

# MAHARASHTRA POLLUTION CONTROL BOARD

## Achievements of MPCB (2005 – 2006)

### 1. Consent Management

Consent management is one of the core functions of the Board. Industries, local bodies, hospitals, development projects etc covered under the environment protection regulation are required to obtain NOC/Consent/Authorization from the Board before any steps are taken towards development project. People demand that the consents are granted quickly to avoid delay in project implementation. There has been situation earlier when it used to take lot of time to clear applications for consent causing delay of several months due to one reason or the other. This also affected efficiency of the Board and caused harassment to the applicants. Fast tract system has been introduced by the Board for disposal of applications in an expeditious manner. Delegation of powers has been done to decentralize the decision making. Instructions have been issued to complete the processing within one week at field level. Now, Consents are generally granted within 15 to 30 days. Consent to Establish can be granted even earlier. There are instances when consents were granted even in one day depending upon the merit of the case. Act provides time period of 120 days to grant/refuse the Consent but Board is doing much faster. On an average, about 200 cases are being cleared every month at head office which deals with Red Category of industries. This is much higher than the previous years. The Orange and Green Categories of industries are given Consent clearance at Regional and Sub Regional Office levels respectively. The enormity of task handled by the Board is presented in the Box below:

Consents / Authorization to the industries	53,006
Authorization to local bodies	250
Authorization for bio-medical wastes	7987
Assessment under Water Cess	7272

Quick disposal of Consents and friendly regulatory system is also one of the important factors in attracting investments in the State. As a result of steps taken by the Board, there is wide spread appreciation by the industry and developers.

### 2. Management of Municipal Solid Waste:

There are 250 urban local bodies (ULBs) in Maharashtra. All the local bodies have to put in place proper collection, treatment and disposal system for management of municipal solid wastes as per requirements given in the Municipal Solid Waste Management Rules notified in the year 2000 under the Environment (Protection) Act, 1986. Until April 2003, most of the local bodies even did not obtain mandatory authorization from the Board as per Rules. Several of them were not in compliance of the Rules.

As a first step, Board persuaded successfully all the local bodies to obtain mandatory authorization, prepare action plan for management of municipal solid wastes and identify/notify suitable land for setting up of facilities for treatment and disposal of wastes generated in the city. The Supreme Court has also appreciated this work done by the Board in its order dated 5.10.2004 regarding solid waste management (CWP 888 of 1996). In order to facilitate the implementation of the MSW Rules and to motivate the local bodies, MPCB has completed the work of demonstration projects in 5 cities, namely: (i) Ambad (Jalna) (ii) Sonpeth (Parbhani) and (iii) Navapur (Nandurbar). In all these cities technical and financial assistance is provided by the Board to set up municipal solid waste collection, transport, treatment and disposal facilities, as well as to augment the existing infrastructure. In addition, Board had made efforts to support local bodies at Gadhinglaj, Pandharpur and Jalna. In order to facilitate the public private partnership in management of municipal solid wastes by local bodies, Board has prepared model tender documents and draft agreements. This will ensure uniform approach and provide guidance to the local bodies. This has been done for the first time in the country and these draft agreements and model tender documents are posted on the website and can be downloaded free of cost.

### **3. Management of Bio Medical Wastes**

There are in all 10,672 health care establishments (10 beds or more), which are taken up initially for regulations under the management of Bio Medical Wastes Rules. Until last year 6062 units were covered under authorization. During this year, 7987 health care establishments have obtained authorizations. Due to intensive enforcement work of MPCB, Board has granted more than 7,000 authorizations and some are in the process.

