Govt of India and Maharashtra Pollution Control Board. It was also noted that the State Pollution Control Board has admitted that the Clearance letter was not displayed on the Website of the Board. The Court also has taken note of the placing of Clearance on the Ministry of Environment and Forest, Govt of India, Website on or about 13/5/2009, when through inadvertence in the Appeal-Memo, stating that the Clearance was available on the Website in the Second Week of April 2009, but it was not available on that date.

The Hon'ble High Court noted the following important points in favor of the Petitioner's

1. The Hon'ble High Court was of the view that the National Environment Appellate Authority did not consider the question of limitation in its proper perspective and not given any opportunity of hearing to the Petitioner's to show cause as to why the Appeal should not be dismissed on the ground of Limitation.
2. The Petitioner's could not be held to be constructively posted with the knowledge of all / or any of those conditions, which mandated that the Environment Clearance was to be displayed on the Website of the Ministry of Environment and Forest, Govt of India and the Maharashtra Pollution Control Board. Hence, the burden was on the Respondent's to show that the Environment Clearance was displayed on the Website of the said Authorities.

The Hon'ble Court accepted the explanation given by the Petitioners for the delay of about 57 days only in filing of the Appeal and come to the conclusion that the matter is required to be sent to the National Green Tribunal established under the National Green Tribunal Act, 2010, for hearing the Petitioner's Appeal on merits, after treating the same as filed within the period of limitation.

11.3 Notable Orders passed by the Appellate Authority in the Appeals filed by the aggrieved persons

Various Environmental Laws nad Rules made thereunder have made provision for appeal against the order of Refusal to grant permissions.

During the year 2010-2011, the following important order has been passed in the Appeal preferred by M/s Mumbai Waste Management Ltd. before the Appellate Authority Constituted under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008

The Mumbai Waste Management Ltd. had filed the Writ Petition bearing No.625/2010 against the Secretary, Environment Dept., Govt. of Maharashtra and Ors., including Maharashtra Pollution Control Board challenging the decision of the Maharashtra Pollution Control Board, assigning the areas of operation of Common Hazardous Waste Collection, Treatment, Storage & Disposal Facilities in the State of Maharashtra for management of hazardous waste by its order dtd.11/12/2008 and 9/3/2009. Hon'ble High Court of Judicature at Mumbai by its order dtd.17/8/2010 disposed off the said petition with a direction to the Secretary, Environment Dept., Govt. of Maharashtra being an Appellate Authority constituted under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 to hear and decide the appeal filed by the petitioner within 2 months from the date of receipt of the said order.

In compliance of the said order, the Appellate Authority extended personal hearing to the appellant on October 14, 2010, before it and rejected the appeal on the face of record itself. Order passed by the Appellate Authority is reproduced as under:

The appeal was mainly filed on the ground that the area based jurisdiction has been done away in the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, which has been passed by the Ministry of Environment and Forests, Govt. of India in super session of earlier Hazardous Waste (Management & Handling) Rules, 1989 as amended from time to time. The Appellant specifically referred to the old Rules and new Rules, stating that the proviso to old Rule 5 specifically provided that an occupier or a recycler not having a Hazardous Wastes Treatment & Disposal Facility of his own and is operating in an area under the jurisdiction assigned by the State Pollution Control Board shall become a Member of a Common Treatment, Storage and Disposal Facility (TSDF) and send its wastes to such facility, to ensure proper treatment & disposal of hazardous wastes generated from their activities.

The new Rule 5 of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 does not mention anything in respect of the jurisdiction to be assigned by the State Pollution Control Board and therefore, the orders issued by the Board dtd.11/12/2008 and 9/3/2009 for area based jurisdiction received by the Mumbai Waste Management Ltd. (MWML) are required to be set aside on the following grounds.

1. The area jurisdiction order dtd.11/12/2008 and the compliance order dtd.9/3/2009 issued by the then Member Secretary, MPCB will lead to the monopoly of the TSDF Operators and it will harm the interest of the industries and also the technical competence and the competitive price.

2. If the TSDF Operators will provide technically sound service at competitive price to the hazardous waste generators, which is followed in all the States except in the State of Maharashtra, the monopoly of the operator of the common facility will be avoided.

3. All other States have not created any area jurisdiction and many small States like Gujarat allowed many TSDF and left to market forces for the survival of TSDF based on technical competence and competitive price.

During the course of hearing of the Appeal, the Appellate Authority directed both the Appellant and Respondent to submit written argument on the grounds on which, they are relying upon their point of view, so as to decide the matter on the basis of their written submissions.

Thereafter, the Appellant and the Respondent Board had submitted their written argument to the Appellate Authority and the Appellate Authority was of the considered opinion that the Maharashtra Pollution Control Board has been authorized to approve the Hazardous Waste Sites as per Rules. The object of the present rule is to reduce the burden of hazardous waste on the incineration by exploring recycle and reuse and secured landfill site option as assured. Therefore, the quantity of hazardous waste is bound to be reduced. Hence, the Appellant cannot expect the quantity of hazardous wastes as in RFP document. The Appellate Authority also relied upon the Guidelines issued by the Central Pollution Control Board, which provides that the site selection procedure be so adopted that the distance of the site is not too close to cause impact, too far as involve heavy transporting cost & risk and therefore, taking into consideration the distance of different distant areas like Aurangabad, Nashik, Nagpur Regions and some parts of Pune Region as well as Kolhapur Regions, decentralized CHWTSDFs. Different area jurisdiction allocated to them is the necessity for the State.

The Appellate Authority observed that in case of sugar factories, the area jurisdiction is allocated for the purpose of sugarcane, so as to avoid any Litigations and disputes in respect of supply of sugarcane as a raw material. In the instant case, the Maharashtra Pollution Control Board has taken into consideration the above Principle of Proximity of the industries generating hazardous wastes to the CHWTSDF and effectiveness in monitoring of such type of units and collection of hazardous wastes and accordingly, approved the area allocation and sites, the rates of different CHWTSDFs is now fixed up by the Authorities and therefore, the contention in respect of arbitrary charging of fees will not arise. Area allocation rules out possibility of any monopoly in a particular area. The concerned TSDF will have to comply with the norms & standards laid down under the provisions of the Environment (Protection) Rules, 1986.

The Appellate Authority also observed that the Appeal has been filed aggrieved by the directions issued by the Maharashtra Pollution Control Board to the Appellant to comply with the Area Allocation Jurisdiction issued vide letter dtd.11/12/2008 and 9/3/2009.

The appropriate remedy would have been to challenge those directions before the appropriate Forum and not before the Appellate Authority because the Appellate Authority has got jurisdiction in respect of the Appeals only in case of order of suspension or cancellation or refusal of Authorization or its renewal passed by the Respondent-Board. As no such order of refusal etc. was passed by the Respondent-Board, the Appeal is not tenable on the face of record itself. Otherwise also, the Appeal has been filed after issuance of those directions more than one year period and therefore, the Appeal is liable to be dismissed. Therefore the Appellate Authority rejected the Appeal.

11.4 Status of legal enforcement

Besides above Public Interest Litigations and various Appeals, the Maharashtra Pollution Control Board is also initiating various actions under the provisions of various Environment Laws.

The Status of actions initiated by the Maharashtra Pollution Control Board along with various Writ Petitions filed by / against the Board and other actions during the period from 1.4.2010 to 31.3.2011 can be summarized as under:

1. Status of cases filed before Trial Courts

   a. Water (Prevention & Control of Pollution)Act 1974

   - No. of cases filed: 454
   - No. of cases disposed off : 386
   - No of cases pending: 68

   b. Air Prevention & Control of Pollution) Act 1981

   - No. of cases filed: 149
   - No. of cases disposed off: 149
   - No of cases pending: Nil

   c. Environment (Protection) Act 1986

   - No. of cases filed: 48
   - No. of cases disposed off: 08
   - No of cases pending: 46

2. Status of Writ Petitions / PILs filed before Hon'ble High Court of Judicature at Bombay Bench at Mumbai/Aurangabad/Nagpur

   - No. of Writ Petitions filed: 461
   - No. of Writ Petitions disposed Off: 348
   - No. of Writ Petitions pending: 113

3. Status of cases before the Hon'ble Supreme Court of India

   - No. of Special Leave Petitions filed: 31
   - No. of cases dismissed: 24
   - No. of cases pending: 07

4. Appeals filed under section 28 of the Water (Prevention & Control of Pollution) Act 1974 & Air (Prevention & Control of Pollution) Act 1981 in the year 2010-2011: **Status Nil**

5. Previous Appeals pending under section 28 of the Water (Prevention & Control of Pollution) Act 1974 & Air (Prevention & Control of Pollution) Act 1981: **Status 10**

11.5 Right to information Act 2005

The said act provides for setting out the practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, the constitution of a central information commission and state information commission and for matters connected therewith or incidental thereto.

Under this Act there were 110 applications pending in previous year. The applicants preferred 690 applications under section 6(1) of the Right to information Act 2005 during the year. Out of these 800 applications, 742 applications are disposed off.

Information is provided to 736 applications and information is refused to 6 applications under appropriate provision of the Act. 58 applications are pending at the end of year. Being aggrieved by the information given by the Public Information Officer, there were 58 appeals including previous year's 7 appeals preferred by the Appellants under section 19(1) of the Right to information Act 2005 before the Appellate Authority. 54 appeals are disposed off under which information is provided to 52 Appellant and refused to 2 Appellants. 4 appeals are pending at the end of year.

Compared to last year, it is seen that there is reduction of 11% in receipt of application under the Act. The rate of disposal of applications is also increased from 87% in 2009-10 to 92% in 2010-11. The pendency of application is also reduced to great extent. In respect of appeals also the situation is more or less same.

12. FINANCE AND ACCOUNTS 2010-11

The Board's actual receipts for the financial year are ₹12,404.77 Lakhs. The same are classified as under :

Sr. No.	Particulars		Water	Air	Total (In Lacs)
1.	Grant - in - Aid from State Govt.		₹0	₹0	₹0
2.	Reimbursement of Water Cess received from Central Govt.		₹1276.50	₹0	₹1,276.50
3.	Interest on Investment		₹1,226.60	₹0	₹1,226.60
4.	Receipt from Central Board for analytical work		₹66.64	₹27.31	₹93.95
5.	CETP		₹168.07	₹0.00	₹1,68.07
TOTAL (A):			**₹2,737.81**	**₹27.31**	**₹2,765.12**
a.	NWMP	₹41,30,975			
	Municipal Solid Waste	₹4,08,000			
	SEPP	NIL			
	Procurement Of Lab Equipment	₹21,25,000	₹66,63,975		
	NAMP	₹27,30,833			
	AAQM	₹NIL		₹27,30,833	
	Grand Total				**₹93,94,808**
6.	Other Receipts				
	Consent Fee		₹6,010.86	₹995.42	₹7,006.28
	Consent Form Fee		₹17.83	₹3.12	₹20.95
	Analysis Charges		₹424.90	₹25.58	₹450.48
	Laboratory Fee		₹0	₹0	₹0
	Appeal Fee		₹0.01	₹0	₹0.01
	Misc. Receipt		₹230.39	₹0	₹230.39
	Hazardous Waste		₹0	₹0	₹0
	Hazardous Waste Form Fee		₹0.65	₹0	₹0.65
	Hazardous Waste Analysis		₹19.13	₹0	₹19.13
	Hazardous Waste Remending		₹0	₹0	₹0
	Bio Medical consent Fee		₹146.55	₹0	₹146.55
	Bio Medical Form Fee		₹12.67	₹0	₹12.67
	Environment Development		₹0	₹0	₹0
	Environment Planning Report		₹0	₹0	₹0
	Regn. For Plastic		₹0.25	₹0	₹0.25
	Noise Pollution		₹2.01	₹0	₹2.01
	Fine & Forefiture		₹0	₹0	₹0
	Profit on sale of Asset		₹0	₹0	₹0.00
	Spl. Env Act		₹0	₹0	₹0
	Right Of Information		₹0.39	₹0	₹0.39
	Transfer from APNP		₹1,600.00	₹0	₹1600
Total (B)			₹8,465.64	₹1,024.12	₹9,489.76
Total A+B			₹11,203.45	₹1,051.43	₹12,254.88
TOTAL			₹11,203.45	₹1,051.43	₹12,254.88

The total expenditure of the Board was ₹8,645.12 lacs. Out of this an amountof ₹873.58 Lacs for capital expenditure and an amount of ₹7,771.54 lacsfor revenue expenditure. The details are as under:

