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## Maharashtra Pollution Control Board



### Institutional Capacity Building

#### Final Report

*Ref: Commissioned by MPCB in compliance of Supreme Court directions vide order dated 14.10.2003 in the matter of writ Petition No - 657/1995 regarding management of hazardous wastes*

**August 2005**

*A Division of* **CRISIL**

## FOREWORD

The Maharashtra Pollution Control Board is the nodal agency for environmental protection in the State of Maharashtra. From a humble mandate to implement law on prevention and control of water pollution in 1969, the Board now carries the onus of implementing several environmental legislations. With increasing environmental consciousness, more and more areas are being added to the Board's mandate.

Given the uniqueness of Maharashtra, the MPCB has been stretching its thin resources for too long to implement its mandate. It is also necessary to be a *futuristic organisation* and also to set standards for environmental enforcement. This calls for *strengthening of MPCB* in several ways, including in upgrading the skills of its scientists and engineers.

Well recognising that such strengthening is fundamental to achieving a good degree of environmental protection in the country, the honourable Supreme Court, in its interim order *dated 14.10.2003 in the matter of writ Petition No - 657/1995, regarding management of hazardous wastes, has called on all pollution control boards to urgently carry out the necessary measures required for strengthening the pollution control mechanism.*

It was in this background that MPCB requested CRISIL Infrastructure Advisory to develop a plan for institutional capacity building. CRISIL Infrastructure Advisory has developed this plan after wide consultation with the *employees of the pollution control board, discussions with experts in the field of environment, study of other pollution control boards in the country/ abroad and comparison with similar regulatory organisations.* The study has also benefited from *critical comments and suggestions from industry experts.* The study has also built on similar initiatives that were attempted in the past for *institutional strengthening.*

Through this plan, MPCB is optimistic, of not just addressing *organisational issues*, but also *changing the style of regulation.* For too long, our regulatory agencies have adopted an enforcement based regulation. Such an approach has its own limitations, given the long process for legal redressal in our country and organisational weaknesses. MPCB intends to broad base its regulatory strategy by adopting *information based regulation.* MPCB intends to use the abundant energy among the media, the public and voluntary organisations for environment protection. Such strategies call for a different organisation structure/ systems and this has been a main thrust of this plan.

We are deeply committed to strengthen the MPCB. Soon after necessary discussions and approvals, a "*Change Management Cell*" will have to be constituted to implement the *institutional capacity building plan.*

I am glad to present our plan for *institutional capacity building.*

Dr. D.B. Boralkar  
Member Secretary  
August 1, 2005



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## **1 Findings, Recommendations and Action Plan**

### **1.1 BACKGROUND**

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Maharashtra Pollution Control Board (MPCB) was set up under the provisions of the Water (Prevention & Control of Pollution) Act, 1974. Several responsibilities have been added to MPCB since then. At present MPCB has a multidimensional responsibility of implementing various environmental legislations in the state of Maharashtra (including several new ones). However, its resource base (comprising skills, manpower, infrastructure etc) has by and large remained inadequate. Additional resources, commensurate with increasing responsibilities, have not been provided to the organisation. As a result of inadequate organisational resources, MPCB has not been able to achieve a desired level of implementation in the various areas of its mandate. In order to enhance the level of implementation, there is urgent need to build the capacity of the organisation in terms of professionally qualified manpower at senior levels and strengthening of infrastructure. This has also been underscored by the Honourable Supreme Court in its order dated 14/10/2003 in the matter of Writ Petition No – 657/1995.

This study has been commissioned in this background.

### **1.2 APPROACH**

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Several studies have been commissioned in the past by pollution control agencies, at the State as well as at the national level. These studies have focused on strengthening of organizational resources to meet the Board's statutorily defined role. Several international and national examples are now available, where different strategies have been adopted to fulfill the statutory role. This study has explored the applicability of these cases. It has also analyzed whether there is a need for a role change or role enhancement for the Maharashtra Pollution Control Board in light of these national and international perspectives.

### **1.3 KEY FINDINGS**

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The key findings of the study are

- 1) **Pollution control strategy** - MPCB relies on inspection and investigation as the primary strategy for pollution control. This needs to change.
- 2) **Tools for pollution control** - MPCB relies almost entirely on internal resources (people, laboratories) for pollution control. In order to be an effective regulator, it needs to reduce its reliance on own resources and supplement this with external resources.
- 3) **Organizational capacity** - MPCB's organizational strengths have not kept pace with its mandate. MPCB needs to build an organization commensurate with its activities. It needs to strengthen its technical resources. It also needs to strengthen its IT, Finance, HR and Revenue functions.

The above issues are discussed in detail in the following sections.

#### **1.3.1 Pollution control strategy**

At present, MPCB, similar to other pollution control boards, relies on the following strategies to ensure compliance:

- ❑ An approval process (both at the time of setting up a unit as well as periodically during operations) that permits setting up of industries after ensuring that adequate pollution prevention mechanisms have been planned.
- ❑ Inspection, investigation and enforcement measures to ensure compliance.

This strategy is effective only when the number of pollutants to be regulated is low. However, at present, MPCB is responsible for enforcing several legislations that cover a cross section of pollutants (such as industries, hospitals and local bodies) as well as several technical areas (such as air, water, hazardous etc). The highly industrialized nature of Maharashtra, with a heavy concentration of small and medium enterprises, adds to this situation.

Even if MPCB were to be strengthened, this strategy, which is based on inspection, investigation and enforcement, has inbuilt limitations. Increasing environmental consciousness indicates that more areas will get added to MPCB's domain. The ongoing economic growth also implies that



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several new pollutants will be added to MPCB's domain. Any institutional strengthening will only provide a short-term relief in this situation. It would be essential for MPCB to understand and adopt newer strategies that are available for pollution control.

### **1.3.2 Tools for implementation**

MPCB faces constraints in enforcement due to organisational weaknesses, which include high corruption, inefficient manpower and lack of adequate systems. MPCB largely relies on its own resources, its employees; its technical infrastructure; and its systems, for enforcement. MPCB needs to reduce its reliance on own resources. Own resources will neither be adequate nor be effective. It is necessary that MPCB uses external resources, in addition to its own resources, as tools for implementation of its mandate.

### **1.3.3 Organisational constraints**

#### **Resources**

The resources of MPCB have not been augmented in line with increasing responsibilities.

- ❑ Specifically in the case of manpower, the strength, skills and pay scales of technical staff need to be revised. The technical skills of staff have not been upgraded through training/retraining etc. This has led to the situation where MPCB finds itself technically deficient in fulfilling its mandate expanded under some of the newer laws and rules.
- ❑ The current structure does not provide for adequate growth avenues for technical staff.
- ❑ The mix of staff is also not appropriate to MPCB's functions, with administrative and non-technical staff in higher proportion to technical staff.