The Board has also taken proactive measures in facilitating development of common facilities for management of BMW in different cities in Maharashtra. The Board has issued directions under BMW rules to common facilities for strictly maintaining the compliance of environmental standards. Bank Guarantee of 4 nos of facilities is forfeited by the Board due to their non-compliance of the directions. Further they were directed to submit fresh performance bank guarantee of Rs. 1 Lakh to the Board, to comply with the standards and upgrade the system wherever necessary within the mutually agreed fixed time period. Board also provided technical guidance and assistance to Mumbai Municipal Corporation for management of Bio-Medical wastes in the city. Details of action taken by the Board and information regarding status of biomedical waste management in the state are available at <http://mpcb.mah.nic.in>

### **4. Management of Hazardous Wastes**

In October 2003, the Hon'ble Supreme Court of India issued orders regarding management of hazardous wastes and expeditious implementation of the rules. The order, among other things, included time

bound action for setting up of hazardous waste management facilities, closure of industries operating without authorisation, preparation of inventory of waste generated, identification of illegal waste dump sites and removal of wastes to a safe place, mass awareness, dissemination of information, institutional capacity building etc. As per the order of the Apex Court, Supreme Court Monitoring Committee (SCMC) has been appointed by the Central Government. The SCMC is submitting quarterly Action Taken Report (ATR) to the Court. Based on the ATRs filed by the SCMC from time to time, the Court is passing further orders in the matter. The State of Maharashtra generates almost half of the hazardous waste generated in India. The task of putting in place a proper waste management is enormous. However, MPCB has done marvelous work in implementation of the Court orders in letter and spirit. The SCMC has appreciated the exemplary work done by MPCB and MIDC in successful cleaning up operations, compliance of environmental standards by the industries, public awareness, stringent action by MPCB against defaulters by way of levy of fines, prosecutions etc. Action Taken Reports submitted by the Board are also placed on the website of the Board <http://mpcb.mah.nic.in> There are 2 Common facilities for management hazardous wastes set up at Taloja and T.T.C. Industrial Areas of MIDC in Thane district. These facilities are high tech and capital intensive. The Central Government in the Ministry of Environment & Forests, MPCB and MIDC have provided capital subsidy to these facilities so as to reduce the tariff and motivate the user industries for management of their waste in an environmentally sound manner. The state-of-the-art technology applications at these facilities can be compared with any such units in the world. Additional high-tech incinerator is proposed for Taloja Common Hazardous Waste Treatment Facility.

Efforts are also being made to develop such facilities at Butibori (Nagpur), Shendre (Aurangabad) and Ranjangaon (Pune) as environmental infrastructure for industries in Vidarbha, Marathwada and Western Maharashtra.

## **5. Management & Recycling of Lead Acid Batteries**

About 150,000 tons of batteries are discarded every year in India from automobiles, telecom equipment, railways etc. These batteries contain toxic metal called as "Lead". Lead adversely affects human health and ecosystem. Toxic fumes of lead generated due to improper recycling by the small and cottage type of industries is of serious concern. In order to regulate collection of old/used batteries and their recycling in an environmentally sound manner, the Government of India has promulgated Lead-Acid Batteries (Management and Handling) Rules, in the year 2001 under the provisions of the Environment (Protection) Act, 1986. These Rules have stipulated time bound target to be achieved by the States for collection of old batteries. It may be appreciated that the level of implementation done by MPCB, is one of the highest in the country in terms of collection of batteries from the dealers and also large consumers. The recovery rate from manufacturers, dealers, bulk consumers,

auctioneers, importers and recyclers in the State has been increased from 65% to 75% during last one year, as against the target of 90%.

## **6. Plastic Waste Management**

It was observed that during the torrential rain on 26th July, 2005 non-biodegradable garbage, especially plastic bags, hips, cups, etc., were partially responsible for blockage of gutters, sewers and drains. With a view to prevent occurrence of such problems, Govt. of Maharashtra issued draft order Notifications on 13th September, 2005 declaring Maharashtra as "plastic bags free area". However, there were many objections and suggestions for this draft order. Therefore, the Govt. of Maharashtra formed an Expert Committee to study these objections and submit the recommendations. Dr. D.B. Boralkar, Member Secretary, MPCB was one of the members of committee. Expert Committee studied the whole scenario and submitted report to Govt. of Maharashtra. Subsequently on 3rd March, 2006 Govt. of Maharashtra, Env. Department issued final notification "Maharashtra Plastic Carry Bag (Manufacture & Usage) Rules", 2006 under "Maharashtra non- biodegradable garbage "Control Ordinance", 2006.