Sr. No.	Expenditure		Water	Air	Total (In Lacs)
1.	Capital Expenditure				
	Land & Building		0.00	0	0.00
	Lab Equipment		642.48	0	642.48
	Vehicle		87.43	0	87.43
	S.I.& O.		87.92	0	87.92
	Furniture & Fixture		55.75	0	55.75
Total (I):			**873.58**	**0**	**873.58**
2.	Revenue Expenditure				
	A.	Administrative			
		Salary	690.75	41.36	732.11
		Contribution to staff pf	39.27	4.59	43.86
		Bonus	50.2	0	0
		Office contigencies	394.47	0.02	394.49
		Financial Assistance (CPCB)	2.60	0.00	2.6
		Financial Assistance (Cess)	1125.15	0	1125.15
		L.S.& P.C.	0.00	0	0.00
	Total:		**2302.44**	**45.97**	**2348.41**
	B.	Executive			
		Salary	1718.63	113.08	1831.71
		Contribution to staff	92.27	17.36	109.63
		Provident Fund	0	0	0
		Office contigencies	208.88	0.05	208.93
	Total:		**2019.78**	**130.49**	**2150.27**
	C.	Running Expenditure of Laboratory	63.32	0	63.32
	D.	Running Expenditure of vehicle	129.25	0	129.25
	E.	Maintainance and Repairs	214.29	0	214.29
		Education Allowance	0	0	0
		Law charges	4.26	0	4.26
		Professional charges	152.84	0	152.84
		Misc. Expenditure	19.91	0	19.91
		Audit Fee	11.89	0	11.89
		HBAR	3.05	0	3.05
		Depreciation	1015.73	37.24	1052.97
		Magazine Allowance	0.20	0	0.2
		Canteen Allow & Medical Allow	20.88	0	20.88
		Refund Of Lab Fee	0	0	0
		Amt Trans	0.00	1600.00	1600
Total (II):			**5957.84**	**1813.70**	**7771.54**
Total (I) and (II):			**6831.42**	**1813.70**	**8645.12**

The total expenditure of ₹6,831.42lacs under Water Pollution Control activities is inclusive of ₹lacs1015.73on account of Depreciation Charges during the year (2010-2011). The total expenditure of ₹6,831.42 lacs against the income of ₹11035.38 Lacs (₹lacs11351.96-₹168.07 lacs of CETP) & ₹873.58 lacs of income over exp. transferred to capital expenditure during the year, resulted in excess of income over expenditure of ₹5056.29 lacs. Out of the total balance of excess of income over expenditure amounting to ₹5056.29 lacs Provision for Gratuity ₹82 lacs is made & also ₹300 lacs is the provision for VI Pay Comm., ₹9.00 lacs misallocated amt of C.E.T.P. addedd. Similarly ₹492.25 lacs amount of unclaimed deposits &

₹83.11 lacs amount of excess provision made is deducted keeping the balance of ₹18797.67 lacs for the year 2011-2012.

The total expenditure of ₹1813.69 lacs under Air Pollution Control Activities includes ₹37.24 lacs on account of depreciation for air. The total expenditure of ₹1813.69 lacs against the income of ₹1051.42 lacs resulted in excess of expenditure over income for ₹762.27 lacs. Similarly, unclaimed deposits added ₹1.39 lacs keeping excees of income over exp of ₹545.59 for 2011-2012.

Summary of the account for 2010-2011 is as under:

Water Pollution Control Activities:

Particulars	Capital	Revenue	Total (In Lacs
Income:			
CETP	0.00	61.08	61.08
Gratuity**	0.00	64.99	64.99
Capital Receipts	0.00	0.00	0.00
Bal 09-10	0.00	14,578.82	14,578.82
Amt trns.	873.58	-873.58	0.00
* Amt Trns to Income	873.58	13,705.24	14,578.82
CETP	0	168.07	168.07
Gratuity** (₹ prov.+ int on invst)	0	82.00	82.00
Income	0.00	11,014.13	11,014.13
CETP		229.15	229.15
Gratuity**		146.99	146.99
Total Income:	**873.58**	**24,719.37**	**25,592.95**
Expenditure:			
CETP	0	69.28	69.28
Gratuity**	0	69.43	69.43
Expenditure	0	5957.84	5957.84
Balance CETP*	0	159.87	159.87
Balance Gratuity**	0	77.56	77.56
Balance Capital Receipts			
Balance:	0.00	18761.53	19635.11
Add: Unclaimed Deposits	0.00	492.25	492.25
Less: Adj	0.00	83.11	83.11
Less: C.E.T.P	0.00	9.00	9.00
	0	**19161.67**	**19161.67**
Provision for vi pay comm	0	300.00	300.00
	0	**18861.67**	**18861.67**
Provision for Gratuity**	0	82.00	82.00
Balance:	**0**	**18779.67**	**18779.67**

Air Pollution Control Activities:

Particulars	Capital	Revenue	Total (In Lacs
Balance	0.00	1313.85	1313.85
Income	0.00	1051.43	1051.43
Total:	**0.00**	**2365.28**	**2365.28**
Expenditure	0.00	1813.70	1813.70
Balance:	**0**	**551.58**	**551.58**
Less: Excess Provision made	0	7.38	7.38
Balance:	**0**	**544.20**	**544.20**
Add Unclaimed Deposits	0	1.39	1.39
Balance:	**0**	**545.59**	**545.59**

Water:

Particulars	Total (In Lacs
Excess of income over expenditure	14578.82
Less: Excess of income transferred to for Capital exp.	873.58
2009-2010:	**13705.24**
Add: Excess of income over expenditure for 2010-2011	5056.29
	18761.53
Less: Provision for Gratuity	82.00
	18679.53
Less: Provision for vi Pay	300.00
	18379.53
Add: Unclaimed Deposits	492.25
	18871.78
Less: Excess Provision Made	83.11
	18788.67
Less: C.E.T.P.	9.00
Excess of income over expenditure C/F	**18779.67**

Air:

Particulars	Total (In Lacs
Excess of income over expenditure	1313.85
Total:	**1313.85**
Less: Excess of expenditure over income for 2009-2010	762.27
Excess of income over expenditure for 2011-2012 C/F	551.58
Less: excess Provision made	7.38
	544.20
Add: Unclaimed Deposits	1.39
Total:	**545.59**

Inspection Report:

Inspection Report on the accounts of the Member Secretary, Maharashtra pollution control Board, (MPCB) Sion, Mnmbai for the period from 01.04.2010 to 31.03.2011 under section 20 (1) or the C.A.G.'s (D.P .c.) Act, 1971

Part I (A):

a. Introductory:

A test check of the accounts of the Member Secretary, Maharashtra pollution Control Board, Sion, Mumbai for the period from 01.04.2010 to 31.03.2011 was conducted locally between 19.11.2012 and 21.12 2012 by Shri. Ashok Kumar, Assistant Audit Officer, Shri Vikash Kumar, Assistant Audit Officer, Smt. Mary Thomas, Assistant Audit Officer and Shri Rajesh Kumar, Assistant Audit Officer under the supervision of Shri. A.D. Kulkarni, Sr. Audit Officer. The audit was taken up under Section 20(1) of the C. &.AG's (D.P.C) Act, 1971.

b. Disclaimer:

The Inspection Report has been prepared on the basis of information furnished and the records made available by the office of the Member Secretary, Maharashtra Pollution Control Board. (MPCB) Sion, Mumbai.

The office of the Principal A.G.(Audit)-I, Maharashtra, Mumbai disclaim any responsibility for any misinformation and /or non information on the part of the audited entity.

c. Personnel:

The following officers held the 'charge of the post of the Member Secretary, MPCB, Mumbai, during the period covered by audit.

Name	From	To
Shri Mahesh Pathak	01.04.2010	23.05.2010
Shri Radheshyam Mopalwar	24.05.2010	27.06.2011(f.N)
Shri Milind Mhaiskar	27.06.2011(A.N)	30.08.2012(F.N)
Shri Rajeev Kumar Mittal	30.08.2012(A.N)	Till date

d. Grants and Expenditure:

The Board's activities are mainly financed from the share of Water cess received from Central Government consent fee from Industry, interest on the investment and receipt from central Board for specific project etc.

The receipt and expenditure of the Board ror the year 2010-2011 was shown as below:

Sr. No.	Prticulars		Water Pollution Control	Air Pollution Control
I	Receipt			
	1	Water Cess received	127650154.00	----
	2	Consent Fees	601086826.06	99541555.00

Sr. No.	Prticulars		Water Pollution Control	Air Pollution Control
	3	Receipt from Central Board for specific project including (C.E.T.P)	21345975.00	2730833.00
	4	GIA from State Government	----	-----
	5	Interest on Investment	122660428.59	
II	Expenditure			
	1	Capital Expenditure	87358603.94	----
	2	Revenue Expenditure	535449554.34	21362981.80
	3	Contingencies Expenditure	60335010.27	7200.00

e. Activities:

The activities of the Board are prevention and control of Pollution and include advice to the State government onmtters relating to pollution, administrating Pollution Control in the municipal bodies and industrial sector and making efforts to protect the environment.

f. Internal Control:

A firm of Chartered Accountant empanelled by C & AG of India has been appointed by the Board to carry out the internal audit. The internal audit has been completed by the Chartered Accountant upto 2010-11. MPCB is extending the technical and financial support to these students.

Part I (B): Paragraphs Outstanding from Previous Inspection Reports

Following paragraphs from previous Inspection Reports are outstanding for want of full and final compliance, which may be expedited.

a. Inspection Report for the Period from 01.04.2005 to 31.03.2006

Para 5 Unfruitful expe11diture on Common Effluent Treatment Plant (CETP) The following information in respect of Taloja Project may be furnished

1. The minutes of meeting held on 25/5/07 regarding Taloja CETP
2. Copy of proposal sent to MOEF
3. Copy of latest analysis report carried out by MPCB in respect of all CETP concerned

Para 6 : Non-receipt of financial assistance from Central Board. Compliance may be expedited.

Para 11: Non disposal of unserviceable / obsolete items. Details of disposal, may be furnished.

Inspection Report for the Period from 01.04.2006 to 31.03.2007

Para 7: Excess release of subsidy to CETP Taloja ₹33.90 lakh

Para 8: Coastal Water Monitoring Survey from Mumbai to Sindhudurg.

Detail of survey conducted and implementation may be furnished.

Inspection Report for the Period from 01.04.2007 to 31.03.2008

Para 2: Delay in disposal of Appeal case resulted in non realization

Para 3: Blocking of Funds to the tune of ₹435.07 lakh under Municipal Solid Water (MSW) Scheme.

Early action may be taken and reply furnished.

Para 5 Loss of revenue amounting to ₹30.00 Jakh due to non encashment of Bank Guarantee.

Final compliance may be expedited.

Inspection report for the period from 01.04.2008 to 31.03.2009.

Para 1: Shortcoming in Procurement of Laboratory Instructions and non-utilisation of the same, resulted in idle investment of ₹2.33 crore.

Status regarding utilization of equipment may be intimated.

Para 8: Non-utilisation of expensive instrument resulted in idle investment.

Final compliance may be expedited.

Para 10:Incorrect instruments of works contrary to the statutory Provisions.

The views of the Board on the comments of the Auditor maybe furnished.

Inspection Report for the period from 01.04.2009 to 31.03.2010.

Para 1: Idle Investment

Further compliance regarding utilization of laboratory building at Mahape at Navi Mumbai and premises at CIDCO Bhavan New Mumbai may be expedited.

Para 2: Non recovery of fine from Hazardous Waste Releasing Industry ₹77.26 crore.

Final Compppliance regarding recovery of fine from Hazardous Waste Releasing Industry for violation of norms may be expedited.

Para 7: Unclaimed deposit of ₹5.68 crore

Final action regarding adjustment of unclaimed deposit may be furnished.

Para 9: Short recovery of consent fees amounting to ₹2.40 lakh

Full and final compliance regarding recovery may be expedited.

Para 10: Avoidable expenditure amounting to ₹15.19 lakh on publicity of tender.

Final reply may be expedited.

Para l3: Non-Maintenance of Master Register in respect of consent:fees.

Final compliance may be expedited,

Part I C

Persistent Irregularities

Part- II current Audit

Part II A Major irregularities

Para 1 Irregular payment of Pay & Allowance of ₹20.58 crores without approval of Finance Department

The Maharashtra Pollution Control Board was established in 1970 under Environment Department, Government of Maharashtra (ED). The various functions of the Board have been laid down under Rule 17 of Water Act 1974 and Air Act,1981. The Board has 702 sanctioned posts of various categories (inclusive of Board Office and its subordinate offices) The Governing Council (Board) approved 39 additional posts (8 posts of Sr. cadre and 31 posts of

subordinate cadre) for which ED had given approval in 2008-09. The Board had also approved one post of Assistant System Officer in the scale of ₹7450-225-11500 (Jr. Class I officer). A Statistical Assistant working in the scale of ₹5800-150-8000 (Class-III cadre) was promoted on the said post. Both the posts are in the pay band of (PB-2) ₹9,300-34,800 with Grade Pay 5000 and ₹4200 respectively. However, the ED's approval has not been obtained for this post so far. As the sanctioned strength was not sufficient to perform all functions across the State, the Board approved the proposal for 626 new posts under various cadre in the 147th meeting of Board and submitted to the ED vide letter dated 03.07.2008 and 01.07.2009. In turn the Ed conveyed sanction for the posts of 517 posts vide letter no MPCb-2008/WS-138/DESK-I dt 20.08.2009

Out of these sanctioned posts Board has filled 99 posts in 2009 of various categories.

