

MAHARASHTRA POLLUTION CONTROL BOARD

Achievements of MPCB (2004 – 2005)

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	50,000
Authorization to local bodies	250
Authorization for bio-medical wastes	10,394
Assessment under Water Cess	5,600

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 (100%) 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 taken up demonstration projects in 5 cities, namely:

- (i) Ambad (Jalna)
- (ii) Sonpeth (Parbhani)
- (iii) Navapur (Nandurbar)
- (iv) Murud-Janjira (Raigad)
- (v) Baramati (Pune)

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. The project implementation is in full swing and is in advance stages of completion at Ambad, Sonpeth and Navapur. For other places, orders are being issued shortly by the respective local bodies and work will commence soon.

In addition, Board is also making efforts to support local bodies at Gadhinglaj, Pandharpur and Jalna. Shri Ganesh Naik, Hon'ble Minister of Environment has announced financial assistance of Rs. 20 lakhs for local bodies in Konkan as they are small towns. This assistance is in the form of zero interest loan returnable in 20 years @ Rs. 1 lakh per year. Modalities are being worked out in the Board for program implementation.

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 is has been done for the first time in the country and these drafts agreements and model tender documents are posted on the website and can be downloaded free of cost, so that the benefit can be availed by all the local bodies in the country.

3. Management of Bio Medical Wastes

There are in all 10,394 health care establishments (10 beds or more), which can be covered for regulations under the management of Bio Medical Wastes Rules. Until last year only 1,192 units were covered under authorization. Due to intensive enforcement work of MPCB, Board has granted about 7,000 authorizations including 851 cases which are in the process. The show cause notices have been issued/ being issued to 3,000 units.

The Board has also taken proactive measures in facilitating development of about 22 common facilities for management of BMW in different cities in Maharashtra. The Board has issued directions under BMW rules to these common facilities for strictly maintaining the compliance of environmental standards. A bank guarantee of Rs.50,000/- (rupees fifty thousand only) is also taken by the Board from the common BMW management facilities as a proof of their intent to comply with the standards and upgrade the system wherever necessary within the time-bound action plan as submitted to the Board.

Board is also providing technical guidance and assistance services 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 from there 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 marvellous 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. 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 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 in the State has been 65% from dealers as against the target of 90% given in the Rules. As for the collection of batteries from the major consumers/auctioneers is concerned the percentage recovery has been more than 100%. In fact, last year it was 165%.

6. 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 from small and medium enterprises. CETPs are being constructed where 25% subsidy is given by the Central Govt., 20% by the MIDC, 5% by MPCB, 15% is by the user industries and 35% is a 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 and it has been common issue for many debates/questions in the legislative assemblies.

A concerted action was initiated by MPCB in July 2004 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. The 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 upgradation

of treatment units at CETPs is now in progress. Primary standards are complied by all CETPs and it is expected that by June 2005 all the CETPs will be achieving the standards prescribed by the Board.

In the meanwhile, CETPs at TTC, Navi Mumbai, Mahad, Badlapur and Roha have completed the work and final commissioning is in progress. CETP at Taloja and Dombivali with additional capacity expansion will also be ready by June 2005. Tarapur CETP work is in full swing so as to complete the job within the scheduled time of June 2005 for 22 MLD. Board has obtained bank guarantees from most of 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 very good response from the industries and MIDC. Construction work is going on in the right earnest.

7. Legal Action

- **Tarapur:** 75 industries were closed for one week. Water supply was also disconnected. Permission of restart was given only after obtaining commitment from industries to set up effluent treatment plant by June, 2005 and also taking a bank guarantee of about Rs. 75 lakh as proof of their commitment.
- **Mahad:** The industry association responsible for setting up of common effluent treatment plant (CETP) was pulled up by the Board. Bank Guarantee of Rs. 25 lakh was taken from the industries to complete the work by February, 2005. Work of CETP is now completed and commissioning is in progress. This is one of the high tech treatment facility of its kind in this area.
- **Taloja:** 58 defaulting industries were identified and show cause notices were issued. Industries have started the work of upgradation of waste water treatment plant and it is due to be completed by June, 2005. Once completed, the water quality of the Kasadi river will improve considerably.
- **Dombivali:** 287 industrial units were closed for 3 days in entire industrial estate of Dombivali phase I and II due to the non-compliance of the environmental standards by the CETP. Fine of several lakhs of rupees was levied by the Board. As a result of exemplary action by the Board, things are rapidly improving at Dombivali. Upgradation to CETP to comply with effluent standards will be completed by June 2005.
- Based on the report filed by MPCB, High Court of Mumbai (Aurangabad bench) levied fine of Rs. 10,000/- to one distillery in Nashik district.