As per new rules registration of MPCB is mandatory for plastic carry bag and container manufactures and the registration number is to be printed / stamped on each bag. There is restriction on thickness and size of plastic carry bags. In view of above, MPCB formed a special cell to implement these Rules effectively. 1154 plastic manufacturing units were identified from different sources. Show cause notices were issued to the units individually by letters as well as through public notices in news papers, to expedite registration. Due to this awareness 75 manufacturing units are registered under Plastic Rules, 2006 and the process is going on very effectively. Training and demonstration for implementation of the rules and to measure the thickness of the plastic carry bags is given to Regional Officers of MPCB as well as to Commissioners and Officers of Municipal Councils.

MPCB arranged 'Street Play' on plastic management during the year with the help of Mumbai University for creating awareness about plastic management.

## **7. Electronic Waste**

Mumbai is economic capital of India and also a largest port city. There has been rapid growth in Information Technology (IT) Industry in Mumbai and Pune regions. Consumption of electronic goods and consumer durables in this regions is also high. Therefore also likely to be. e-waste is generated, particularly in Mumbai and Pune belt. Currently there are no regulations to manage e-waste. Facilities for the collection, treatment, recycling, reuse and final disposal of the e-waste are required. MPCB is seized of these issues and had initiated discussions with the agencies like EMPA ( Switzerland) GTZ and AESM on how to take care of this waste in

environmentally compatible manner. MPCB has further initiated pilot study on the Rapid Assessment of e-waste generation in Mumbai and Pune regions. UNEP has also provided financial assistance for the study by MPCB.

## **8. Common Effluent Treatment Plants**

This scheme is implemented for the clusters of industries in MIDC areas as a part of the common environmental infrastructure for environment protection. Common effluent treatment plants (CETPs) are being promoted by the Central Government for cluster of industries for management of industrial effluents, especially for small and medium enterprises. CETPs are constructed with 25% subsidy the Central Govt., 20% by the MIDC, 5% by MPCB, 15% capital is provided by the user industries and 35% is loan from the financial institutions. The scheme was started in 1990. First CETP in Maharashtra came up at Tarapur. This was followed by CETPs at TTC, Navi Mumbai, Dombivali, Taloja, Mahad, Lote Parshuram etc. However, due to one reason or the other most of the CETPs were not complying with the standards in terms of effluent quality of treated wastewater at the outlet. As a result, there are several complaints from various people in the area. A concerted action was initiated by MPCB, so as to secure the compliance by the CETPs and also to ensure implementation of the directions of the Hon'ble Supreme Court regarding the management of hazardous wastes.

Series of actions were taken by the Board against the defaulters, intensive discussions and meetings were held with industry and time-bound action plans were prepared for each CETP. Work of strengthening and up-gradation of treatment units at CETPs. In the meanwhile, CETPs at Navi Mumbai, Mahad, Badlapur, Butibori, Ranjangaon, Kurkumbh and Roha have completed and commissioned. Additional capacity for CETP at TTC is provided working satisfactory. Taloja and Dombivali with additional capacity expansion will also be ready by August, 2006. Primary treatment work is completed at Tarapur CETP for of capacity 22 MLD.

Board has obtained bank guarantees from the CETPs as a proof of their commitment for complying with the standards and completing the work within the agreed time, failing which, bank guarantees are liable to be forfeited. Board is getting good response from the industries.

## **9. Revenue Generation**

Considering the fact that the activities of the Board have increased due to recent legislations promulgated by the Central Government and also directions of the High Court and Supreme Court of India covering various areas of environment protection, there is an urgent need to augment the resources of the Board. Board has become self-sufficient on its own revenue collection, which are arising from water cess, consent fees, analysis charges etc. Revenue generation of the Board has gone up from

about Rs. 35 Crores in the year 2004-2005 to about Rs.70 Crores in 2005-2006.