It was further observed from the records that in the 148th meeting , the Board approved the proposal of implementation of the Sixth Pay Commission recommended pay scales to MPCB staff from 01.06.2006 (subject to the approval of ED). MPCB issued Office Orders in this regard on 23.03.2011 for the implementation

It was further seen that in the 152nd meeting the Board has approved the proposal of payment of 40 percent of the (total amount due) Sixth Pay Commission arrears to the members from the period 01.01.2006 to 31.03.2009. Hence as per decision the 40 percent payment amount of ₹8.88 crores was paid to employees in the month of April 2011 and remaining amount of arrears was kept pending.

On scrutiny of relevant records, it was revealed that:

1. Environment Department had issued the sanction letters for creation of 556 posts (39 additional and 517 new) without obtaining approval from Finance Department (FD), GOM.
2. The MPCB filled 138 posts (33 additional+ 99 New) without confirmation of Finance Department's sanction.
3. One post of Statistical Assistant was sanctioned and operated by Board without approval of ED.
4. The decision to implement Sixth Pay Commission pay scale and payment of 40 percent arrears to MPCB staff was neither concurred by ED nor approved by FD till date.
5. Now ED vide their letter dated 24.07.2012 have sought clarification from MPCB as to the circumstances under which the 138 posts were filled in without FDs approval and resulting annual recurring financial implication on Board. Thus it could be seen that 138 posts filled by Board are not sanctioned by Finance Department

As per Rule 19 & 20 of Air (Prevention and Control of Pollution) Rules 1983, for creation of posts and appointment of officer , the Board requires to take prior approval of State Government. As sanction of FD was not obtained before creation of new post and filling of 138 post the expenditure incurred on pay & allowances of these officials is irregular. Further as no concurrence of either ED or FD was obtained for implementation of 6th Pay Commission's pay scale and payment of arrears of 8.88 crore is also irregular.

The total expenditure incurred on pay and allowances of 138 posts filled by Board and 6th Pay Commission implemented till date was called for in audit.

Further, it was also called for that circumstances under which the post of Assistant System Officer was created and filled directly without ED's and FD's approval and justification / criteria for promotion for class II official on Class I post, may be clarified to the audit. Total expenditure incurred on the post till date was also called for. In reply to audit observationthe Department stated that out of 8 posts sanctioned in the 139th and 142nd meeting of the Board, seven

posts were filled in by way of promotion and after receipt of ED approval for 8 posts these promotions were confirmed.

Out of 31 posts sanctioned, 24 posts of field officers were filled as per Hon High Courts direction (seven posts are still vacant). It was further stated that out of 517 new posts sanctioned by the ED vide their letter dated 03.03.2008, the 99 posts were filled by the Board and remaining posts were yet to be filled in. It was also stated that the post of Statistical Assistant was filled on adhoc basis from October 2004 subject to approval of the ED.The proposal in this regard submitted to Ed vide letter dated 18.11.2004 however Ed's sanction is yet to be received.

The Board further stated that the Environment Department, Government of Maharashtra is Administrative Department and it has given sanction for these posts from time to time and it is not Boards responsibility to obtain Finance Department's approval , as this is the purview of Ed only.

As far as implementation of 6th pay commission's pay scale to Board's staff and payment of arrears, the Board stated that, the proposal was submitted to ED on 21.05.2009 and their sanction was still awaited.

The Board intimated that an expenditure of ₹11.70 crores was incurred on pay andaloowances of 137 posts recruited by them, till December 2012.

Thus it could be seen that total expenditure of ₹20.58crore (₹11.70 crore + 8.88 crore pay arrears) incurred was irregular. As Sanction of finance department is not obtained so far for 137 and one post of Stastical Assistant not approved by Environmental Department of Govt., of Maharashtra.

As far as implementation of 6th pay commission's pay scale and payment of 40 percent arrears of ₹8.88 crore is concerned, no approval from either Environment Department or Finance Department of Govt. of Maharashtra was obtained so far.

This is brought to the notice of Environment Department of Government of Maharashtra for confirmation and comment.

Part-II B Other Irregularities

Para 2: Recovery of cess on water from local bodies and industries.

The Water (Prevention & Control of Pollution)cessAct 1977, was encated to provide for levy and collection of a cess on water consumed by thepersons carrying out certain industries and by local authorities with a view to augment the resource of central Board and the state Board for the prevention and control of water Pollution, constituted under the Water (Prevention and Control of Pollution) Act, 1974. As per provision of the Act, the cess shall be calculated on the basis of water consumed. As per information furnished by the Board an amount of ₹68.52 core was remained to be recovered from various Local Bodies and industries as at the end of 31 March, 2012 as shown below:

Particulars	Amount
Dues from Local Bodies	₹43,36,35,222
Dues from industries	₹25,15,66,046
Total	₹68,52,01,268

The scrutiny of details further revealed that major recovery is due from the following local bodies and industries.

Local Bodies

Local Bodies	Amount
Nagpur Corporation	₹10,31,01,355
Pune Corporation	₹2,99,72,978
Kolhapur Corporation	₹2,10,06,770
Kalyan Dombivali Corporation	₹4,23,04,192
Mumbai Corporation	₹1,08,67,593
Nanded-Waghala Corporation	₹1,05,87,210
Navi Mumbai Corporation	₹2,07,38,761
Total	₹23.85;78.859

Industries

Tarapur Atomic Power Station (1&2)	₹20,78,97,913
Tata Power Company Chembur	₹1,13,05,439
Total	₹21,92,03,352

As against ₹43.36 crores, an amount of ₹23.86 crore from seven Municipal Corporations and as against ₹25.16 crore an amount of ₹21.92 Crore from two industries was due to be recovered as on 31 March 2012. The aforesaid recovery was inclusive of due amount of interest. Tarapur Atomic Power Station 1&2 and Tata Power Company, Chembur had filed an appeal with the Appellate Authority and the same was not finalized.

In reply the Department stated that they were taking appropriate action to expedite the said recovery as soon as possible.

Para 3 Incomplete projects worth ₹6.06 crores and diversion of ₹54,25 lakhs

The main activity of Maharashtra State Pollution Control Board is prevention and control of pollution of the environment. For said purpose the Board provides financial assistance to municipal corporations/ local bodies for treatment of Municipal Solid Waste (MSW). Approved projects can be implemented in collaboration with Central Pollution Control Board and Local Bodies.

On scrutiny of records, it was noticed that the Board has provided funds for various MSW projects, as detailed below.

(₹ In Lakh)

Name of the Project	Project Cost	MPCB contribution	Date of Signing MoU	Expenditure incurred till March 2012
Demo project, Latur	112.97	1,00.00	2007	92.90
Demo Project, Baramati	113.00	36.00	2004	Not utilized
Demo project Janjira	80.34	75.00	2004	68.75
Demo project, Jalna	300.00	75.00	2005	₹I49.00
Total	606.31	286.00		310.65

As per the terms and conditions of MOU, the project was to be completed within two years. However, none of the projects has been completed so far, even after lapse of 5 to 8 years from the date of signing the MOU.

Further, it was also noticed that, in respect of Latur project, an expenditure of ₹92.90 lakhs only had been incurred. Out of the said amount, an amount of ₹54.25 lakhs has been diverted to plantation of tree, which is in violation of the MOU

In respect of project at Bararnati, it could be. seen that, no expenditure was incurred due to non availability of land and the project it is still at the tendering stage.

As these projects are taken for management of Municipal Solid Waste, their non completion could adversely impact the enviromnent. The reason for non-completion of projects, action taken in this regard, along with reason for diversion of ₹54.25 lakh on tree plantation at Latur was called for in audit.

In reply the Department stated that it was pursuing the matter with Local bodies and progress would be intimated to audit in due course

Para 4 Statistical Report of Working of M.P.C.B.

As per circular issued by M.P.C.B.(Board) vide No. Circular No. Bo/Co/ Hq/ B-3052 dated 31.5.1999 for the norms for collection the samples. It had instructed that field officer working with the Sub Regional office should collect 40 nos. of samples each month as indicated below:

1	J.V.S to be collected	20
2	Sample of Air emission to be collected during 3 days on field	13
3	Environmental sampling for 2 days	7
	Total	40

There were 204 Field Officers (F.Os) working in the Board at Headquarter office as well as Regional Offices across the state.

The total sample of various categories collected as per norms in 2009-10 and 2010-11 and shortfall in collection of samples is shown below:

1.

Sr. No.	Category of sample	2009-10	2010-11
1	J.V.S. (Red)/ Orange	19094	28358
2	Sample of air environment	4836	5884
3	Environmental Sampling	7246	9089
4	Samples required to be collected as per norms per year(204 FO x 40 x 12)	97920	97920
5	Total samples collected during the year	31176	43381
6	Shortfall in collection of samples	66744 (68%)	54589 (56%)

2. As per norms fixed by board, frequency of samples collected in respect of red and orange categories industries is shown below:

(Industries status taken as on 31st March 2011)

Industry type	Category	Sample frequency	No. of Industries	Total no. Of sample to be collected in a year
Large	Red	Monthly	1564	18764
Medium	Red	Monthly	893	10716
Small	Red	Once in a Six Month	9777	19554
Large	Orange	Once in a Six Month	327	654
Medium	Orange	Once in a Six Month	327	1154
Small	Orange	Once in a Six Month	14741	29482
Total				80324

It was however noted that actual visits made by field officer and sample collected from the industries and shortfall, if any is not available with the board. The short fall and omissions in collection of samples from the industry as shown in above table indirected very casual approach and laxity on the part of the board to monitor pollution control norms and effective action for prevention of pollution in the environment.

It was seen from the statistical report submitted by the Regional Offices to Board Office that the column regarding shortfall in visit and collection of samples was not available in the report. Though large no. of consent renewal cases was outstanding with each region, the said information was not indicated in the statistical report of R.O. and Board as well.

Total no. of bank guarantee forfeited/released and available in the custody of R.O./ Board alongwith value (Yearwise breakup) was also not available in the statistical report of 2010-11 of R.O as well as Board.

As these are vital information for ensuring, effective execution of pollution control of norms in the states, the same was to be collected and collected for said purposes.

In reply the Department stated that action would be taken for fulfillment of norms and achievement of target the Board also accepted the lacunae in the system stating that appropriate action would be taken.

Further compliance may be furnished.

Para 5: Non utilization of Water Cess

As per the Water (Prevention and Control of Pollution) Cess Act, 1977, the Maharashtra Pollution Board levies and collects Water Cess from Industry and Local Bodies. The said cess is remitted to Central Pollution Control board, New Delhi. As per the decision December 1994 of CPCP, 80% of the Cess collected has to be remitted back to the Boards for meeting their approved expenditure requirement.

Further, out of the 80% Cess received, the Board shall utilize 40% on the execution of specific projects. For this, the Board had to prepare proposals and take the approval of CPCB. The remaining 40% could be utilized by the Board without any condition.

An amount of ₹1171573456 was remitted to CPCB, during February 2007 to March 2011. Thus an amount of ₹937258764.80 (80%) to be received from the Board: However, only ₹876441434.80 had been received so far and balance amount of ₹167353309.80, is still awaited.

On scrutiny of records, it was noticed that, out of of ₹876441435 (80 %) received from the CPCB ₹438220717 being half of the said amount (40%) Should have been utilized on execution of specific project for control and prevention of pollution during the period February 2007 to March 2011.

However, it was noticed, that the Board, did not have any primary record to verify the projects approved, project implemented and expenditure incurred during the above period. The project wise and year wise breakup of expenditure was called for in audit.

In reply to audit observation the Board stated that the outstanding dues would be collected from CPCB and the cess fund utilized for the various projects.

The Board reply indicates that they are not serious and keen in undertaking and execution of project for their cause and even Primary records also not maintained for ensuring that the funds are utilized for intended purpose. The Project wise information may be prepared and furnished to audit.

Para 6: Delay in settlement of advances released by MPCB Office

As per Circular No. MPCP/Est/ Ka/ B171 dated .07-02-2012, any type of advance sanctioned to any party for any purpose should be settled within 3 months of advance (sanctioned) or 15 days after utilization of advance whichever is earlier.

On scrutiny of records such as Cash Book and Advance Register, it was noticed that the MPCB had released different advances for different purposes,

however there was abnormal delay in settlement of advances for the period ranging from 5 months to 29 months as given in Annexure “A” & Annexure “B” Action taken to recover the outstanding advance was called for.

In reply the Board stated that appropriate action is being taken to recover the outstanding advances.

Para 7: Procurement of Laboratory Equipments

Government of India, Ministry of Environment and Forests (MOEF) vide letter No. G-27017/4/2008-CPW, dated 07/04/2008 invited proposals for procurement of laboratory equipments in details under the scheme “Assistance for Abatement of pollution” aimed at strengthening the technical capabilities to achieve the policy statement objectives for the abatement of pollution and preventing deterioration of the environment.

On scrutiny of records it was noticed that the Government of India, Ministry of Environment and Forests sanctioned (March 2009) ₹70,85,0001/- for procurement of laboratory equipments and released (50% of total cost ₹35,42500/•) as 1st installment. Further, all amount of ₹21,22,500/- had been released (December, 2010) by Government of India, Ministry of Environment and Forests for the said purpose.