#### **Technical infrastructure**

- ❑ The functionality of the laboratories needs to be harmonized within the overall organizational structure. The hierarchy of the laboratory needs to be well defined in the overall organization structure.
- ❑ There is a need for up-gradation of skills by induction of new staff with higher qualifications and for training of existing staff.
- ❑ Equipment, space and working conditions in the laboratories need to be improved.



### **Support functions**

IT -MPCB has appointed a consultant to design and implement the IT system across the organization. CRISIL's past experience with other organizations has revealed that **the first attempt at computerization** usually is not up to the expectations because of unavoidable failure in mapping the future needs of an organization. This can lead to disillusionment and skepticism about the utility of the whole exercise. However, it will be worthwhile to persevere with the system and accept the inevitability of continuous improvement in IT systems.

**Finance and Accounts** - The finance and accounting functions need a revamp. There is lack of annual planning and reporting. The availability of current and detailed information relating to finances is poor. The cess collection functions are centralized and this impedes revenue generation.

### **1.4 OPTIONS FOR CHANGE AND RECOMMENDED DECISIONS**

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**The inability to enforce regulations due to organizational weaknesses, weak enforcement mechanisms and the institutional environment (legal issues, interagency coordination problems, ill equipped and overburdened regulators etc.) makes it impractical to expect efficient regulation.**

MPCB follows an inspection-based strategy for pollution control. MPCB has to monitor and analyze pollution from each plant, determine whether it has violated the rules, and institute legal proceedings in cases where the violation is clear. These steps are not cheap, and many developing countries have not been able to implement them. Similar to other PCBs in India, MPCB also faces internal constraints in enforcing a strict regulatory regimen. The weaknesses include high corruption, inefficient manpower and lack of adequate systems.

Past efforts at institutional strengthening of PCBs have highlighted the need for capacity building through efficient systems, recruitment and training of manpower; creating infrastructure; greater financial support and autonomy to the Boards. However, the studies have focused on strengthening the organization to perform **its defined role as a regulator and enforcer** in a better manner.





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While such institutional strengthening would help in tackling problems relating to manpower and systems that are currently crippling the Boards, it would be of no help in solving issues of corruption in the systems and procedures. Nor would such strengthening increase the accountability within the system. Even with improved systems and manpower, there will be doubts regarding the enforcement capability of the PCBs if accountability cannot be introduced and corruption continues. Such institutional strengthening also does not address the limitations of the legal environment in which the PCBs function.

Hence a change is required in the model of regulation. Many countries are opting for more flexible and efficient regulations that provide strong incentives for polluters to change their ways. Varied strategies have been used by different countries ranging from pollution charges to public disclosure programs that pressurise polluters to clean up their act. Indonesia's PROPER model is one such example, where public disclosure has been used as a strategy to catalyse pollutants to carryout abatement measures. Andhra Pradesh has introduced a system of involving the community while giving consents as a measure to reduce corruption at the consent stage.

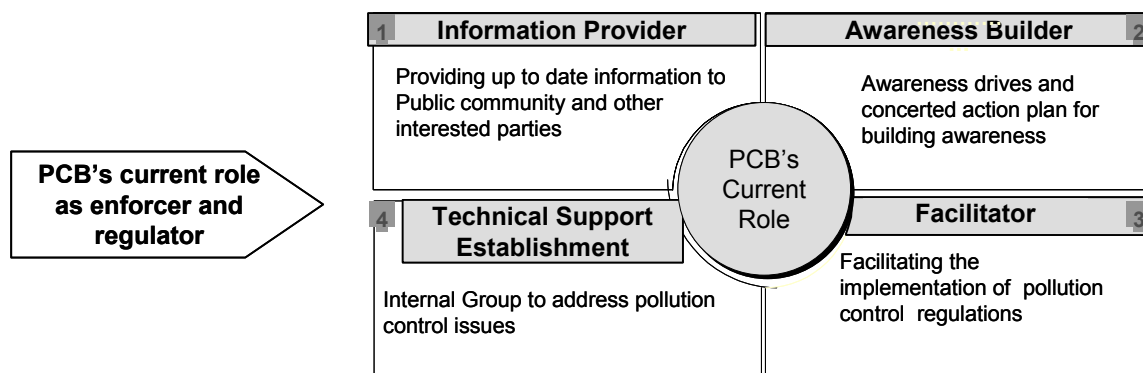
In Indonesia, the enforcement of pollution control by BAPEDAL - the national pollution control agency - was weak because the regulatory budget was limited and the courts were plagued by corruption. Faced with this predicament, BAPEDAL decided to initiate a program for rating and publicly disclosing the environmental performance of Indonesian factories.

In early 1995, BAPEDAL rated water pollution from 187 plants. Initial ratings showed that two-thirds of the plants had failed to comply with Indonesian regulations. In June 1995, Indonesia's Vice-President presided over a high-profile public ceremony to congratulate five green-ranked plants whose performance met formal requirements. In December 1995, BAPEDAL released ratings by industry groups over several months in order to hold media attention. By December 1996—one year later—improvements had become much more pronounced. Compliant plants, originally one-third of the sample, now constituted over one half.

Developing countries are using formal and informal channels effectively as a new model for pollution control. As an environmental agency exerts influence through numerous channels, it becomes more like a mediator and less like a dictator. The new model empowers regulators

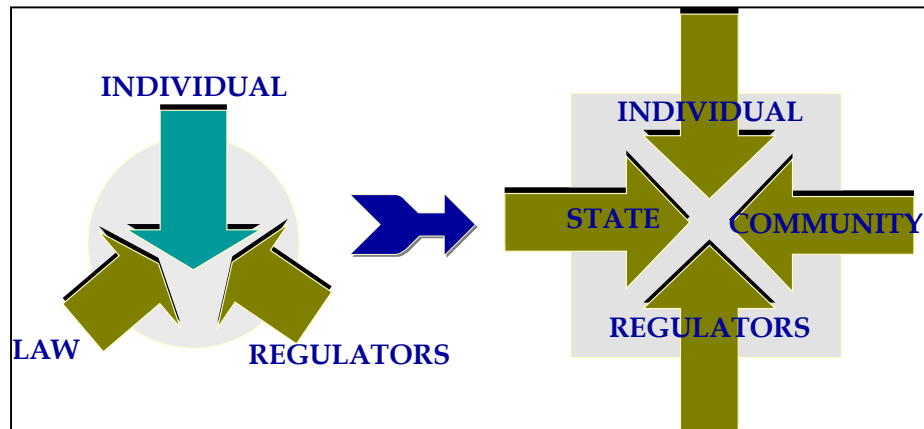
because it gives them many options for improving industry’s environmental performance. The new models call for two significant changes:

- 1) **A change in strategy** – From being simply an enforcer, **PCBs enhance their role** by becoming
  - a) An information provider
  - b) An awareness builder
  - c) A facilitator
  - d) A technical support establishment



**Figure 1: PCBs need to enhance their existing role**

- 2) **Using community resources** – In addition to using its internal resources, PCBs use community resources such as community organizations and professionals in pollution control.