## **10. Infrastructure Strengthening**

MPCB is nodal authority for implementation of environmental regulations in the State. Board is responsible for enforcement of laws regarding water pollution, air pollution, noise pollution, municipal solid wastes, biomedical wastes, hazardous wastes, hazardous chemicals, fly ash utilization, plastics recycling, chemical accidents & response, environmental impact assessment, coastal regulation zone, batteries collection & recycling etc. Activities of the Board are science and technology based. It also covers pollution control, assessment, monitoring and survey. In order to meet the requirements of growing activities, Board has strengthened infrastructure laboratories and increased availability of field monitoring equipment and transportation. These improvements have added to efficient functioning of the Board and also increased revenue. Environmental surveillance has also increased. About 25000 environmental samples consisting of air, water, waste water, solids etc. have been analysed in last year.

Central laboratory of the Board at Navi Mumbai provides scientific services for programmes of prevention and control of pollution. This includes undertaking State level activities related to pollution assessment, monitoring and survey. The laboratory is strengthened in the year and equipped with required modern instruments and equipments. Construction of new building for Central Laboratory at Navi Mumbai is completed. This building is eco friendly and has well facilities required for analysis of various parameters and undertaking R&D activities. This includes treatability studies, demonstration plants for effluent treatment, performance evaluation of pollution control systems, calibrations, environmental planning studio, exhibition gallery for informal education and mass awareness, training of scientists and engineers of the Board and industry, EDP centre etc. This building is technical nerve centre of the Board.

## **11. City Action Plans**

### **Action Plan for Control of Air Pollution at Pune and Solapur**

Hon'ble Supreme Court of India is considering Public Interest Litigation (WP No. 13029/1985), regarding control of air pollution in 16 cities in India. Mumbai, Pune and Solapur have been included. Directions have been given by Apex Court to prepare action plan for these cities for control of air pollution in the time bound manner.

In Pune major contributory sources of air pollution were recorded as Industrial Pollution and Vehicular Pollution. Out of total 705 polluting industries 67 were recorded as air polluting industries. They have installed air pollution control devices like dust collectors, scrubbers, stacks etc.

MPCB has taken action on defaulting industries. Vehicular population is of urgent concern as it impacts public health and gives rise to respiratory bronchitis, cough, eye irritation, etc.

Solapur city has 17 air polluting industries and few commercial activities using D.G. sets as alternative source of power. Use of fuels like kerosene, wood, bagasse, saw dust, waste paper/board etc. contribute to air pollution from household sources. Further biomass burning in the agricultural farms in the vicinity also adds to air pollution. Vehicular population in the city has increased during last 10 years. However, road developments have not been taken place properly. Bad road condition, traffic congestion, etc. add to air pollution.

MPCB has prepared Action Plans for these cities and submitted same to the Environmental Pollution Control Authority (Bhurelal Authority) appointed as per order of the Court. Based on the action plans prepared by the Board, directions have been given by the Apex Court for implementation by concerned agencies these include, various aspects like improvement in air quality, introduction of better and cleaner fuels, retrofitting of three and four wheeler transport vehicle for LPG / CNG, checking of vehicular emissions regularly and development of bypass road etc.

### **Chandrapur Action Plan**

Chandrapur district has its sprawling coal mines and Tadoba wildlife sanctuary, which is important Tiger destination in the country. The mineral based industrial development and urbanization is cause of pollution and environmental degradation. Effects are being felt on a wide scale.

Considering the magnitude of pollution problems, Board has prepared Action Plan for Control of Pollution at Chandrapur. The Action Plan is prepared in consultation with various stake holders and time frame is developed with mutual agreement to complete implementation of actions such as up-gradation of pollution control devices to meet environmental standards, improvement of roads and transport infrastructure, restriction of coal burning in open ores, bypass / ring road, etc. for smooth traffic, strengthening of Board's office / lab at Chandrapur.