Further scrutiny revealed that the department in May 2008 initially demanded a fund of ₹11 crore for Procurement of Laboratory Equipments under this scheme. Subsequently, MOEF asked department to restrict the total demand of fund upto ₹3.50 crore. The department then submitted proposal for ₹1 crore against which (₹35.42 lakhs and ₹21.25 lakhs) 56.67 lakhs was received out of which only ₹42.69 lakh was spent. ₹4.78 lakhs is under process for purchases and ₹9.2 lakhs is to be returned.

This entire sequence of events indicates that department made a casual proposal of demand without assessing actual requirements, availability of infrastructural facility and proper market

survey. The department could not get the fund suggested by MoEF. Further, the entire fund could also not be utilized till date for up gradation of laboratory facilities and balance fund of ₹9.20 lakh is being refunded to Ministry of Environment and Forest, Environmental department, Government of India.

In reply the Department stated that this matter is being pursued and would be complied in due course. Further progress may be intimated.

Para 8: Outstanding recovery of JVS fees

Joint Vigilance Samples (JVS) were collected from the industries by the Field Officers falling under their jurisdiction and same were tested by Central Laboratory of the Board. For testing the samples, analysis fees were charged and recovered from the industries.

Scrutiny of records made available to audit revealed that as on 31-03-2011 an amount or ₹60,49, 506/- was recoverable as on from the industries under the jurisdiction of following RO and SR 0 offices.

Sr. No.	Office	Outstanding
1	SRO CHANDRAPUR	1, 29,975/-.
2	SRO MUMBAI	1,12,430/-
3	SRO NANDED	2,07,790/-
4	SRO SATARA	7,62,690/-
5	SRO RATNAGIRI	3,56,228/-
6	SRO AHMEDNAGAR	2,91,935/
7	SRO PIMPRI CHINCHWAD	1,09,714/-
8	SRO NASHIK	9,16,345/-
9	SRO SOLAPUR	3,58,130/-
10	SRO MAHAD	3,70,241/-
11	SRO TARAPUR	21,18;929/-
12	SROTHANE	3,15,099/-
Total		60,49,506/-

Reason of outstanding recovery along with amount of outstanding JVS recoverable from remaining RO and SRO offices as on 31-03-2011 was called for in audit.

In reply the Department stated that appropriate action is being taken to recover the JVS fee at the earliest. Further compliance is awaited.

Para 9: Transfer of Vehicle

Maharashtra Pollution Control Board, Sion is provided with 20 vehicles for official use. On scrutiny of Log Book it was noticed that out of the said 20 vehicles four vehicles along with driver had been transferred to Mantralaya and were being used by Ministers as detailed below.

Sr. No.	Vehicle No	Make	Expenditure	Drivers Name
1	MH-43-V-1466	Honda Citi	2,23,339/-	Shri. Periyan
2	MH-43-A-6500	Bolero	2,31,040/-	Shri. Subramani
3	MH-43-AF-8773	Indigo(cs)	34,729/-	ShrLS.Khan
4	MH-40-CD-7276	Indigo	3,69,570/-	Shri. Phaphal
Total			6,58,678/-	

Further expenditure on cost of maintenance, Petrol Oil Lubricant and the salary of the driver are also being incurred by the Maharashtra Pollution Control Board, Sion Reasons for transfer of vehicle along with driver to Mantralaya, and incurring maintenance and POL Cost of vehicles which are not being used by MPCB was called for.

In reply the Board stated that these vehicles were transferred to Mantralaya on the orders of Higher authorities.

Matter may be taken up with the department for necessary action.

Para 10: Delay in issue Consent to Companies.

As per section 7 of the Water (Prevention and Control of Pollution) Act, 1974, unless explicit consent is given or refused earlier, it may be deemed to have been .given unconditionally after the expiry of a period of four months after submission of application to the State Board.

On scrutiny of the Consent Outward Register, it was noticed that in many cases there was abnormal delay in the consent fees paid by industries and consent sent by the MPCB. A list of the red* category industries are indicated in Annexure "C" where there was delay of 6 to 16 months in issue of consent by MPCB:

Abnormal delay of 6 to 24 months in issuing consent indicates that these' Red' category industries have automatically got consent (deemed consent) and they may start production/ manufacturing activities without consent. In these circumstances, how does the department ascertain that these industries have not discharged hazardous effluent into the environment beyond the permissible limit before they get actual consent? Circumstances under which there was abnormal delay in issuing consent beyond stipulated period of four months was called for in audit.

How the consent were issued prior to date of receipt of consent fee in respect of Sr. no. 14 and 47 was also called for.

In reply the; Department stated that matter was being examined and would be complied in due course. Further progress may be intimated.

Para 11: Issue of consent without proper documents

As per MPCB's Circular dated 29.12.2011 for calculation of consent fees, the following documents are required for consent to renewal of business entity registered under Indian Companies Act, 1956:

1. Recent Balance Sheet along with Schedule of Fixed Assets

2. Certificate of CA in prescribed format.

On scrutiny of consent charges register and relevant files, it was noticed that in the following cases concerned documents were not available in the relevant files.

1. In case renewal of business in respect of .MIs Exide Industries Ltd, Ahmednagar, it has been noticed, that Balance Sheet had not been attached along with the Schedule of Fixed Assets. The basis on which consent fee of ₹3,00,000 was charged was called for.
2. M/s ECO Friend Industries, Navi Mumbai had been given granted consent on 3.5.2011 to operate for a period upto 17.04.2012 However, M/s ECO Friend Industries have applied 09.03.12 for renewal of consent late by almost a year. It was also noticed that consent

*An industry is categorized as "Red" which. discharges effluent which is dangerous for life hazardous to environment. Thus the field officers had to collect sample of discharge of effluent every month• to examine whether they were discharging effluent to environment at permissible limits.

to operate the business upto 17.4.2012 was granted on the basis of capital investment of ₹9 crores. However, there was no supporting document, i.e neither Balance Sheet of the industry or certificate of CA in prescribed fannat which was required for sanction were available on records produced to audit. The first consent for operation was• also calculated based on capital investment of ₹9 crores.

In reply the Department stated that matter is being looked into and will be complied in due course.

Further reply in this matter may be furnished.

Para 12: Reconciliation of CPF balance under MH-8336

The scrutiny of the records related to Contributory Provident Fund (CPF) revealed a difference of ₹l,92,26,352.40 in the CPF balances under the Major Head 8336 between the records of Board and Pr A. G. as on 31-03-2011 as shown below:

Balance as per Boards records as on 31-03-2011	350117100.00
Balance as per Pr.AG's records as on 31-03-2011	330890747.60
Difference	19226352.40

Scrutiny further revealed that the difference is continued from 2006-07 without any reconciliation. Further, the difference of ₹19226352.40 has been reconciled since 2006-07 and the Board has to take necessary steps to reconcile the same.

In reply the Department above stated that it appropriate action would be initiated.

Reply is not convincing as the difference is continued since 2006-07 and Board failed to reconcile.

Para 13: Improper functioning of

a) Internal Audit Wing

Internal Audit is an integral part of the Internal Control. For this every department shall be provided with functional Internal Audit Wing.

The Maharashtra Pollution Control Board, is provided with an Internal Audit Wing, which is entrusted with internal audit of 12 regional, 41 sub-regional branches, 1 central laboratory and 7 regional laboratories of the Board. As per the Circular No.E-209/2011 dated-15.05.2011, the sanctioned strength of the Wing is of four posts of Accounts Officers. Further, the said Wing was entrusted to complete the entire audit by 2011.

On scrutiny of relevant records, following discrepancies were noticed

1. Although the sanctioned strength of the Wing is four posts of Accounts Officer, it was noticed that, three posts were vacant, as those Accounts Officer were transferred to other wings/offices
2. Although there are total 62 units under the Board and as per the aforesaid circular, the audit all of these units was to be completed up to March 2011.However, only 28 units had been targeted for audit, which is only 45% of the total units, due to inadequate man power.
3. Though target was lowered, there was 75% pendency in internal audit of Branches targeted for Audit, during 2010-11, as shown below, although the target was lowered.

No. of Branches to be audited	Branches actually audited	Pendency
28	7	75%

4. It was noticed that the Wing was entrusted to prepare a preliminary report on computerization of provident fund. However, the Wing has not prepared and submitted the said report so far.
5. It was seen that though only seven branches were audited, no follow up action for obtaining compliance from the audited units was made
6. Further, it was noticed that no Internal Audit Manual had been prepared nor any guidelines has been framed for conducting internal audit.

Thus, it could be seen that due to shortage of staff, inadequate coverage and non follow up action of inspection report the internal control is weak. The Board is required to take immediate steps to provide adequate staff to internal audit and clear the pendency of audit of units.

In reply the Department stated that the Internal Audit Wing was not functioning properly due to shortage of staff and other administrative reasons.However, it was further stated that it would take appropriate action in this regard.

Further compliance may be furnished.

b) Internal Control Mechanism

Internal Control is an integral part of an organization's operation and is the principal focus of the Internal Control Mechanism with reference to financial matter like maintenance of cash book, custody of cash expenditure control reconciliation with bank cash deposited in time, execution of works/project as laid down in Departmental Rules/ Act / Manual and Instructions issued by higher authority. The control exists within the organization to safeguard against irregularities in operational and financial matter.

On scrutiny of records, following observations were noticed.

1. The Annual Accounts of the Board for the year 201 0-11 were approved by the Board in the 158th meeting on 30.07.2012 and 31.07.2012 and annual accounts for the year 2011-12 are yet to be finalized.
2. The Annual Report of the Board for the year 2010-11 though approved by Board yet to be submitted to State Government
3. Internal audit wing is having shortage of manpower and audit of subordinate office is pending. Even compliance of paragraphs taken in the internal audit report are not obtained by board time to time.

It was also seen that the Board in its 156th meeting held on 31.01.2012 expressed grave concerns regarding policies about the "Internal Control System" within the Board as well as the need for clear "Accounting Polices" based on well laid down accounting standards. The Board also noted that quite a few of the points being made by the Auditor were already pointed out in the past and the Board had approved the Annual Accounts with comments "regarding compliance on the points raised by the Auditors," however, appropriate compliance had not been done.

The Board felt that approving Annual Accounts for the year 2009-10 without taking note of these failures would be dereliction of duty on its part. Since approval to the Annual Accounts 2009-10 and its adoption was already delayed, after detailed discussion the Board recorded that it would be appropriate to pass these accounts but with clear directives that in the future, serious note be taken of the comments made by the Auditor especially those relating to weak Internal Control System and Accounting Policies.

In this connection attention was invited to Board's decision to invite top accounting and audit firms for a presentation with a view to finalize the terms of engagement for a comprehensive

review of the existing accounting policies and Internal Control systems and suggestions/ recommendations for a revamp. The Board agreed to make a provision of ₹25 lakhs for this purpose. In spite of these comments Internal control mechanism was not strengthened by the Board.

In reply board stated that necessary steps would be taken to strengthening Internal Control Mechanism in the Board.

Para 14: Workshop on "Municipal Solid Waste (MSW) and Plastic Waste Management"

Government of India, Ministry of Environment and Forests sanctioned financial assistance of ₹5,10,000/- to MPCB for organization of Workshop on Municipal Solid Waste and• released 80% of total cost i.e ₹4,08,000/- as 1st installment for organization of five workshop on "Municipal Solid Waste (MSW) Management and Plastic Waste Management" at Ratnagiri, Aurangabad,Nagpur, Pune, and Mumbai vide letter No. 7-4/201O-HSMD, Dated 23/11/2010 with term and condition that the 2nd installment i.e. 20% balance amount of the project was to be released after submission of audited expenditure statement and Activity Report along with list of participants.

On scrutiny of records it was noticed that no workshop had been organized on the said subject so far and the fund received being unutilized. The reason, for not conducting work shop was called for in audit.

In reply the Department stated that it was taking immediate action to organize the workshop as soon as possible.

Para 15: Lapse period consent fees and delayed payment charges in r/o grant of consent authorization under various Environment Laws.

On scrutiny of records it was noticed that some of the industries, operations of processes are undertaken without obtaining valid consents/authorizations or obtain it after a lapse of certain period. In this connection, the total amount of lapse period consent fee that is due and recoverable as on 31.03.20 12was called for in may be intimated to audit with year wise break up.

Also details of Analytical charges due, recovered and outstanding was also called for in audit, along with year wise break up.

A list of the delayed charges collected in the Financial year 2010-11 and 2011-12 was asked produced' in a tabular format specifying the company and the rate at which the amount of delayed charges has been levied.

In reply the Department stated that information would be compiled and furnished to audit. Further progress may be furnished.