**Figure 2: Need to use community resources for pollution control**

These changes have two effects –

- They reduce the effort and resources required in pollution control. It is no longer required for the PCB to follow a lengthy procedure for enforcement. The external pressures from the community catalyse abatement. The enforcement procedure is also not specific to each pollutant. As a result it reduces the pressure on the resources of the regulator.
- They reduce the dependence on the effectiveness of own resources. Information and awareness are used as external tools to catalyse abatement. External participants such as the community organizations and professionals are also used similarly.

#### **Bio medical waste management – An example of MPCB’s new strategy**

MPCB’s recent successes in bio medical waste management are a sound example of adopting new methods for pollution control.

In this area, MPCB has created awareness through strong public communication and has highlighted the impact of poor disposal mechanisms. It has taken the lead in generating a favourable opinion for change in existing systems through a dialogue with the State Government and the local body. It has educated the community about the responsibility of the hospitals and the role that hospitals need to play. MPCB has acted as a facilitator to create good quality disposal infrastructure in the city. It has also provided technical advice to the generators and the local body in developing equipment standards for the disposal system. Thus, MPCB has gone far beyond its traditional role of an enforcer in this area.

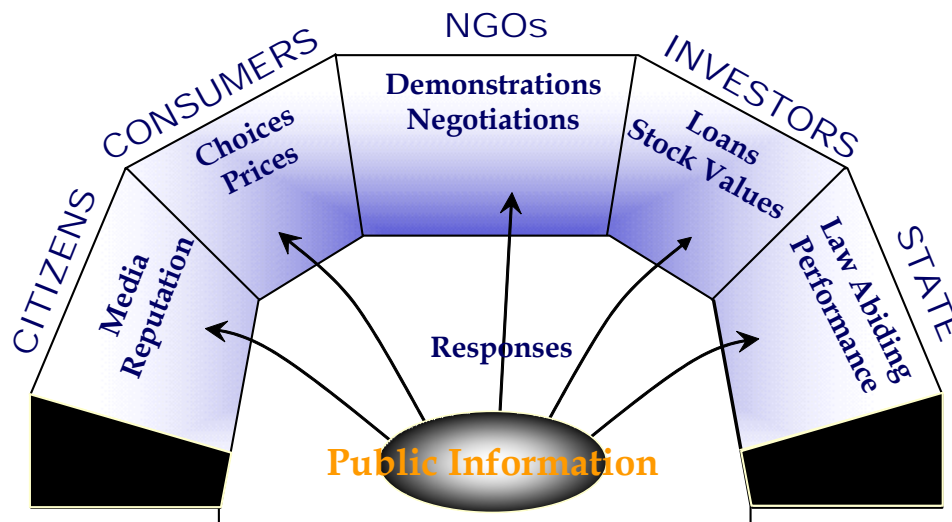
We believe that an enhancement in the role of MPCB and involvement of external resources will create a sustainable approach to pollution control. An institutional strengthening that is carried out on this foundation is more likely to yield results as well as sustain such results.

Accordingly we recommend that MPCB takes a decision to enhance its role and also involve community resources in pollution control.

### 1.5 KEY TO SUCCESS

Pollution Control Agencies like MPCB need to marshal reliable information, educate the public about environmental tradeoffs, and encourage broad participation in setting goals. Communities that participate in regulation will support its objectives, provide information about local polluters, and defend the environmental agency against political attack.

Good relations with business leaders are crucial as well, since industry associations often have the political clout to veto pollution-control programs. Regulators will find natural allies among CEOs of firms whose market position depends on good environmental performance. Having already paid for cleaner production, these leaders will support measures that require similar efforts from their competitors. Regulators can encourage informal regulation by publishing reliable, easily understood information on pollution sources and their impacts.



**Figure 3:** Key to successes – various players

## **1.6 THE AGENDA FOR INSTITUTIONAL STRENGTHENING**

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The institutional strengthening agenda will need to reflect

- 3) changes in the role that MPCB will play in the future and
- 4) The increased interactions with community resources.

Accordingly, we recommend an institutional strengthening plan with the following dimensions.

### **1.6.1 Give effect to the change in the role of MPCB**

**Public communication and awareness building as a role** - The changes being recommended require special focus on public communication to act as an information provider and awareness builder. This is not a traditional function of MPCB. In order to effect this, MPCB needs a sound information gathering mechanism, a well maintained database and strong networks with the community for communication. A separate department is being proposed to handle this function.

**Build a technical excellence cell**, which will perform the roles of facilitation and technical support, which includes:

- ❑ Keeping abreast of the latest regulations in pollution control and framing the guidelines and procedures for operationalising them within MPCB.
- ❑ Research on pollution control mechanisms and coordinating with various research bodies like NEERI and other PCBs in performing the functions.
- ❑ Providing training and systems to the operational staff for better performance of their current duties as well as new duties that may be added over a period of time.
- ❑ Tracking development in the State and performing a proactive role towards pollution control and abatement in Maharashtra.

**Enhance supporting capabilities such as IT** – if MPCB were to move on to an information-based strategy, IT would be in the forefront of activities. There cannot be centralised and reliable information dissemination without computerization of the various departments so that information is available among various departments and also to the community. Computerization has to happen in all areas where information could be possibly obtained.

### **1.6.2 Build linkages with external resources such as the NGO community and professionals**

- NGOs have played a critical role in environmental management/ pollution control and abatement mainly driven through building public awareness, creating media attention and also keeping a vigil against pollution by vociferously canvassing/ being part of PIL related cases. Currently they are performing functions like - sampling and analysis, providing information to the general public and also assisting the Pollution Control Boards in inspection related aspects. Moving forward a larger role could be envisaged for a select set of NGOs working in this field. This could include a) being a part of the enforcement machinery of the regulator in keeping a vigil on pollution control b) being a part of the changing role of an information provider and c) building the capacity of MPCB in areas such as public communication and community participation.
  