8. Revenue Generation

Considering the fact that the activities of the Board are increasing day by day due to new legislations being 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 not taken any financial contribution from the State Government in the last several years even though there is provision under the Water (P&CP) Act, 1974 for Government support for efficient working of the Board. Board has become self-sufficient on its own revenue collection, which are arising from water cess, consent fees, analysis charges etc. In February 2004, revenue generation activities were reviewed and it was decided to increase the consent fees @ 0.01% for the industries/development projects involving capital investment of Rs.100 crores or above. In case of laboratory analysis charges, not revised in last ten years, they were revised upwards by 40%. Further, intensive campaign was undertaken to cover as much as industries and also efforts were made to collect the old dues from various agencies on account of cess to be paid to MPCB. A target of Rs.20 crores was set up for the year 2004-2005 and this was achieved. Revenue generation of the Board has gone up from Rs.22 crores in the year 2003-2004 to Rs.34.7 crores in 2004-2005.

9. 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 into efficient functioning of the Board and also revenue income. Environmental surveillance has also increased. About 25000 environmental samples consisting of air, water, waste water, solids etc. have been analysed in last year which is higher than the previous year.

Central laboratory of the Board is a premier institution in the State responsible for providing scientific services for programmes of prevention and control of pollution. This also includes undertaking State level activities related to pollution assessment, monitoring and survey. This laboratory also has to be equipped with required modern instruments and equipments, besides coordination of activities of regional laboratories and their quality assurance and quality control. The Central laboratory of the Board at present is cramped into one floor at CIDCO Bhawan and it is highly inadequate in terms of space and infrastructure. Considering the urgency, the Board has started construction of independent building for Central Laboratory at Navi Mumbai. The building will be eco friendly and will have a well developed laboratory facilities required for analysis of various parameters and undertaking R&D activities. This will include treat

ability 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.

10. Action Plan for Control of Air Pollution at Pune and Solapur

Hon'ble Supreme Court of India is considering a Public Interest Litigation W.P.13029/1985 regarding air pollution in 16 cities in India. Mumbai, Solapur and Pune cities in Maharashtra have been included for the preparation of the action plans for the control of air pollution for these cities which inter-alia should include the pollution reduction strategies. Mumbai High Court is already seized with the matter regarding air pollution control in Mumbai as per action plan prepared by the State Government.

MPCB prepared Action Plans for control of air pollution in Pune and Solapur and submitted it to Environmental Pollution Control Authority (EPCA) under the Chairmanship of Shri Bhurelal set up by the Supreme Court. Based on the review meeting taken by the Bhurelal Authority in January 2005 at Pune, MPCB has issued directions as under:

- LPG for autorickshaws
- CNG for buses
- Parking policy and its implementation in city
- Bus Terminal on the outskirts of city to avoid traffic of polluting vehicles in city.
- Bye Pass construction to reduce congestion in city.
- Road Pavement construction to control dust pollution
- Supply of cleaner petrol (1% Benzene) and diesel (500 ppm sulphur) and EURO III compliance from April, 2005..
- Completion of CNG supply pipe line from Panvel to Pune by December 2006.

11. 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 numbers 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-Shingapur 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 it to them local Authorities

Upon receiving the approval of Board to the concept papers, work on preparation of techno-economic feasibility and Detailed Project Report for Shirdi, Shani Shinganapur & Alandi is in progress. Scope of the this work is as follows :

- Preparation of conceptual plan for each town
- Feasibility study for the concept and
- DPR for proposed infrastructure improvements (block estimates adequate enough for the appraisal by funding agencies)

Shani Shinganapur has famous temple of Lord Shani. It is open to sky. Place is a unique pilgrim centre in Maharashtra famous for its door less houses. The offerings of leaves and flowers to the God generate about 1.5 to 2 Tons of solid waste per Day. Disposal of the waste has been a problem for the local Gram Panchayat and Devasthan Authorities. MPCB was approached by Devasthan committee along with a Pune based NGO M/s. Conservation Education

& Research Institute with a proposal for financial assistance for the project of vermin-composting of solid waste at the site reserved by Devasthan 2 Kms away from temple.

MPCB has considered the proposal for extending technical and financial assistance. After two years, the Devasthan committee will take responsibility for further operation and maintenance of the project. It is expected that the project will be self sustainable after two years.. Further work is in progress.

12. **Air Quality Monitoring:**

In order to check the levels of air pollution, Board has set up 23 air quality monitoring stations in different cities in the State such as Aurangabad, Nagpur, Nashik, Pune, Solapur and Mumbai. These stations are inadequate. Board has planned to set up air monitoring stations at other cities and industrial estates in the State. New cities proposed to be covered are Kolhapur, Akola, Amravati Ulhasnagar, etc. Additionally Board has also 7 mobile vans for air monitoring. Daily air quality data at 5 major cities in the State is reported TV news channels. Board has prepared action plan to increase the number of air quality monitoring station upto 82. 50% financial support for 56 stations will be from Central Pollution Control Board and rest will be from MPCB resources. Educational institutes having department of Environmental Sciences will be involved for operation and maintenance of most of these stations. Data acquisition and coordination center is proposed to be set up at Pune University. Air quality data will be published regularly and also placed on website of the Board. This will be useful for public information and also for students. It is proposed to spend about Rs.1 crore per year for implementation of this project. CPCB has approved the proposal. After obtaining formal approval of MPC Board, the project will be taken up for implementation.