Part-III Test Audit Note

---Nil ---

Part-IV Non tax Revenue

-----Nil---

Sr. Audit Officer / General Sector

Annexure 'A'

Sr. No.	Name and purpose of the Advance	Amount Sanctioned (In ₹)	Sanctioned Date	Settled Date	Delay Period (in Months)
1	Misc Advance for Environmental ministry meeting Assembly session	10000	8-4-2010	16-6-2011	14
2	Misc. Advance for entertainment (Charges for Assembly)	10000	12-4-2010	26-5-2011	13
3	Misc. Advance for vehicle repairs. (No. MH-43-A-5600)	34499	7-5-2010	27-1-2011	8
4	Misc. Advance for WPAE, APAW & PSO posts	7500	12-7-2010	Not yet settled	29
5	Misc. Advance for cess meeting to be held on 25-2-2011 at New Delhi	12000	23-2-2011	Not yet settled	22
6	Misc. Advance for purchase of Tapal bag	3000	13-7-2012	Not yet settled	5
7	Misc. Advance for building No. C6/19 , Sector-6 C.B.D., Extension work of officers quarters	70000	2-2-2011	Not yet settled	22
8	Misc purchased for. Advance for tyre vehicle no MH-43-V-1466	23100	18-11-2010	3-5-2011	6
9	Misc. Advance for purchased of postal stamps to Shri M.P.Chavan	20000	28-1-2011	Not yet settled	23
10	Misc Advance for purchased for New books on pollution control Act to Shri K.V.Shingade	39000	24-8-2010	3-5-2011	9
11	Misc. Advance for new vehicle purchased for extra parts	20000	27-4-2010	26-1-2011	9
12	Misc. advance to Shri P.R.Jagtap, Ex engineer for replacement of Broken glass at Nirmal Bhavan, Mahape	17531	4-6-2012	Not yet settled	6
13	Misc. advance for purchase of leather bag for audit purpose	3000	17-6-2011	Not yet settled	18
14	Misc. Advance for winter assembly 2010 Nagpur to RO Nagpur	680500	19-10-2010	12-5-2011	7
15	Misc. Advance for expenditure during visit of Honorable Environmental minister visit at RO Nashik	71000	13-1-2011	19-4-2012	15
16	Misc advance towards 2nd instalment of 6th pay arrears work to Shri S.M. Telang	50000	18-4-2011	Not yet settled	20
17	Misc. advance for repair of vehicle No. MH 43 V 4017 to Shri D.L.Aawkar	15000	16-6-2011	17-3-2012	9

Annexure 'B'

Sr. No.	Name and purpose of the Advance	Amount Sanctioned (In ₹)	Sanctioned Date	Settled Date	Delay Period
1	Misc Advance for Environmental ministry meeting Assembly session	10000	8-4-2010	16-6-2011	14 months
2	Misc. Advance for entertainment (Charges for Assembly)	10000	12-4-2010	26-5-2011	13 months
3	Misc. Advance for vehicle repairs. (No. MH-43-A-5600)	34499	7-5-2010	27-1-2011	8 months
4	Misc. Advance for WPAE, APAW & PSO posts	7500	12-7-2010	Not yet settled	29 months
5	Misc. Advance for cess meeting to be held on 25-2-2011 at New Delhi	12000	23-2-2011	Not yet settled	22 months
6	Misc. Advance for purchase of Tapal bag	3000	13-7-2012	Not yet settled	5 months
7	Misc. Advance for building No. C6/19 , Sector-6 C.B.D., Extension work of officers quarters	70000	2-2-2011	Not yet settled	22 months
8	Misc purchased for. Advance for tyre vehicle no MH-43-V-1466	23100	18-11-2010	3-5-2011	6 months
9	Misc. Advance for purchased of postal stamps to Shri M.P.Chavan	20000	28-1-2011	Not yet settled	23 months
10	Misc Advance for purchased for New books on pollution control Act to Shri K.V.Shingade	39000	24-8-2010	3-5-2011	9 months

Annexure 'C'

Sr. No.	Name of the company	Consent fees paid	Amount of consent fees	Outward consent No./ date	No. of months in delay in issuing consent beyond 4 months	Comments
1	M/s Metal Chem, Thane	18.1.10	7,500	25 01.04.11	12 months	
2	M/s Mumbai Waste Management, Mahad	24.10.09	50,000	26 01.04.11	15 months	
3	M/s Aegies Logistics Ltd,	11.11.09 26.11.09	3,75,500 100	29 08.04.11	14 months	
4	M/s HPCL, Solapur	26.11.09	1,50,000	32 08.04.11	16 months	
5	M/s Parth Packaging	29.03.10	2,500	31 09.04.11		
6	M/s Indian Oil Coorp. Ltd	14.06.10	1,50,000	32 11.04.11	6 months	
7	M/s Bharat Pet Coorp. Ltd	13.03.10 04.05.10 09.03.11 09.03.11	20,000 30,000 25,000 25,000	33 11.04.11	10 months	
8	M/s Navgire Petrochemicals	22.11.10	10,000	40 29.04.11	1 month	
9	M/s Snehalata Chemicals P. Ltd	04.02.08	7,500	41 29.04.11	20 month	
10	M/s Eco Friend Ind	07.12.09	20,000	44 03.05.11	13 months	
11	M/s Mahanagar Gas Ltd	17.07.10	3,75,000	45 03.05.11	6 months	
12	National Highway Authority of India	02.03.10	75,100	46 03.05.11	10 months	
13	M/s Exide Ind. Ltd	24.11.10 26.11.10 22.01.11 21.03.11	6,13,760	48 16.05.11	1 month	
14	M/s Total Oil India Pvt. Ltd	06.09.11	75,000	50 27.05.11		# How is O/w consent given before payment of consent fees
15	M/s Sarshi Metals	28.09.10	9,000	52 31.05.11	4 months	
16	M/s Artheon Battery Co. Pvt. Ltd	20.10.10	1,50,000	53 31.05.11	3 months	

Sr. No.	Name of the company	Consent fees paid	Amount of consent fees	Outward consent No./ date	No. of months in delay in issuing consent beyond 4 months	Comments
17	M/s Kadri Metal Refinery	27.04.10	7,500	55 03.06.11	10 months	
18	M/s Samico International	07.06.10 01.06.11	1,500 6,000	56 03.06.11	8 months	
19	M/s Oil & Natural Gas Corp Ltd	30.8.10	1,00,000	61 22.06.11	6 months	
20	M/s Precious Alco & Petro	23.12.10	9250	62 22.06.11	2 months	
21	M/s Sahar Industries	23.02.09	1500	64 27.06.11	24 months	
22	M/s Subhash Chemical Ltd	29.12.09 25.03.10	50,000 10,000	65 27.06.11	11 months	
23	M/s Ritik Chem Pvt. Ltd	27.09.10 28.10.10 08.06.10	3,000 4,500 1,800	66 27.06.11	8 months	
24	M/s Abdul Jabbar & Sons	18.12.10	3,000	67 27.06.11	2 months	
25	M/s Maxx Mobile Comm. Ltd	11.10.10	2,00,000	71 07.09.11	7 months	
26	M/s Nilchem Industries	01.07.08 17.01.10	2,500 500	74 07.09.11	4 months	
27	M/s Ratnagiri Gas & Power	27.11.10	2469740	75 07.09.11	6 months	
28	M/s Earth Sense Recycle P. Ltd	14.09.10	7,500	77 07.09.11	8 months	
29	Oil & Natural Gas Corporation Ltd	24.12.09 28.05.10	50,000 1,00,000	78 08.09.11	12 months	
30	Salema Chemicals	19.10.10	1,50	79 09.09.11	7 months	
31	Sahastra Chem. P. Ltd	17.03.07 08.12.10	15,000 3,000	81 09.09.11	5 months	
32	Global Lubrication	04.10.10	1,500	82 09.09.11	7 months	
33	Shell India Markets P. Ltd	17.04.09	1,50,100	85 09.09.11	25 months	
34	Mahanagar Gas Ltd	22.10.10	10,000	88 14.09.11	7 months	
35	IOT Infrastructure & Energy Services Ltd	28.04.10	1432118	89 26.09.11	1 month	
36	Mardia Tubes P. Ltd	25.01.11	15,000	92 13.1011	5 month	

Sr. No.	Name of the company	Consent fees paid	Amount of consent fees	Outward consent No./ date	No. of months in delay in issuing consent beyond 4 months	Comments
37	Sakshi Auto Parts P. Ltd	11.04.11	10,100	97 24.10.11	2 months	
38	M/s Heena Metal P. Ltd	21.01.11 04.12.10	7500 100	99 24.10.11	6 months	
39	Meet PETRO Prod P. Ltd	17.11.09	16,100	107 19.11.11	20 months	
40	Alok Chemicals P. Ltd	17.02.11	25,000	111 01.12.11	6 months	
41	M/s Paras Petrochem	10.02.11	9,000	112 03.12.11	6 months	
42	Shakti Industries	27.07.10 29.04.11	20,100 1,600	06 25.01.12	5 months	
43	Gore Trading Corpn	16.06.11	1,500	08 01.02.12	15 months	
44	Jay Santoshi Maa Trading Co.	05.08.11	500	09 01.02.12	2 months	
45	Ameya Metal Ind	02.09.11	3,100	14 09.03.12	2 months	
46	R.K. Manufacturing Co. Ltd	25.05.11	2500	15 09.03.12	6 months	
47	BPCL	03.08.12	150000	16 17.03.12		# How is O/w consent given before payment of consent fees
48	Super Lubes	21.09.11	7,500	20 22.03.12	2 months	
49	Vijay Chem Ind.	16.03.11 02.04.11	7,600 500	22 22.03.12	7 months	
50	M/s Raj Metal Refinery	15.07.11	7,500	26 27.03.12	4 months	

13. Important Matters Dealt by the Board

13.1 Zoning Atlas:

a. District Environmental Atlas (DEA):

The District Environment Atlas is a compilation of district-wise information on environment presented in the form of GIS based maps. The District Environmental Atlas is highly useful to district planning authority to identify the thrust areas for formulating programs and policies for conservation of environment and sustainable industrial development in the district. Final draft of the District Environmental Atlas (DEA) of Latur, Nanded, Nashik and Solapur District has been presented to respective District Collector. The reports of the DEA for Latur and Nanded have been finalized as per the suggestions and recommendations received from stakeholders during the workshop. The reports of DEA Latur and Nanded are being submitted to CPCB for approval.

b. The District Level Zoning Atlas for Siting of Industries (ZASI):

The study inter-relates the sensitivity of environment with the pollution potential of industries. The Atlas identifies the sites through easy to read maps suitable for siting of polluting industries based on their pollution potential and capability of the site to withstand pollution of industries, with minimal environmental impact / risk. Preparation of the ZASI Latur & Nanded District is completed and reports of ZASI Nashik & Solapur District will be completed shortly.

c. District Level Industrial Siting Guidelines (DLISG):

The District Level Siting Guidelines, brings out a clear information on environment-sensitive zones / areas that are to be avoided for location of industries or carrying of process or operations to be restricted in the district, potential zones for Siting of air and water polluting industries and carrying process that may be considered for Siting anywhere in the district, other than Environmentally Sensitive Zones / Areas to be avoided for priority districts. This helps in implementing the District Level Zoning Atlas for Siting of Industries. The district level guidelines for Pune, Aurangabad is completed and submitted to CPCB for approval. Preparation of the District Level Siting Guidelines for Nashik and Solapur district is in progress.

13.2 Environment Improvement Program (EIP) at religious places:

The religious places in Maharashtra are mostly located in small cities or on the bank of rivers. The local authority do not have adequate infrastructure to manage large numbers of population during the festival seasons or religious occasions. Occasionally due to huge crowds of people at these places might have an adverse affect on environment and public health, thereby causing Air, water, noise and solid waste pollution. Considering the seriousness of the issues, the Maharashtra Pollution Control Board considered the implementation of a project on environmental improvement of selected 19 religious places.

a. Pandharpur:

The Mahrashta Pollution Control Board has completed the Techno Economic feasibility study of "Sanitation and Sewerage Management of Pandharpur Town & adjoining areas". The final draft of detailed project reports for selected nine activities are presented to High Level Project Monitoring Committee (HLPMC) under the Chairmanship of Principal Secretary, Water Supply & Sanitation Department (WS&SD), Govt. of Maharashtra and finalized by incorporating suggestions and comments of the High Level Project Monitoring Committee.

The final Detailed Project Reports (Hardcopies) are submitted to HLPMC. MPCB is also extending full technical support to Divisional Commissioner, Pune for "Dehu-Alandi-Pandharpur Tirthkshetra Vikas Prakalpa" funded by Govt. of Maharashtra.

b. Theur (Chintamani) and Pali (Ballalaeshwar):

MPCB has initiated the study of Village Theur (known for lord Chintamani) Taluka - Haveli, District - Pune and Village Pali (known for lord Ballaleshwar) Taluka-Sudhagad, District Raigad, under the "Environment Improvement Program (EIP) at Religious Places in Maharashtra". Both of these places are among the Asthavinayak Places having religious importance.

MPCB has awarded the work of preparation of concept plan for Environment Improvement at Theur to the student of M.Arch, Dept. of Environmental Architecture & Planning, Dr. Bhanuben Nanavati College of Architecture for Women, Cummins College Campus, Karve Nagar, Pune-400052, and it has awarded the work of preparation of concept plan for Environment Improvement at Pali to the student of M.Arch, Institute of Urban & Regional Planning, Rachana Sansad, Prabhadevi, Mumbai-400025.

MPCB is extending the technical and financial support to these students.

13.3 Eco- Village Project at Katewadi , Taluka Baramati, Dist Pune

Since ages villages in India are characterized by communities that live close to nature and have a supportive socio-economic structure. Lack of appropriate infrastructure facilities, unsustainable environmental practices and a breakdown of the traditional knowledge systems lead to an overall destruction of villages.