- Professional involvement – Adding internal resources in line with the enlarging domain is not sustainable for MPCB. For the new areas it is desirable that MPCB involve external resources. Pollutants such as hospitals (bio medical waste), local bodies (solid waste and sewerage) and service industries (E-Waste) do not have the technical capacity for conformance. It is inevitable that they rely on professionals (consultants, equipment providers etc). Such professionals can also play the role of assurers for MPCB. Since they facilitate the pollutants to achieve conformance, a select group of these professionals can also be empanelled/ accredited by MPCB as assurers of conformance. Based on their objective report about the pollutant, MPCB may be able to issue the necessary approvals. This will reduce the pressure on MPCB's resources. Agencies such as ISO, Securities Exchange Board of India (SEBI), and Greater NOIDA Development Authority have already introduced such involvement of professionals in the regulatory role. Implementation of this would call for a system to accredit a limited number of professional agencies.

### **1.6.3 Address organizational issues**

There is an imminent need in MPCB to look at organizational issues and address them in a time bound manner. Some of the key needs to be addressed include



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1. Measures towards bringing greater accountability - administrative in-charges for all specific functions, creation of responsibility levels for technical/non technical levels and creation of zonal responsibilities centres to drive operational accountability.
2. Measures towards improving the technical/non technical employee ratios - planned redeployment plans, addition of technical talent at various levels including contract employment.
3. Additional focus on new responsibilities – by creating new positions for technical excellence/ corporate communication/ audit & vigilance/ MIS/ IT.
4. Promotion opportunities –an organisation structure which ensures growth to all cadre and creates a career path for each individual.
5. Compensation levels - revision of pay scales for select positions to bring parity with similar organizations.
6. Capacity building - need to develop capacity through training and skill building at all levels in the current set up.

### **1.6.4 Strengthen support functions**

MPCB should look at strengthening the support functions to address the organisational change.

Some of the key functions that would need additional focus include:

**Finance and Accounts** –there is a need for conversion to double entry accounting system which would bring in the necessary checks and balances in MPCB. In addition the finance and accounts department would perform functions like annual budgeting, funds mobilization and annual reporting

**Revenue** – this would be a nodal consolidation point for Cess and Collection. This function would look into aspects like decentralization of collection, increasing coverage, managing receivables, and bringing changes in the collection frequency and involving banks/ other collection mechanisms.

**IT/MIS** – IT would play a critical role in the transition and strengthening desired by MPCB including handling aspects like systems/process for improving operational efficiency, generation/



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maintenance of a robust MIS system, create system to track defaulters, build automatic trigger mechanisms for periodic enforcement, facilitate inter region information flow and develop information collection and dissemination mechanisms for larger public.

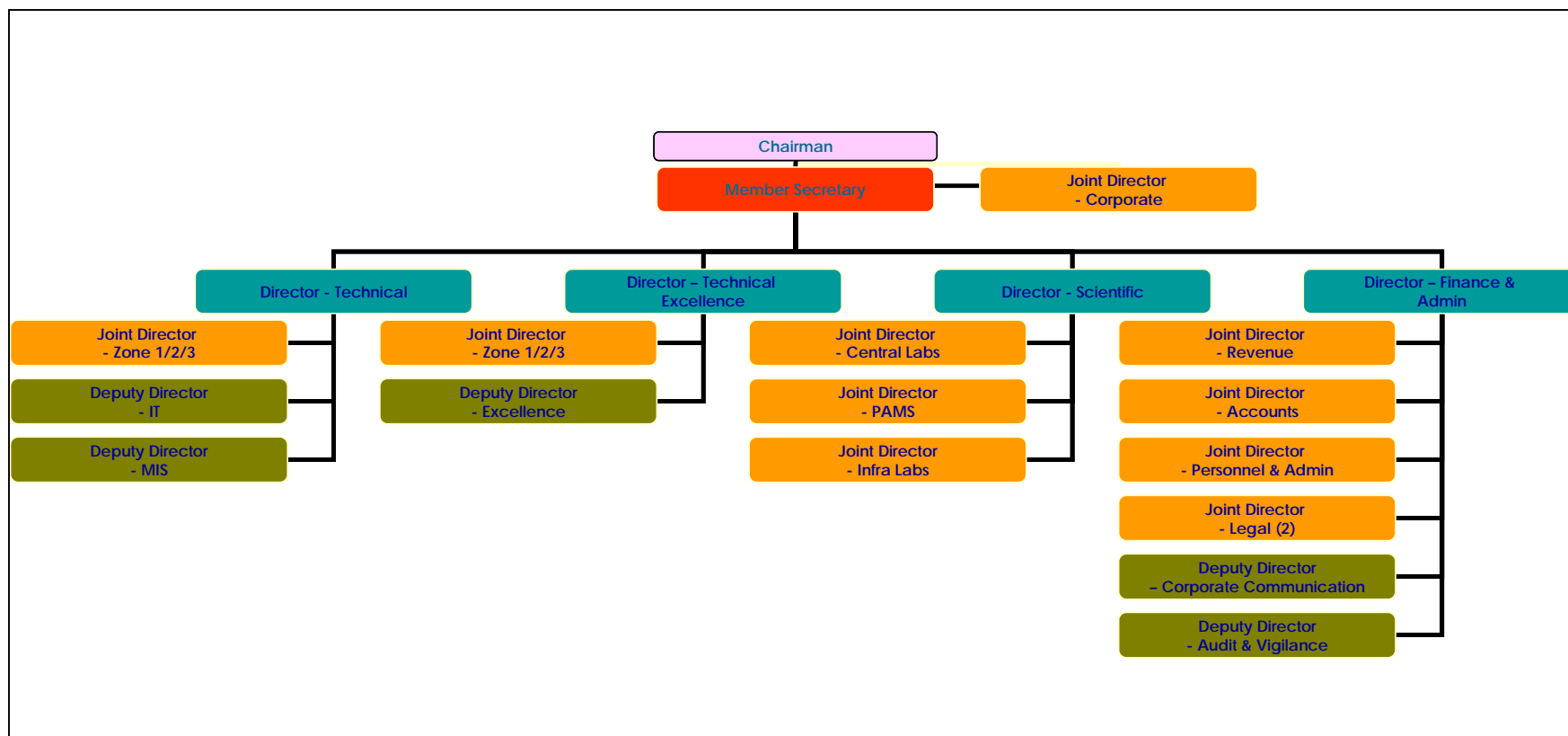
### **1.7 PROPOSED ORGANISATIONAL STRUCTURE**

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A revised organisational structure for MPCB, fully reflecting the institutional strengthening agenda for MPCB has been drawn up. The revised structure is based on the following principles.