13. **Fly Ash Utilisation**

Air pollution caused due to emission of fly ash from coal based Thermal Power plants is a major cause of health impacts on the people living in their vicinity. In Maharashtra State alone, about thirty thousand tons of fly ash is generated everyday by thermal power plants producing about 12,000 MW of power. In order to regulate the disposal and utilisation of fly, Govt. of India has issued notification making it mandatory for the brick manufacturers to use the fly ash. This is also aimed to reduce the exploitation of the precious natural top soil layer. MPCB has issued directions to more than 3800 the brick manufactures for utilisation of the fly ash. Co-operation of District Collectors is also sought for implementation of the notification.

14. **Research & Development:**

Implementation of environmental regulations require solid base of science and technology with a back up of research and development activities. Board is required to undertake investigative research develop and assess its policy programmes and initiatives. This area was not given adequate attention in the past. Since last one year Board has taken up several such projects which are of great importance for the environment protection and public health. Following is the list of important research based projects being implemented by the Board either on its own or in collaboration with other scientific institutions:

- Collaboration with US EPA for air pollution control studies at Pune
- 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 different cities during Diwali
- Measurements of Benzene, Toluene and Xylene (BTX) in ambient air at Mumbai. This will help in developing understanding regarding exposure of public to volatile organic compounds which are toxic and emitted from vehicles.
- 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.
- Preparation of environmental management plan for Patalganga industrial area.
- Biological monitoring of river quality. This will help in understanding the ecological impact on the river water quality.
- Guidelines for O&M of Effluent Treatment Plants
- Mission Waldhuni Nalla for control of water pollution (128 MLD) by application of innovative and cheaper technology.
- Comparative study of effect of air pollution on health of children in Mumbai and New York. Board is working with US EPA/USAEP to develop a collaborative project.

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 ones are listed as below:

- Publication of report on impact of mass bathing on the water quality of Godavari river during Kumbh Mela at Nashik.
- Report on environmental status of Nagpur region
- Report on river water quality of Maharashtra, January 2005
- Report on water pollution of Mithi river, June 2004.
- Re-launching of website of MPCB and its updating on daily basis. Size of the website was 5 MB in January 2004. Today it is more than 60 MB and its growing. Environmental Information Center has been newly created in the Board for public awareness and assistance.
- High Level Conference on strategies for control of air pollution in Mumbai was organised in March, 2005.
- Feature Film: Technical and financial assistance was given to Smt. Sai Paranjape, for production of a feature film "Chakachak." The theme of the film is to promote importance of proper management of domestic solid waste.
- Production and telecast of short films on themes of environment protection for mass awareness during Diwali (noise and air pollution due to fire crackers) and Holi (avoid use of chemical colours, plastic harmful to public health).
- Mass awareness activities in collaboration with NGOs: Commemoration of Ozone Day, Earth Day, World Environment Day etc.
- Quarterly magazine "Paryawaran Sevak" is produced in Marathi by MPCB in collaboration with one NGO in Navi Mumbai.
- Environment First: Maharashtra, 2004: Mega Even organised in September 2004 for mass awareness on the occasion of Foundation Day of the Board.
- Training programme for NGOs was held at Pune in collaboration with CPCB to educate NGOs on environment related issues.
- In last few month Board participated in four exhibitions:
 1. India International Trade Fair in New Delhi, November, 2004
 2. Exhibition on Pollution Control at Navi Mumbai, November, 2004.
 3. Exhibition and Students Rally for Environment Protection at Nagpur, December 2004
 4. International Exhibition on Environment held at Abu Dhabi, February, 2005
 5. Krishi Mela Pradarshan held at Latur in March 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 almost all the environmental laws which are about twenty in number. In order to build up the institutional capacity and to identify strengths and weaknesses, 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 same is being submitted to the Supreme Court Monitoring Committee.

17. Appreciations

- The Supreme Court appreciated the work done in management of municipal solid wastes
- Supreme Court Monitoring Committee appreciated the work doen in the management of hazardous wastes
- Mumbai High Court (Nagpur Bench) appreciated work done in noise pollution monitoring.
- Dr. D.B. Boralkar, Member Secretary of the Board is a scientist of high calibre and reputed expert in the field of pollution control with experience of 29 years. There are 31 research publications/manuscripts to his credit. He has been Member of Indian Delegation participating negotiations at Basel Convention under UNEP. Dr. Boralkar is also nominated by the Court as Member of the Supreme Court Monitoring Committee set up by the Government of India in October 2003. He is providing effective leadership to the Board since November, 2003 and has brought focus on MPCB from all concerned in the field of environment protection.