The motivation for eco-villages is the choice and commitment to reverse the gradual disintegration of supportive social and cultural structures and the upsurge of destructive environmental practices. Eco-villages are intended to be socially, economically and ecologically sustainable communities that allow for social networks within a broader foundation.

MPCB has approved implementation of the project entitled "Eco-Village" at village Katewadi, Taluka Baramati, District Pune, to facilitate the protection and conservation of environment infrastructure at Katewadi

- MPCB has agreed to provide one-time financial assistance of Rs. 129.85 Lakhs to implement demonstration of projects shortlisted by Board.
- MoU was signed on January 30, 2009 among Katewadi Gram Panchayat, Chief Executive Officer, Zilla Parishad, Pune and YASHADA and MPCB.
- Yashada, Pune was appointed as project Management Consultant on behalf of MPCB.
- PMC is formed under the Chairmanship of CEO, ZP Pune to guide and monitor the progress. Project is being implemented under guidance of Project Monitoring Committee.

a. **Eco Village: 'Environmental Sustainable Village' scheme:**

Based on the MPCB's initiative on the concept of 'Eco-Village', Department of Rural Development, Government of Maharashtra has declared state wide scheme of the "Environmentally sustainable village" on August 18, 2010 wide G.R.No / VPM 2610/ PK1/PR-4.

Upon request from Department of Rural Development, GoM, MPCB has short listed consulting firms for preparation of 'Eco- Village Development Plan' through open advertisement calling Expression of Interest. In all, 64 agencies responded to the advertisement and 32 agencies of them are short listed as per defined short listing process through the third party expert agency M/s Environment Management Center, Mumbai.

Evaluation report has been submitted to Environment Department, Govt. of Maharashtra for further necessary action on March14, 2011

13.4 Eco City: Sangli - Miraj- Kupwad Municipal Corporation (SMKMC):

Eco-City is said to be a city wherein Economic, Environmental and Social interests are recognized, balanced and are an integral part of the governance in the city. Eco-City is a process and sustained through partnerships and capacity building. The Eco-City program aims to improve the existing environment through a systems approach and following root cause analyses.

In the year 2002, as a part of the X Plan activities, the Eco pCity Program was initiated by the Central Pollution Control Board with the grants-in-aid from the Ministry of Environment & Forests, Government of India and technical assistance from the German Technical Cooperation (GTZ) under the Indo-German Environment Program on "Advisory Services in Environmental Management" (ASEM). The Eco-City Program started with six small to medium towns namely, Tirupati, Puri, Ujjain, Kottayam, Thanjavur and Vrindavan.

Hon'ble Shri. Jayant Raoji Patil, Minister, Rural Development, GoM in meeting at Mantralaya on January 05, 2010, proposed to develop and over-arching policy and procedure framework to guide infrastructure related investments in Sangli-Miraj-Kupwad Municipal Corporation (SMKMC) indicating economic, environmental and social considerations. The program is targeted to provide a framework for developing and implementing projects to ensure sustainability with the development in SMKMC and on the lines of eco-city program.

Proposal for Financial assistance for Sangli-Miraj-Kupwad Municipal Corporation (SMKMC) Eco-City program - Preparation of Eco-City policy and Action Plan was Accordingly M/s EMC was awarded work for preparation of Eco City Action Plan for Sangli Miraj Kupwad Municipal Corporation. MPCB has extended financial assistance for this work.

M/s Environmental Management Centre (EMC) Mumbai, has submitted the reports of Eco City Action Plan to SMKMC on November 30, 2010 further implementation is being done by SMKMC.

13.5 Accreditation of Board's Laboratories from National Accreditation Board for testing and calibration laboratory (NABL), Dept. of Science & Technology, Delhi as per ISO/ IEC 17025:

Board is having Central Laboratory at Navi Mumbai and Regional Laboratories at Pune, Aurangabad, Nashik, Nagpur, Thane, Chiplun and Chandrapur established as a State Water

Laboratory and State Air Laboratory under the provisions of Water (P&CP) Act, 1974 & Air (P&CP) Act, 1981 and Rules made there under. These laboratories are performing analysis of Water, Air, HW, BMW, MSW under the provisions of Environment (Protection) Act, 1986. The Board laboratories are well equipped with modern sophisticated instruments like GC, MS, LCMS, AAS, IC, ICP, AOx, CHNS, UV Spectrophotometer, etc.

Quality control and Quality assurance is a key factor to establish credentials of any analytical laboratory. Though MPCB is following strict quality checks in its laboratory to improve functional efficiency, third party quality checks and certification by National Accreditation Board based on ISO/IEC 17025 : 2005 for testing and calibration laboratories which will help to ensure further consistency and credibility of the Board's laboratories, is required.

In view of this, Board has given approval in 152nd Board Meeting held on 02.02.2011 for initiating process of accreditation of Central Laboratory and subsequently to extend the process for other Regional Laboratories and accorded its approval for following:

1. MPCB to follow the NABL procedure for ISO/IEC 17025.
2. Appointment of Consultant and Certified Auditor(s) to cover the entire scope.
3. To authorize Member Secretary of the Board to approve the expenditure required for appointment of Certified Auditors and other expenses required for improvement of Board laboratories.
4. To depute the Scientists of the Board for training(s) required (within India / abroad) for fulfilling the NABL auditors requirements.
5. The expenditure for the same shall be incurred from the Cess fund of the Board.

13.6 Project on Determination of back ground concentration of heavy metals and other pollutants in the coastal water of Maharashtra:

The State of Maharashtra has 720 kms. of coastal area. Many of the chemical industrial clusters and MIDC are located in the coastal regions, like Tarapur, TTC, Roha, Mahad, Lote Parshuram, etc. It is observed that most of the treated effluent is discharged at the estuarine line of the coast which leads to the concentration of various heavy metals in the coastal water of Maharashtra.

To monitor the Maharashtra coast with reference to the concentration of heavy metals, hydrocarbons, PCBs, PAHs, etc., a Project Proposal to undertake the study of Coastal Region for above metals was approved by the Board. The estimated expenditure of Rs.56.67 Lakhs was also approved for the same.

13.7 Revision of Sampling and Analysis Charges

During the recent past, as per new / amendments in pollution control acts, rules and notification and considering the exclusive requirements of sampling of various types of samples and analysis of parameters to trace levels, the Board has upgraded its laboratory infrastructure and has planned to strengthen the manpower. Moreover, cost of consumables, transportation, operation and maintenance of sophisticated instruments, laboratory overheads has increased by manifolds in recent past.

Giving due consideration to these increased costs, recently Ministry of Environment & Forests (MoEF) , Govt of India , vide its Notification No. Legal/42(3)/87 dt. 15th June, 2008 has revised the charges for collection and analysis of various types of samples and parameters prescribed under various Acts and Rules notified by MoEF, GoI.

In the 139th Board meeting dated 22-01-2004, the Board has empowered Member Secretary to make suitable proposals to the Government for enhancement of the charges as and when required and issue the notification to that effect with the approval of the Government.

As per the approval given in the 150th Board Meeting held on March 17, 2010, revised scheduled rates of analysis of various parameters and sampling charges were sent for the approval of State Government. Vide letter dtd. 11.02.2011, Director (Env.) has informed the approval of Government for issuance of Notification. Accordingly, Notification was issued on March 11, 2011.

13.8 Environmental Impact Assessment Notification 2006 and Amended Notification in 2009

As per the EIA Notification 2006 and amendment in 2009, the projects or activities shall require prior environmental clearance from the concerned regulatory authorities for matters falling under category A and B in the schedule, before any construction work, or preparation of land by the project management except for securing the land.

The procedure for laid down by the said Notification for the Environmental Clearance will comprise of maximum of four stages, all of which may not apply to particular cases specified in the notification. These four stages in sequential order are Screening, Scoping, Public Consultation and Appraisal.

Role of MPCB:

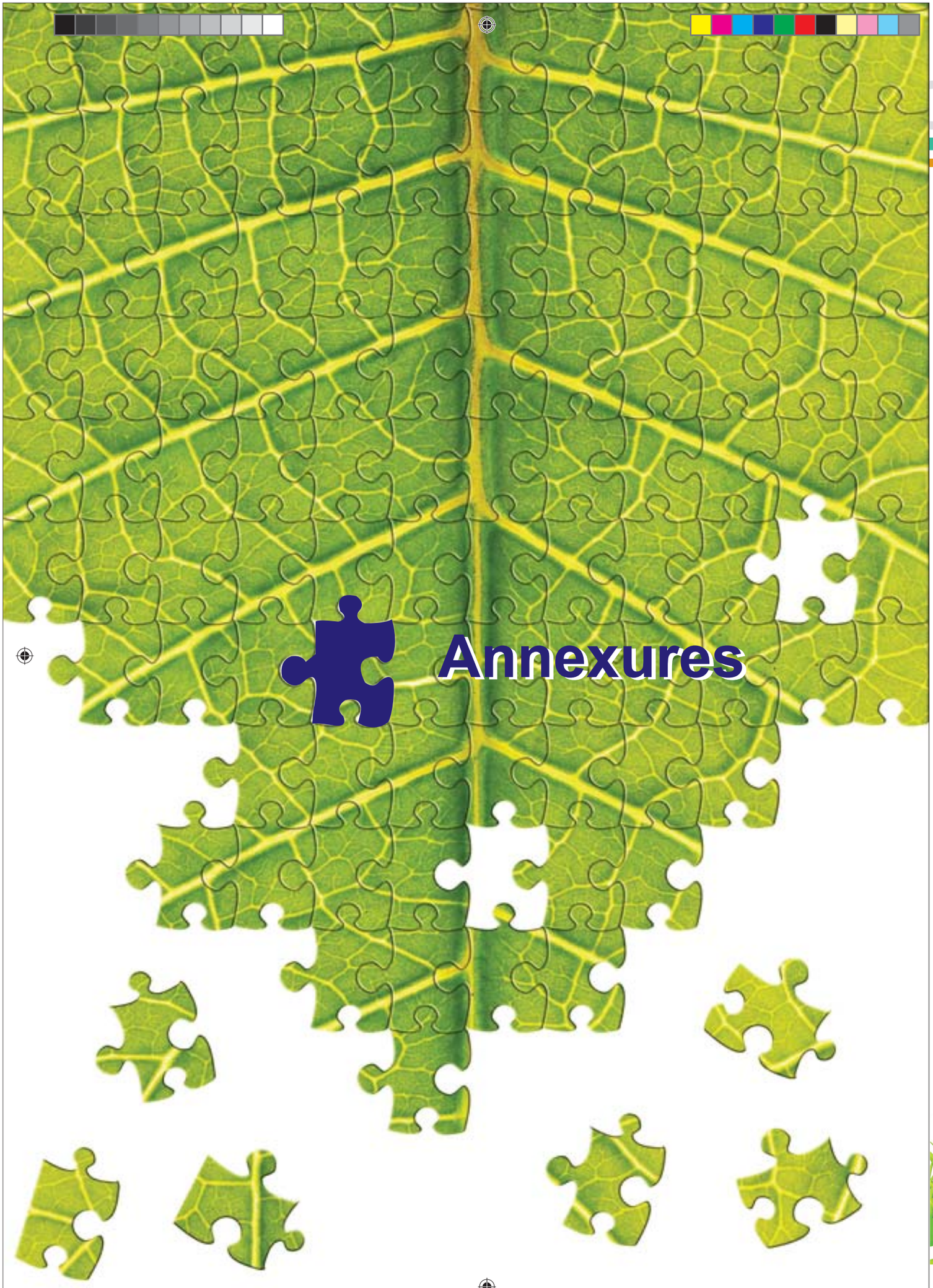
The role of Maharashtra Pollution Control Board comes under the public consultation; the applicant shall have to make a request through a letter to the Member Secretary of the Maharashtra pollution Control Board.

After the receipt of the application, Maharashtra Pollution Control Board arranges the Public Hearing and give wide publicity about the project by making available the summary of the Draft Environmental Impact Assessment report for inspection as specified in the said Notification and also give the public notices in the News Paper specifying the date of the public hearing and places /offices where the public could access the draft EIA report.

The Member Secretary of the Board constitutes the panel for the public hearing which includes a concerned Regional officer of the Board as a representative of the MPCB and the Sub Regional Officer as the convener for supervising and presiding over the entire process of Public-hearing. The District Magistrate is nominated as Chairman of Public Hearing.