### **Kolhapur Action Plan**

Citizens in the area are agitating since long against the pollution of Panchganga river. This is mainly due failure to put up pollution control system by the KMC and others, as stipulated by the Board. In view of continued agitation by people in area, after hearing from Steering Committee of Panchganga River Pollution, Kolhapur Municipal Corporation, NGOs, industries and public, a concrete time bound 'Kolhapur Action Plan' is prepared by MPCB. Specific directions were issued to concerned authorities and defaulting industries.

Board also published 'White Paper' for the information of all concerned, which includes the status of pollution in Pachganga river & steps taken so far by the Board as well as directions issued by the Board to various authorities for non-compliance. Implementation as per the Action Plan is monitored by the Board.

## **12. Environmental Improvement At Religious Places**

The religious places not only in Maharashtra, but also all over the country are revered pilgrim places. On several occasions, large number of people gather at these places. These religious places, generally, are in small or medium towns. Due to huge conglomeration of people at these places, number of environmental problems are created, which adversely affect the environment and public health. The pollution problems arising out of such activities mainly due to mass bathing, cloths washing etc. are water pollution of rivers/lakes, pollution due to disposal of municipal solid waste, disposal of plastics, noise pollution, dust pollution, contamination of drinking water etc. These problems are also due to lack of civic amenities. The religious places are generally lacking infrastructure in terms of water supply, collection, treatment and disposal of sewage, disposal of municipal solid wastes etc. In order to address the needs regarding environmental improvement at these places for the welfare of the people, Board decided to take up project on environmental improvement at religious places in the State of Maharashtra. Under this project, MPCB provides technical and some financial assistance for taking up demonstration projects at selected religious places. These projects are proposed to be implemented with cooperation of the local authorities. This project is based on the concept of eco-city project being implemented by MoEF/CPCB at various places, e.g. Mathura, Vrindavan etc. To begin with, the Board has approved to consider following places for environmental improvement projects:- 1] Shirdi / Shani- Shinganapur 2] Alandi 3] Bhima Shankar 4] Ashta Vinayak (Temples) 5] Jejuri (Khandoba) 6] Pandharpur 7] Mahoor 8] Shegaon. In order to take up the implementation of the project systematically over a period of time, Board has initiated preparatory work for Shirdi/Shani-Shinganapur and Alandi. In this regard, following steps are proposed to be taken:- 1] Preparation of conceptual paper 2] Preparation of pre-feasibility and feasibility report 3] Preparation of Detailed Project Report 4] Tender process for selection of project implementing agency. 5] Implementation of monitoring programme 6] Completion of the project and handing over to local Authorities. Project report of Shirdi, Shani Shinganapur & Alandi in completed.

## **13. Air Quality Monitoring**

Monitoring of ambient air quality in the State has been strengthened by the board. 28 locations are covered in the National Air Quality Monitoring Programme (NAMP) of CPCB, New Delhi and 13 locations are covered under the State Air Monitoring Programme (SAMP) implemented by MPCB.

It was noticed that the existing air quality monitoring network is inadequate to represent the regional air quality for big state like Maharashtra having several dense urban areas of pollution and major industrial areas. MPCB has therefore developed a road map for strengthening of the ambient air monitoring network and increased the total no. of stations up to 92, which will represent the regional air quality on spatial and temporal scales.

MPCB is also in the process of developing a calibration laboratory for calibration of air quality monitoring stations including the equipments, sampling and analysis procedures. Further, it is also planned to develop the data, collation and synthesis facilities to effectively utilize the air quality data in the decision making process.

The continuous air quality monitoring stations are equipped with the advance air quality monitoring instruments which display "real time" value of air pollutants. The data is useful for the trend analysis.

Board has taken up the work to rationalize the distribution of the CAAQM in Mumbai Metropolitan Region (MMR). New cities included for air monitoring are Kolhapur, Akola, Amravati Ulhasnagar, etc. Daily air quality data of 5 major cities in the State is reported on website. This is also sent to print and electronic media.