- ❑ Separate technical and non technical responsibilities and provide for senior level attention dedicated to these areas
- ❑ Increase accountability and efficiency and provide a nodal consolidation point just below the corporate office – a Zonal structure
- ❑ Create an enabling environment for research and coordination efforts in future focus areas – A dedicated technical excellence cell
- ❑ Facilitate additional emphasis on IT and MIS
- ❑ Focus on revenue enhancement mechanisms – Revenue section
- ❑ Facilitate movement of MPCB towards public information strategies – A Corporate communications cell
- ❑ Further strengthen the internal systems and processes of a public body like MPCB – a separate audit and vigilance cell
- ❑ Address enhanced legal needs of MPCB





**Figure 4:** Top level organisation structure



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**1.8 RECOMMENDED PAY SCALES - SUMMARY**

SI. No	Designation	Department	Function	Proposed Numbers	Current Numbers	Proposed Pay Scale	Current Pay Scale
1	Chairman			1	1	18,000	16,400
2	Member Secretary			1	1	16,400	14,300
3	Joint Director	Corporate		1	-	12,000	12,000
4	Director	Technical		1	-	14,300	-
5	Director	Technical Excellence		1	-	14,300	-
6	Director	Scientific		1	-	14,300	-
7	Director	Finance & Administration		1	-	14,300	-
8	Joint Director	Technical	Zone	3	1	12,000	12,000
9	Joint Director	Technical Excellence	Zone	3	-	12,000	12,000
10	Joint Director	Scientific	Central Labs	1	1	12,000	12,000
11	Joint Director	Scientific	PAMS	1	-	12,000	12,000
12	Joint Director	Scientific	Infra Labs	1	-	12,000	12,000
13	Joint Director	Finance & Administration	Revenue	1	-	12,000	-
14	Joint Director	Finance & Administration	Personnel and Admin	1	-	12,000	-
15	Joint Director	Finance & Administration	Legal	2	-	12,000	-
16	Joint Director	Finance & Administration	Accounts	1	1	12,000	12,000
17	Deputy Director	Technical	IT	1	-	10,000	-
18	Deputy Director	Technical	MIS	1	1	10,000	10,000
19	Deputy Director	Technical	Regional Office	13	13	10,000	10,000
20	Deputy Director	Technical Excellence	Zone	3	-	12,000	12,000



***Institutional Capacity Building - MPCB***

Sl. No	Designation	Department	Function	Proposed Numbers	Current Numbers	Proposed Pay Scale	Current Pay Scale
21	Deputy Director	Technical Excellence	Excellence	1	-	12,000	12,000
22	Deputy Director	Finance & Administration	Corporate Communication	1	-	10,000	-
23	Deputy Director	Scientific	Central Labs	1	1	10,000	10,000
24	Deputy Director	Scientific	PAMS	1	1	10,000	-
25	Deputy Director	Scientific	Infra Labs	1	1	10,000	-
26	Deputy Director	Finance & Administration	Legal	3	2	10,000	10,000
27	Deputy Director	Finance & Administration	CESS	1	-	10,000	-
28	Deputy Director	Finance & Administration	Audit & Vigilance	1	-	10,000	-
29	Deputy Director	Finance & Administration	O&M Buildings/ Maintenance	1	-	10,000	-
30	Deputy Director	Finance & Administration	Accounts	1	-	10,000	-
31	Manager	Technical	Regional Office	52	52	8,000	8,000
32	Manager	Technical	Networks	1	-	8,000	-
33	Manager	Technical	Software Systems	1	-	8,000	-
34	Manager	Technical	Statistics	1	-	8,000	-
35	Manager	Technical	Coordination	1	-	8,000	-
36	Manager	Scientific	Central Labs	3	1	8,000	6,400
37	Manager	Scientific	PAMS	3	1	8,000	6,400
38	Manager	Scientific	Infra Labs	3	1	8,000	6,400
39	Manager	Technical Excellence	Zone	3	-	8,000	-
40	Manager	Technical Excellence	Excellence	4	2	8,000	6,400
41	Manager	Finance & Administration	Collection	3	-	8,000	-
42	Manager	Finance & Administration	CESS	3	-	8,000	-
43	Manager	Finance & Administration	Audit	3	-	8,000	-
44	Manager	Finance & Administration	Accounts	3	2	8,000	7,450
45	Manager	Finance & Administration	PR	1	-	8,000	-



***Institutional Capacity Building - MPCB***

<b>Sl. No</b>	<b>Designation</b>	<b>Department</b>	<b>Function</b>	<b>Proposed Numbers</b>	<b>Current Numbers</b>	<b>Proposed Pay Scale</b>	<b>Current Pay Scale</b>
46	Manager	Finance & Administration	Public Information	1	-	8,000	-
47	Manager	Finance & Administration	Admin & Estate	1	1	8,000	7,450
48	Manager	Finance & Administration	Vigilance	3	-	8,000	-
49	Manager	Finance & Administration	Personnel	1	-	8,000	-
50	Manager	Finance & Administration	Training	1	-	8,000	-
51	Manager	Finance & Administration	Legal	3	2	8,000	6,400
52	Jr. Manager	Finance & Administration	Civil	1	-	7,450	6,500
53	Jr. Manager	Finance & Administration	Maintenance	1	1	7,450	6,500
54	Jr. Manager	Finance & Administration	Mechanical	1	-	7,450	6,500



**1.9 ACTION PLAN**

Aspect	Role	Organisational Issues	Support Functions	Infrastructure
<b>Immediate Key Decisions</b>	<ul style="list-style-type: none"> <li>recommendations in role change</li> </ul>	<ul style="list-style-type: none"> <li>recommendations of proposed organisation structure, pay scales</li> </ul>	<ul style="list-style-type: none"> <li>emphasis on support functions of IT, MIS, Finance &amp; Accounts and Revenue</li> </ul>	<ul style="list-style-type: none"> <li>in Infrastructure for existing facilities and proposed new facilities</li> </ul>
Setting up of a “CHANGE MANAGEMENT CELL” for implementation – Internal/ External				
<b>0 - 3 Months</b>	<b>Initiation of Implementation</b>	<b>Initiation of Implementation</b>	<b>Review and Planning</b>	<b>Review and Planning</b>
	<ul style="list-style-type: none"> <li>excellence cell</li> <li>communication cell</li> <li>where new strategy would be used</li> <li>information to be gathered/ disseminated</li> </ul>	<ul style="list-style-type: none"> <li>scale and organisation structure</li> <li>external recruitment</li> <li>deputation/ secondments</li> <li>for contract staffing</li> </ul>	<ul style="list-style-type: none"> <li>entry system and design a plan for movement to double entry system</li> <li>organisation including data compilation and analysis systems</li> <li>IT platform to strengthen increasing IT needs of MPCB</li> </ul>	<ul style="list-style-type: none"> <li>technical infrastructure addition plan</li> <li>expenditure plan</li> <li>approvals from Board for capital expenditure plan</li> </ul>