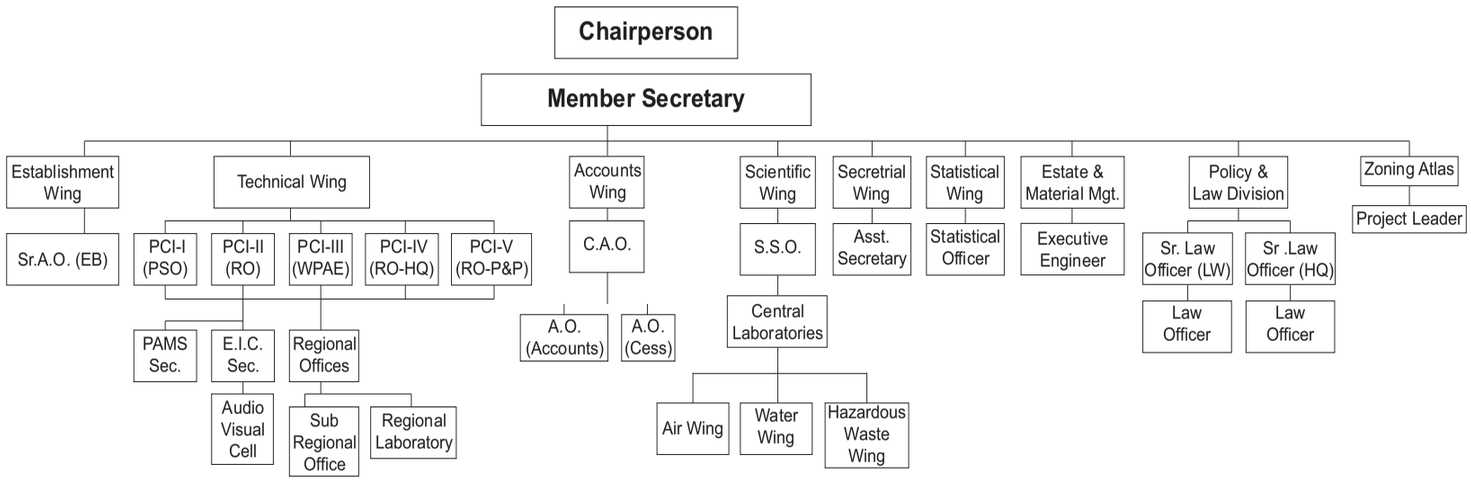
MPCB notes all the comments/ representations and Suggestions from the public and incorporate in the Minutes of the public hearing.

All the proceedings of the public hearing are forwarded to the concern regulatory authority MoEF for Category 'A' projects, and Environment Department of Maharashtra for Category 'B' projects as per the schedule of said notification for the further consideration.


Annexures

Annexure- I (A)

Organization Structure of M.P.C.B. Head Quarter office



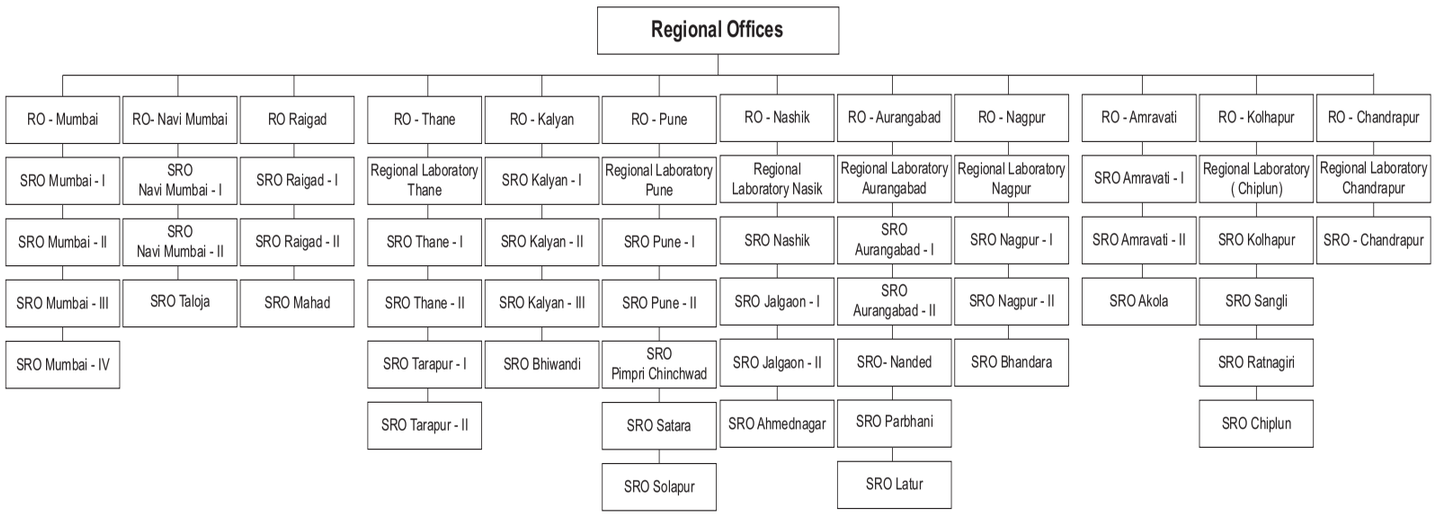
Abbrievations Used:

WPAE - Water Pollution Abatement Engineer
APAE - Air Pollution Abatement Engineer
RO (HQ) - Regional Officer (Head Quarter)
PCI - Pollution Control & Implementation
RO (P&P) - Regional Officer (Project & Planning)
EIC -Environmental Information Center
PSO: Principal Scientific Officer

Sr. A.O. - Senior Administrative Officer
CAO - Chief Accounts Officer
AO (Cess) - Accounts Officer (Cess)
AO (Accts.) - Accounts Officer (Accounts)
SSO - Senior Scientific Officer
PAMS - Pollution Assesment Monitoring & Survilliance

Annexure- I (B)

Organization Structure of M.P.C.B.



Annexure- II

STAFF STRENGTH AS ON 31.03.2011

Sr. No.	Cadre	Sanctioned	Filled In	Vacant
I	**A-TECHNICAL**			
1	Director	1	0	1
2	Director (Tech.Excell)	1	0	1
3	Water Pollution Abatement Engineer	2	1	1
4	Air Pollution Abatement Engineer	2	1	1
5	Asst. Secretary (Technical)	1	0	1
6	Asst. Director (P.A.M.S.)	1	0	1
7	Regional Officer	26	9	17
8	Executive Engineer	1	1	0
9	Asst. Engineer	1	0	1
10	Sub-Regional Officer	57	43	14
11	Deputy Engineer	2	0	2
12	Field Officer	204	196	8
13	System / Statistical officer	4	1	3
14	Asst. System Officer	5	0	5
15	Statistical Assistant	3	1	2
16	Draughtsman	1	0	1
17	Field Inspector	42	34	8
18	Asst. Draughtsman	2	0	2
19	Tracer	6	4	2
20	Electrician	2	1	1
21	Instrument Fitter	1	1	0
Total		**365**	**293**	**72**

Sr. No.	Cadre	Sanctioned	Filled In	Vacant
II	**B-LEGAL**			
1	Director	1	0	1
2	Senior Law Officer	2	1	1
3	Law Officer	2	2	0
4	Asst. Law Officer	3	2	1
5	Legal Assistant	4	2	2
Total		**12**	**7**	**5**

Sr. No.	Cadre	Sanctioned	Filled In	Vacant
III	**C-SCIENTIFIC**			
1	Director	1	0	1
2	Principal Scientific Officer	2	1	1
3	Senior Scientific Officer	3	1	2
4	Scientific Officer	9	7	2
5	Junior Scientific Officer	56	24	32
6	Junior Scientific Asst.	91	39	52
7	Laboratory Asst.	7	5	2
8	Lab Attendant	22	0	22
Total		**191**	**77**	**114**

Sr. No.	Cadre	Sanctioned	Filled In	Vacant
IV	**D-Accounts & Administration**			
1	Director	1	0	1
2	Chief Accounts Officer	1	1	0
3	Senior Administrative Officer	1	1	0
4	Material Officer	1	0	1
5	Private Secretary	2	1	1
6	Accounts Officer	2	2	0
7	Administrative Officer	1	0	1
8	Asst. Secretary	1	0	1
9	Asst. Accounts/Admin Officer	19	11	8
10	Asst. Public Relation Officer	1	0	1
11	Head Accountant/O.S.	37	16	21
12	Senior Clerk	91	48	43
13	Junior Clerk	114	59	55
14	Senior Steno	10	5	5
15	Junior Steno	53	25	28
16	First Clerk	24	14	10
17	Daftari	22	10	12
18	Drivers	94	68	26
19	Roneo Operator	1	0	1
20	Naik	2	1	1
21	Chowkidar	20	17	3
22	Peons	123	72	51
23	Field Peon	64	0	64
24	Sweeper	3	3	0
Total		**688**	**354**	**334**

Abstracts				
A.	Technical	365	293	72
B.	Legal	12	7	5
C.	Scientific	191	77	114
D.	Accounts & Administration	688	354	334
	Member Secretary	1	1	0
	Chairman	1	1	0
Total		**1258**	**733**	**525**

Annexure- III

Training, Workshops and Seminars attended by Board officers and Staff (2010-11)