#### **14. Research & Development:**

Implementation of environmental regulations require sound base of science and technology with a back up of research and development activities. Board is required to undertake investigative research involving pollution assessment survey and monitoring. This area was not given adequate attention in the past. In last year Board has taken up such projects of importance for the environment protection and public health. They are:

- Collaboration with US EPA for Urban Air Quality Studies at Pune
- Collaboration with the World Bank Institute for Air Quality Improvement at Pune
- Collaboration with Asian Development Bank for development of "Strategic Action Plan for MPCB"
- US EPA Health and Air Quality Linkages using BENMAP studies
- Collaboration with NEERI, Nagpur for study of environmental impacts of disposal of effluent on land at Aurangabad and Nagpur
- Collaboration with NEERI, Mumbai for collation of data on air quality and health effects in Mumbai
- Monitoring of noise pollution at ten cities in Maharashtra during Diwali, 2005
- Measurements of Benzene, Toluene and Xylene (BTX) in ambient air at Mumbai.

- Collaborative project of CPCB under Indo Canadian Cooperation regarding preparation of Indian Register for Potentially Toxic / Hazardous Chemicals
- CPCB-MPCB project on preparation of Zoning Atlas for Siting of Industries. (ZASI) based on environmental consideration.
- Bio-monitoring of Goadavari river
- Report on Pollution Study of Mithi River Basin.
- Report on Construction on Mill Land in Mumbai

#### 15. **Mass Awareness:**

It is important that people are aware of the environment related issues affecting them. The education helps in preventing impacts. More over, due to right of information, it is also necessary for the Board to make the information available to the people regarding effects of pollution, need to prevent and control pollution and environment protection. Mass awareness also helps in creation of proper perception of the Board and its activities in society. Courts are also directing Board from time to time to engage in to mass awareness programs. Intensive efforts were made in last one year in this area. Some of the important publications /reports and events by the Board are listed as below:

- World Environment Day 5<sup>th</sup> June, 2005 at Sport Club, Vashi
- Ozone Day at Cambridge School and distribution of ozone awareness booklets
- Jal Din on 22<sup>nd</sup> March, 2006 at Yashwantrao Chavan Pratisthan Hall and booklet on use of water and documentary film
- Press Conference and Environmental Awareness to NGO's / consultants / Press in Textile Committee Hall in November, 2006
- Plastic awareness Street Play with the help of Mumbai university in September / October, 2005.
- Publication of "Guidelines for Citizens for Management of Municipal Solid Waste" in English and Marathi language.
- Report on Environmental status for all the regions of Maharashtra (11 regions).
- Publication of "Guidelines for immersion of idols in water bodies".
- "Suggested approach for disposal of excreta and other waste from poultry farms during chicken bird flue wave"
- Publication of "Guidelines for handling and management of spent mycelium in bulk drug industry"
- Slaughter house survey report
- Report on Pollution Study of Mithi River Basin.
- Report on Construction on Mill Land in Mumbai
- "Procedure for measurement of thickness of carry bags"
- Report on " Noise Pollution Scenario in Maharashtra during Diwali", November, 2005

## **16. Institutional capacity building**

The MPCB was initially setup mainly for implementation of Water Pollution Act. Composition of the Board is also oriented towards management of water and waste water. As of now the, Board is responsible for implementation of about 20 regulations / environmental laws. In order to build up the institutional capacity and to identify strengths, weaknesses, and gaps a work study involving performance evaluation of the Board, has been carried out by engaging services of M/s. CRISIL. The Supreme Court in it's order dated 14.10.2003 has also directed the States to strengthen Pollution Control Boards so that the orders of the Supreme Court can be implemented more effectively. The study has been completed and the report is submitted to the State Government for consideration.

## **17. Appreciations (2005-2006)**

- Maharashtra Pollution Control Board recently honored with Environmental Leadership Award by United States - Asia Environmental Partnership, for the contribution made towards Environment protection and Pollution Control
- Dr. Dilip. B. Boralkar, Member Secretary, MPC Board is individually honored with Environmental Leadership Award by United States - Asia Environmental Partnership for his contribution in Environment Protection and Pollution Control
- Appreciation by High Court in case of environmental protection at Mahabaleshwar – Panchgani (Appendix 2)

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