***Institutional Capacity Building - MPCB***

<b>Aspect</b>	<b>Role</b>	<b>Organisational Issues</b>	<b>Support Functions</b>	<b>Infrastructure</b>
<b>3 – 6 Months</b>	<b>Implementation</b>	<b>Implementation</b>	<b>Initiation of Implementation</b>	<b>Initiation of Implementation</b>
	<ul style="list-style-type: none"> <li>▪ community involvement mechanisms including NGO's/Community</li> <li>▪ accreditation process for external professionals</li> <li>▪ dissemination platforms including updated website, newsletters, public relations cells</li> <li>▪ committees for preparing regional environment action plans</li> </ul>	<ul style="list-style-type: none"> <li>▪ skill development program</li> <li>▪ analysis across all levels and functions</li> <li>▪ training calendar</li> <li>▪ Programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ conversion to double entry system</li> <li>▪ system for MPCB across locations</li> <li>▪ system across MPCB locations</li> <li>▪ improving revenue collections and tracking mechanisms for revenue efforts</li> </ul>	<ul style="list-style-type: none"> <li>▪ expenditure plan</li> <li>▪ bound procurements/ installation for all capital goods</li> <li>▪ expenditure plan and suggest modifications</li> </ul>
<b>6 – 15 Months</b>	<b>Review and Modifications</b>	<b>Review and Modifications</b>	<b>Implementation</b>	<b>Implementation</b>
	<ul style="list-style-type: none"> <li>▪ process for professionals</li> <li>▪ information dissemination platforms</li> <li>▪ dissemination and subsequent actions taken</li> </ul>	<ul style="list-style-type: none"> <li>▪ powers across locations and suggest improvements</li> <li>▪ development program on a yearly basis and monitoring of the same</li> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ for tracking revenue collections and monitoring mechanisms</li> <li>▪ conversion to double entry system</li> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ bound procurements/ installation for all capital goods</li> </ul>



***Institutional Capacity Building - MPCB***

<b>Aspect</b>	<b>Role</b>	<b>Organisational Issues</b>	<b>Support Functions</b>	<b>Infrastructure</b>
	<ul style="list-style-type: none"> <li>▪ Identification of outsourcing opportunities including technical areas and identification of service providers</li> </ul>	<ul style="list-style-type: none"> <li>▪ process to bring in skilled talent</li> <li>▪ of current administrative staff</li> </ul>	<ul style="list-style-type: none"> <li>▪ system for MPCB across locations</li> <li>▪ system across MPCB locations</li> </ul>	
<b>15 Months Onwards</b>	<b>Future Planning</b>	<b>Future Planning</b>	<b>Review and Modifications</b>	<b>Review and Modifications</b>
	<ul style="list-style-type: none"> <li>▪ service providers including technical areas</li> <li>▪ performance, agenda and plan for the future role changes</li> </ul>	<ul style="list-style-type: none"> <li>▪ redeployment plan for administrative staff</li> <li>▪ and preparing action plan to address the same</li> <li>▪ scheme in line with MPCB's performance areas and incentive parameters</li> <li>▪ scheme and communication of incentive scheme to employees</li> </ul>	<ul style="list-style-type: none"> <li>▪ of MIS/ IT system and revenue</li> </ul>	<ul style="list-style-type: none"> <li>▪ installations and performance</li> </ul>



## 2 BACKGROUND

MPCB was set up under the Water Act, 1974

Maharashtra Pollution Control Board (MPCB) is set up under the provisions of the Water (Prevention & Control of Pollution) Act, 1974. The main objective of this Act is to promote cleanliness of streams and wells in the country.

Over a period of time, several other responsibilities have been added to the Board

In 1986, the Environment (Protection) Act was promulgated. This Act has wider coverage of several aspects of environment protection. MPCB is required to perform additional functions under this as well.

Currently MPCB has a multidimensional responsibility of implementing various environmental legislations in the state of Maharashtra (including several new ones) such as

- ❑ Water (Prevention and Control of Pollution) Act, 1974
- ❑ Air (Prevention and Control of Pollution) Act, 1981
- ❑ Water (Cess) Act, 1977
- ❑ Some of the provisions under the Environment (Protection) Act, 1986
- ❑ The Biomedical Waste (M&H) Rules, 1998
- ❑ The Hazardous Waste (M&H) Rules, 1989
- ❑ The Municipal Solid Waste Rules, 2000 etc.

Day by day several new responsibilities are being added. A relevant example is the emergence of electronic waste as a major area requiring attention. From time to time, various High Court and Supreme Court directives are also required to be complied with by





	<p>the Board. A relevant example is the order of the Honourable Supreme Court on the subject of hazardous waste management as a result of writ petition No 657 of 1995. The Supreme Court has directed the State Pollution Control Boards to undertake several activities.</p>
<p>Supreme Court Order on management of hazardous wastes</p>	<p>Hazardous waste is highly toxic in nature and requires proper control and handling. For effective management of hazardous waste in India, the Supreme Court had appointed a high powered committee in 1997 under the Chairmanship of Prof. M.G.K. Menon. The Committee submitted its report in 2002. The new report dealt comprehensively with several aspects related to the implementation of existing regulations and hazardous waste management. The Supreme Court vide its order dated 14.10.2003 directed the concerned authorities to take follow up actions in a time bound manner. The effective implementation of the order would require strengthening of the Pollution Control Boards particularly by provision of requisite infrastructure and manpower. <i>The Maharashtra State Pollution Board had requested the Court for an Institutional Strengthening prior to implementation of the Order, which has been agreed to by the Court.</i></p>
<p>The growth of the organisation has not kept pace with additional responsibilities</p>	<p>Several responsibilities have been added to MPCB. Its resource base however, (comprising skills, manpower, infrastructure etc) has by and large remained inadequate. Additional resources, commensurate with increasing responsibilities, have not been provided to the organisation.</p> <p>Further, due to increasing environmental consciousness, activities are increasing which require a multidisciplinary scientific/technical base. The latter is lacking.</p>



## *Institutional Capacity Building - MPCB*

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As a result, MPCB has not been able to fulfil its mandate.