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
1	Adv. International Training institute at Norrkoping Sweden	17.05.2010 – 11.06.2010	Air Pollution Management, India	Mr. R.B. Andhale, S.R.O. Mr. R.B. Sorte, S.O. Mr K.S. Langote, F.O. Mr. N.S. Wagh, F.O. Mr. P.T. Gaikwad, F.O. Mr. U.C. Kulkarni, F.O. Mr. S.D. Save, JSA	
2	World Institute of Sustainable Energy at the 'O' Hotel, Koregaon Park, Pune	20-21 April, 2010	Regulatory & Policy Framework for Market Development for Renewable Energy	Mrs. Sindhu Kapare, Field Officer	
3	State Expert Appraisal Committee, Gujarat at Gandhinagar	6th – 8th May, 2010	National Level Training Programme on EIA	Shri H.D. Gandhe, F.O. Ratnagiri. Shri Jayant Hajare, F.O. Satara.	
4	Trinity Academy, Kurla	8th & 9th May, 2010	Soft Skill Training to (Driver & Peon)	Driver at HQ & other offices, Peon of HQ	
5	Natural Productivity Council at Hotel Nand Residency, Mussoorie	24th – 28th May, 2010	Developing Executive Secretaries, P.As and Office Staff of future	Shri S.M. Waghulikar, P.A. Shri Vinay Waghmare, Sr. Steno.	
6	C. lab Mahape, Navi Mumbai Regional Lab, Nagpur,/Pune/ Thane	10th May – 18th June 2010	Field Officer Training at Laboratory	1. Gude Ujjwala, R.O. Mumbai. 2. Deshmukh Indrajit RO PAMS 3. Bijae Shital, RO Navi Mumbai 4. Jadhav Ravindra, SRO Chandrapur 5. Kadle Avinash, SRO Satara 6. Ms. Zadpide Kalyani, SRO Solapur 7. Kulkarni Hemant, SROThane-I	
7	Institute of Technology & Management Systems, New Delhi at Gangtok ('Sikkim)	5th – 8th June 2010	Improving Personal Skills of the new & prospective manager. Financial Management	Shri Amar Durgule, S.R.O. Shri S.R. Banate.	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
8	Japan International Corpn. Agency (JICA) at Japan	19th July – 26th Nov. 2010	Industrial Wastewater Treatment Techniques	Shri P.M. Joshi I/c. Chandrapur Shri N.S. Shivangi, S.R.O. Ratnagiri.	
9	Institute of Technology & Magagement Systems, New Delhi at Royal Residency Gangtok, Sikkim	8th – 11th June, 2010	Improving Secretarial Performance Efficiency & Effectiveness	Shri Joy Thakur, F.O.	
10	FICCI at Pune	24th – 28th May 2010	MoEF Training Programme on “Cleaner Production Technology Integreted Envt. Management	Mr. Jivapure F.O. Mr. Sgar Anse, Pune.	
11	NHWIS, Convention Hall, 7th Floor, NIC, A Block, CGO Complex, New Delhi	07-July-10	National Hazardous Waste Information System	Dr. D.G. Tare, JSO	
12	ESCI, Hyderabad	25-27 Aug 2010	CDM & Carbon Finance for agriculture, forestry and land use projects	R.T.Jadhav, FO, HQ P.D.Jagtap, FO, Kalyan	
13	NEERI, NAGPUR	10 & 12 Nov 2010	Pollution problems & Environmental mgnt in sponge iron industries	SHRI V.M.Motghare, APAE Shri A.T.Fulmali, I/c RO Nagpur	
14	SCOPE complex, New Delhi	23-Jul-10	Automatic water quality monitoring under Hydrology.	Shri S.R.Bhosale, SRO, HQ Shri S C Kollur, SO HQ	
15	EPTRI, Gachi bowli, Hyderabad	12 & 13 Aug 2010	Prevention & management of chemical accidents	Shri S.A.Deshpande, SRO, Taloja Shri A.F.Deshmane, SRO, Mumbai.	
16	BHEL, PCRI, Ranipur, Haridwar	30/11/10 to 04/12/10	Lake Eutrophication, Remediation & restoration	Shri N.N.Gurav, SRO, Thane Mrs Hema Deshpande, I/c SRO, Bhandara.	
17	TERI Retreat, Haryana	10-12th Nov 2010	Air quality modeling	Shri V.V.Killedar, FO HQ Shri A.N.Katole, FO Chandrapur	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
18	CT & SR , New Delhi	8-10 Sept 2010	Pensionary benefits under the old pension scheme & new pension scheme in wake of 6th pay commission & ACP	Shri Vijay Chavan, AAO Shri S.S.sengupta, AAO Shri A.H.Padvi, AAO	
19	NEERI Kolkata	18-20/11/10	Air toxics in Environment	1. Shri D. B.Patil, SRO, Tarapur 2. Shri K.V.Gavankar, JSO, C.Lab 3. Shri S.V.Bhosale, SO, Nashik 4. Shri C.A.Sawant, JSA, HQ	
20	IIPA, Mantralaya	10/08/10	1. Appeal rule, Discipline & Dept Enquiry	1. Shri Umakant Naik, FC 2. Shri Sanjay Mahale, FC 3. Mrs Amruta Javkar, JC	
		12/08/10	2. DDO duty and responsibility	1. Mrs Neeta Bhorade, AAO 2. Shri A.H.Pavi, Asst AO 3. Shri Vivek Pawar, SC	
		13/08/10	3. Assembly work	1. Shri Shivaji Banate, SAO 2. Shri Anil Mokashi, SO 3. V H Chavan, AAO	
		17/08/10	4. Pension etc	1. Mrs. Bharti Pol, SC 2. Shri Ramlalit Pandey, SC	
		18/08/10	5. Office note, drafting etc.	1. Shri S.A.Waikar JC 2. Shri H.M.Naik, JC	
		20/08/10	6. MCSRules, joining period, leave suspension, termination etc	1. Shri Santosh Karande, JC 2. Shri Santosh Mohite, JC	
		21/08/10	7. Budget Estimate Allocation Monitoring	1. Shri Vijay Tannkar, FC 2. Shri S S Bandekar,HA 3. Shri Milind Gharat, SC	
		23/08/10	8. Service Rules, Seniority list, Promotion, Dept exam, CR etc.	1. Mrs Sampada Rane, OS 2. Mrs. S S Giri, HA 3. Mrs. A.A.Londhe, AAO 4. Shri D.A.Rane, Cashier	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
21	YASHADA, Pune	01/10/10	UNICODE	Shri Vinay Waghmare, Jr Steno Shri Ravindra Pradhan, Jr Steno Shri A.B.Ranvare, Jr Steno Shri K.N.Patil, Jr Steno	147
22	YASHADA, PUNE	27-30/09/10	Computerized office administration for PAs	Mrs Sujata A. Londhe, Jr Steno Mrs. Snehal Nerurkar, Jr Steno Mrs.Mrunal Sarang, Jr Steno Mrs. Saroj Sheety, Jr Steno	
23	ESCI, Hyderabad	28-30/10/10	Calibration of instruments / equipments & Measurement traceability	Shri S.V.Bhosale, SO, Nashik Shri M.S.Rakh, JSO, C'pur	
24	CPCB, Delhi	27-29/9/10	Development of Ambient Noise monitoring network in india	Shri Ashok F Deshmane, SRO, RO Mumbai Shri S.L.Waghmare, FO, RO Thane Shri V V Killedar, FO HQ	
25	Ramada Plaza Palm Grove, Juhu	27 & 28/09/10	Emergency Preparedness & business continuity Planning.	Shri B.B.Nimbarte, RO, NM Shri B.D.Wadde, RO, Mumbai	
26	ESCI, Hyderabad	5 to 7/10/10	Advanced Technologies for management of Tannery Waste & EIA	Shri V.V.Sorge, FO, A'bad Shri A.R.Suryavansi, FO, A'bad	
27	VNIT Nagpur	21 & 22 Oct, 2010	QAQC in Water Quality monitoring & Analysis	11 MPCB Officials	
28	VNIT, Nagpur	21/10/10 & 22/10/10	QAQC in Water Quality monitoring & Analysis	Shri Dhananjay Nanekar, JSA, C.Lab	
29	ITC Grand Central, Parel, Mumbai	21/10/10	Solid waste Management conference	MPCB officials	
30	Industrial Management Academy, Jaipur	25 to 27/11/10	Development of Pvt. Secretaries, PAs & other support staff.	Mrs. Lidwin Pais & Kamala Bhaskar Mr. A.M.Mirkute & E.V.Dhanvate	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
31	YASHADA, Pune	26.11.10	Unicode	Shri.S D Suralkar, Jr.Steno, Shri.R C Pandey, Sr.Clerk, Shri. Santosh Karande, Jr.Clerk, Shri.Santosh Mohite, Jr.Clerk	
32	YASHADA, Pune	13-16th Dec,10	Computerized Office Administration for PA's	Smt.Jyoti Vedante, Jr.Steno, Smt.Ashwini Patil, Sr.Clerk, Smt. Arundhati Hadkar, Jr.Clerk, Kum.Pallavi Loke, Jr.Clerk	
33	IIT Roorkee	25-29th Jan,2011	Environmental Health & Safety	Shri.L S Bhad, SRO Nanded, Shri.Pravin Patil, FO N.M, Shri.Pramod Mane, FO, Kolhapur	
34	IIT Roorkee	24-26th Feb,2011	Clean Technology	Shri.N D Toke, I/c.SRO, Shri.Sangram Nimbalkar, FO, Shri.Ravindra Jadhav, FO	
36	ICMAM, Chennai	22-25th Nov,10	Marine GIS for Coastal Pollution management	Shri.B S Gadhari, JSO, Shri.A V Mandavkar, JSO	
37	Dukes Retreat, Khandala, Pune (Organized by NEERI)	22-24th Nov,10	Air quality models to improve decision making process of air quality management	Shri.P K Mirashe, RO, Pune, Kum.Poonam Poyrekar, FO	
38	Indian Institute of Science (IISC), Banglore, 500 032	23-29th Jan,11	Noise Pollution	Shri.S C Kollur, SO, Shri. Arjun Jadhav, FO	
39	IIT Powai, Mumbai	26-27th Nov,10	Envirovision 2010	Shri.A V Rathod, FO, Kum.U T Gude, FO	
40	Panipat Refinery, Punjab	3.1.210	Revised National Task Force for implementation of CREP	Shri.Ashok F Deshmane, SRO, Mumbai	
41	Centre for Science & Env., 41, Tughlakabad Institutional Area, New Delhi	14-18th Dec,10	Action plan for critically polluted area (CAPS)	Shri.P D Jagtap, FO	
42	IIPA, New Delhi	13-15th Dec,10	QA QC in Lab Analysis	Shri.N A Moghal, SO, Shri. Sarang Deshpande, JSA	
43	YASHADA Pune	27-30 Dec,10	Website Development with ASP	Smt.Geeta Phatak, Jr.Clerk	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
44	CPCB Lucknow	11-13 Jan 2011	Water Quality monitoring and best lab. practices	Shri A.V.Auti, FO & Shri D.V.Nehe, JSA	
45	CPCB, Bhopal	09-11 Feb. 2011	Preparation of river action plan & mgnt of post monitoring	Shri N.H.Shivangi, SRO & Shri S.L.Waghmare	
46	CPCB Bengluru	09-11 March 2011	Water quality monitoring and Network mgnt	Shri Promod Doke, FO & Shri Salil Save, JSA	
47	RO-A'bad, SRO-Tarapur, RO Chandrapur, Kalyan	-	Sampling & analysis of VOC in CEPI industrial area of Maharashtra	SRO & FO of respective regions	
48	CSE New Delhi	10-14 Jan 2011	Advanced training programme on compliance & monitoring of centralized waste water treatments plants	Shri Jayant Hazare, SRO Shri S.D.Patil, SRO Shri Manchak Jadhav, FO Shri Jaywant Kadam, FO	
49	Aurangabad	17-22 Jan 2011	Follow up advanced international training prog on air pollution management	Shri R.B.Andhale, SRO Nanded Shri R.B.Sorte, SO, I/c R.Lab A'bad Shri K.S.Langote, FO, RO(P&P) Shri N.S.Wagh, FO, APAE section Shri P.T.Gaikwad, FO, Kalyan Shri U.C.Kulkarni, FO Kalyan Shri S.L.Tope, FO A'bad Shri S.D.Save, JSA, PAMS Division	
50	Framingham USA	11-14 Jan 2011	Liquid chromatography with spectrometer	Mrs Yamini Chachad, JSO Shri Anil Patil, JSA	
51	Coast Guard Regional HQ, Worli, Mumbai	14-15 Jan 2011	1) Table top exercise 2) NATPOLREX	Shri S.L.Waghmare, SRO Shri V.B.Kshirsagar, SRO	
52	EPTRI, Hyderabad	18-19 Jan 2011	Environmental compliance & enforcement	Shri V.B.Waghjale, AS.(T)/ RO(P&P) Shri Y.B. Sontakke, RO (HQ)	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
53	NIH, Roorkee	01-03 March 11	Hydrological investigation for conservation & mgnt of lakes	Mrs. Varsha A.Kadam, FO, Kolhapur Mrs. Sushma Kumbhar, FO Kolhapur	
54	CSE, New Delhi	14 Feb -14 march 2011	National Training prog. On Compliance monitoring & enforcement	Shri Indrajit Deshmukh, FO PAMS Shri Manohar Wakle, FO, Raigad Shri Manish Mahajan FO Nagpur Shri Yogesh Deshmukh, FO K'pur Shri Amit Late, FO, Ahmednagar	
55	YASHADA, Pune	27-29 Jan 2011	IT procurement & maintenance	Shri D.L.Gaonkar, Sr Clk, Stores HQ Shri J.S.Hadkar, Jr Clk, EIC, HQ	
56	CPCB Delhi	10-12 Feb 2011	Development of ambient noise monitoring network in india	Shri T.K.Devkamble, FO RO Mumbai Shri Hemant Kulkarni, FO, Thane Shri A.P.Varale, FO Raigad	148
57	Indore Delhi	07-08 Feb 2011 18-Feb-11	EU organized workshop Air quality monitoring	Shri V.V.Killedar, FO PAMS Ms Poonam S. Poyrekar, FO PAMS Shri S.C.Kollur, SO, PAMS	
58	IIT Madras, Dept. of Bio Technology, Chennai	22-24 March 2011	Environment Mgnt system in Pharma & chemicals	Shri Rajendra T. Jadhav, FO PAMS Shri A.V.Rathod, FO PAMS Shri Sandeep B. Shinde, FO Chiplun	
59	Indian Institute of Quality mgnt STQC, Jaipur	21.25 Feb 2011	LEAD ASSESSORS	Dr. Amar R. Supate, PSO	
60	ESCI, Hydrabad	02-04 Mar 2011	Environmental issues challenges & solutions for power plant	Shri J.H.Patil, SRO Nashik Shri Prashant Gaikwad, FO Kolhapur Shri N.S.Wagh, FO, APAE section Shri A.N.Katole, FO Chandrapur	

Sr. no.	Name of the Institute & Venue	Training Date	Subject	Participant Name	
61	Director, Central Water Commission, NWA, Khadakwasala, Pune	07-18 Mar 2011	Water Quality management (Surface Water)	Shri Shahikant Patil, FO Kalyan Shri Sandeep Patil, Sangli Shri R.B.Sorte, SO, I/c R.Lab A'bad Shri D.P.Khadkikar, JSO Shri R.P.Raut, JSA Lab Shri B.N.Sangle, JSA	
62	NITRA, Ghaziabad	15-17 Mar 2011	Pollution control in textile	Shri B.M.kukade, SRO Sangli Shri M.G.Igave, FO Tarapur	
63	VNIT Nagpur	5-6 Mar 2011	Case Studies in Environmental Mgnt	Mrs.Hema Deshapande, SRO Bhandara Shri R.M.Wankhede, FO Nagpur Shri P.B.Jadhav, FO	
64	VNIT Nagpur	5-6 Mar 2011	Case Studies in Environmental Mgnt	SHRI V.M.Motghare, APAE	

Annexure- IV - A

Consents / Authorizations Granted by HQ during (2010-2011)

Sr. No.	Region	Consent Granted			Total	Authorizations granted under the Rules
		To Establish	To Operate	Renewal		BMW
1	Mumbai	62	34	27	123	42
2	Navi Mumbai	8	23	27	58	6
3	Thane	29	22	84	135	5
4	Kalyan	36	30	59	125	1
5	Raigad	24	18	27	69	3
6	Pune	137	81	114	332	33
7	Nagpur	46	33	58	137	8
8	Nashik	51	35	62	148	9
9	Amravati	8	1	0	9	4
10	Aurangabad	46	26	62	134	17
11	Kolhapur	53	50	62	165	17
12	Chandrapur	19	17	25	61	0
Total		**519**	**370**	**607**	**1496**	**145**

Annexure- IV - B

Status of Consents / Authorization Granted by Regional / Sub Regional Offices (2010-2011)

Sr. No.	Region	Consent		Total Consent Granted	Authorization granted under BMW Rule
		consent to establish	consent to operate		
1	Mumbai	58	366	424	415
2	Navi Mumbai	234	430	664	57
3	Thane	84	394	478	217
4	Kalyan	195	532	727	124
5	Raigad	186	158	344	103
6	Pune	753	1053	1806	609
7	Nagpur	253	523	776	206
8	Nashik	726	1168	1894	369
9	Amravati	256	279	535	268
10	Aurangabad	815	926	1741	584
11	Kolhapur	1340	1384	2724	492
12	Chandrapur	91	143	234	289
Total		**4991**	**7356**	**12347**	**3733**