As a result of inadequate organisational resources, MPCB has not been able to achieve a desired level of implementation in the various areas covered by its mandate. In order to enhance the level of implementation, there is urgent need to build capacity in the organisation in terms of professionally qualified manpower at senior levels and strengthening of infrastructure.

This need is also underscored by the recent Supreme Court order referred above in which the **Supreme Court** has noted “... it is necessary to strengthen the SPCBs and CPCB by providing them with requisite infrastructure and manpower so that they can issue the necessary guidelines to monitor the handling of hazardous wastes as suggested...”



## 3 INSTITUTIONAL STRENGTHENING OF PCBS

### 3.1 CONTEXT

In response to public interest litigation on the management of hazardous wastes in India, the Supreme Court in October 2003 directed the strengthening of SPCBs and CPCB through the provision of requisite infrastructure and manpower so that they could issue the necessary guidelines to monitor the handling of the hazardous wastes. The court gave a time period of three months for implementation of the direction.

### 3.2 PAST EFFORTS AT INSTITUTIONAL STRENGTHENING

Efforts for institutional strengthening of PCBs have been initiated right from the early 80s through the following:

- The Bhattacharya Committee in 1984 by MoEF/ CPCB
- The Belliappa Committee in 1990 by MoEF/ CPCB
- Administrative Staff College of India (ASCI) Report in 1994 sponsored by MoEF
- The sub-group constituted by the Chairmen & Member-Secretaries of SPCBs
- Planning Commission Study

The main features of each of the committees were as under:

#### **The Bhattacharya Committee Report in 1984**

- Delinking of grants-in-aid from cess collections and reimbursing the cess amounts to the Boards without undue delay
- Urging State Governments to allot suitable pieces of land to the Boards
- Discouraging the flow of deputationists to the Board
- Upgrading regional laboratories
- Providing each Board with at least one mobile laboratory



### ***Institutional Capacity Building - MPCB***

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- Creating a centralised training institute
- Providing one vehicle each for the Chairman, the Member-Secretary and divisional heads, in addition to a common vehicle for staff and laboratory
- Imposing a fine in excess of running costs of ETPs on erring units before legal action was initiated
- Linking SPCBs to the State Dept of Environment
- Providing, on priority, funds to establish air pollution control activity
- Giving customs duty exemptions for instruments meant for measuring and analysing pollutants
- Bestowing the power to make posts at least upto the rank of environment engineers/scientists with the Boards
- Decentralising administrative and financial powers at different levels of the hierarchy within the Board.

### **The Belliappa Committee Report**

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- Categorising Boards into four groups depending on the number of pollution sources, area, population, etc.
- Introduce elaborate monitoring, reporting and organizational systems at the national level along with four regional centres and one training cell in each Board
- Effecting suitable changes in the Boards recruitment policies to enable them induct persons with suitable academic qualifications
- Ensuring adequate financial support to the Boards in a consistent manner and giving autonomy to the Boards to utilize their resources for systematic development
- Ensuring that the Chairman and Member-Secretaries are appointed for a minimum of three years
- Constituting a purchase committee



### ***Institutional Capacity Building - MPCB***

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- Revising the categorization of industries
- Formulating - uniform and model sets of rules consistent with the corporate character of the Boards as set out under the Water Act

### **Administrative Staff College of India (ASCI) Report 1994**

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- SPCBs be reoriented for implementing the instrument mix of legislation and regulation, fiscal incentives, voluntary agreements, information campaigns and educational programmes
- An Annual Environmental Quality Report be prepared by every SPCB for the concerned state
- An inventory of discharges and effluents disaggregated to the district level be prepared
- Controlling function be digitalized
- A research cell be formed in each SPCB and a network be established with the proposed clean technology centre
- Model environmental impact assessments be prepared for major categories of industries
- A perspective plan be prepared to indicate location sites
- Polluter-pays-principle be progressively employed
- A business process re-engineering be undertaken in PCBs so that they will become technical groups with lean supporting staff structures
- A pollution control plan is prepared considering the marginal reduction possible at the lowest cost.
- Technical staff that are on deputation from The Public Health Engg Dept be trained comprehensively
- A conversion plan be prepared so that the administrative staff, after re-training, can be converted into technical support staff



### ***Institutional Capacity Building - MPCB***

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- An environmental education cell be created in each Board to create awareness among school children through sanitation programs, professionals, decision makers and public at large
- Customer friendliness be ensured while dealing with polluting units
- On-line pollution monitoring systems be introduced for newer industries especially for red industries in the large category
- The NOC be issued in two stages, such that there is a mid-term monitoring before the plant becomes operational, and consent for non-red industries be given at the RO level.
- Consent order be made available in a register so that if there are violations, members of the public can seek redressal
- Small water users be charged a flat rate of cess so that large users are systematically covered
- SPCBs be made the agencies for certifying Ecomark
- A system of institutionalising vigilance be involved
- Increased use of consultants and sampling through external labs be initiated
- Initiatives like rationalization of cess collection and metering, sponsored research, services to industries for EIA and analysis, environmental engineering, information support, environmental quality report sales, recognition charges for labs and reimbursement of inspection expenditure by industry be introduced for increasing the Boards' revenue.



**The Sub-Group**

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- Creating independent sections for hazardous wastes and substances, clean technology, training programmes, collection of cess, prosecution of cases and complaints
- Introducing a Time Targeted Action Plan for the most polluted cities in the State
- Evolving and updating the environment atlas
- Conducting regular programmes to foster awareness
- Creating a computer based data network
- Establishing laboratories in HO and ROs
- Fixing the tenure of Chairman and Member Secretaries at not less than five years
- Authorising the Boards to create posts and to appoint all categories of employees other than Chairman and Member Secretary
- Entitling the SPCBs to spend the collected amount of cess on programmes on priority basis rather than restricting them to predetermined formula
- Providing for retaining 82% of the cess with the Boards and depositing 18% with the CPCB for programmes of national importance
- Introducing a single window approach to consent management whereby units can seek consents through one single application covering aspects of both air and water pollution
- Granting consents to small units in the Green category within 15 days of the receipt of the application
- Empowering the ROs to issue consents to units in the green category.

## 4 APPROACH FOR THE STUDY

The objective of the current study has been:

- To revalidate the vision for the future
- To assess organizational capabilities, strengths and weaknesses
- To bridge the gap between the above aspects

In order to fulfil this objective, we have adopted the following approach:



**Figure 5:** Our approach

Through our strategic review, we have attempted to

- Assess the degree to which MPCB has been able to successfully implement its mandates
- Identify the areas for institutional strengthening
- Revalidate the vision

The strategic review has been a highly participative process with interviews and interactions with stakeholders and workshop with the senior management of MPCB.

Our three-step approach towards this module has been:

1. Consultations with external and internal stakeholders
2. International case studies on the approach to pollution control
3. National best practices





## ***Institutional Capacity Building - MPCB***

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The organization review is intended to assess the “as is” organization structure, manpower strength, technical infrastructure, financial resources, systems and processes to identify the suitability of the same for the revalidated vision. A detailed implementation plan is envisaged to bridge the in the “as is” situation and “to be” requirements as per the revalidated vision.

### **How different from earlier studies?**

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Prima-facie, the current study would appear as the sixth institutional strengthening study, the implementation of which - on the lines similar to the earlier studies, would be unknown. However, while the earlier studies have focused on the strengthening of organization resources to satisfy the Board’s statutorily defined role, we have also tried to analyse whether there is a need for a role change or role enhancement for the Maharashtra Pollution Control Board in the light of changing national and international perspectives.



## 5 BACKGROUND TO MPCB

### 5.1 HISTORY OF POLLUTION CONTROL

Pollution control efforts in India have a long history dating back to British rule. The Shore Nuisance Act, 1853, the Indian Penal Act, 1860, the Indian Easements Act, 1882, the Bengal Smoke Nuisance Act, 1905, the Bombay Smoke Nuisance Act, 1912 and the Motor Vehicles Act, 1939 were some of the pioneering legislative attempts at abatement of pollution. These were however at best, a piecemeal approach to environmental regulation, based on the law of torts. Action against pollution could only be taken by the courts on the basis of proper representation by the affected people. In this scenario, litigation could be prolonged and penalties hardly served as deterrents.

In the post-independence period, there was a spate of fresh legislation which, attempted to deal with pollution. This included the Factories Act, 1948, the Industries (Development and Regulation) Act, 1951, the River Boards Act, 1956, the Atomic Energy Act, 1962, the Insecticides Act, 1968, the Merchant Shipping (Amendment) Act, 1970, and the Radiation Protection Rules, 1971. All these Acts dealt only incidentally with pollution and proved ineffective in handling it. River pollution intensified while these Acts remained on paper. Absence was felt of a specialized institution to oversee and implement environmental protection regimes.

The Water (Prevention and Control of Pollution) Act, 1974, the culmination of over a decade-long deliberation between the Central and State Governments, provided for the establishment of Boards for the prevention and control of pollution of water. These Boards were entitled to initiate proceedings against infringements of environmental law, without waiting for affected people to launch legal actions.

The Water Cess Act, 1977 supplemented the Water Act by requiring specified industries to pay a cess on their water consumption. With the passing of the Air (Prevention and Control of Pollution) Act in 1981, the need was felt for an integrated approach to pollution control. The



## ***Institutional Capacity Building - MPCB***

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Water Pollution Control Boards were thereby authorized to deal with air pollution too and were henceforth called Central/State Pollution Control Boards.

The Bhopal gas tragedy, which occurred on 3rd December 1984, precipitated the tightening of environmental law. In 1985, the Department of Environment (DOE) was transformed into the Ministry of Environment and Forests (MoEF) with greater powers. An umbrella Act called the Environment (Protection) Act was passed in Parliament in 1986, encompassing water, air, land and other inter-relationships. The Act identified MoEF as the nodal agency for pollution control. The Environment (Protection) Rules, 1986 were subsequently notified to facilitate the exercise of the powers conferred on the Boards by the new law.

The Hazardous Wastes (Management and Handling) Rules, 1989 required any the ‘occupier’ of hazardous wastes who possessed a facility for collection, reception, treatment, transport, storage and disposal of such wastes to make an application to the SPCB for grant of authorization for any of the above activities. The Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 supplemented the Hazardous Waste Rules. The Public Liability Insurance Act was passed in 1991 to provide for public liability insurance for the purpose of giving immediate relief to persons affected by accidents occurring while handling hazardous substances. The Public Liability Insurance Rules were promulgated in 1991 and an Environment Relief Fund was created to facilitate the exercise of the powers conferred by the Act, 1991. The National Environment Tribunals Act was passed in 1995, to ensure strict liability for damages arising out of accidents occurring while handling hazardous substances and for establishing National Environment Tribunal, to ensure effective and expeditious disposal of cases arising out of such accidents with a view to provide early relief and compensation to affected persons, properties and environment. The National Environmental Appellate Authority Act, 1997, provides for an authority to hear appeals with respect to restriction of areas in which industries, operations or processes shall not be carried out.

Apart from the measures of command and control embodied in the above Acts and Rules, the Government of India has, from time to time, offered many economic incentives for units endeavouring to control pollution. The ECO-Mark scheme introduced in 1991 operates on a notional basis and provides accreditation and labeling for products that satisfy certain environmental criteria along with quality requirements of the Indian Standards Organisation.



## ***Institutional Capacity Building - MPCB***

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Other incentives include rebates offered on water cess charges to units implementing pollution control measures and meeting the standards, investment allowance on actual costs of new machinery or plants installed to reduce or control pollution, exemptions in indirect taxes, income tax, etc.

Of late, the judiciary has been taking an active interest in matters relating to environmental pollution and in ordering compensating for the ill effects of pollution on affected areas. In some states, 'Green Benches' have been created to dispose off environmental cases quickly.

### **5.2 ENVIRONMENT RELATED LAWS, RULES AND REGULATIONS**

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Government of India has enacted several laws for the protection of forests and environment and for the prevention of air and water pollution. There are also proposals to enact additional laws to deal with environmental problems more effectively. The factual position regarding the laws enacted/proposed is briefly discussed below:

#### **The Indian Forest Act, 1927**

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This Act contains various provisions for conservation of forests and also provides for the constitution of any forest lands or waste lands that are the property of the State Government as reserved forests. The Act has undergone several amendments to bring it in conformity with the forest policy of the Government.

#### **The Wildlife (Protection) Act, 1972**

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This Act provides for the protection of wild animals and birds and for all matters connected with this objective. The Act envisages, inter-alia, the appointment of a Director of Wild Life Preservation by the Central Government and a Chief Wild Life Warden by each State Government, and the constitution of a Wild Life Advisory Board. The Act also provides for notification of Sanctuaries, National Parks, Game Reserves and Closed Areas by the State Government.

#### **The Water (Prevention and Control of Pollution) Act, 1974**

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This Act provides for the prevention and control of water pollution and for the maintenance or restoration of the wholesomeness of water. The Act envisages establishment of a Central Board for the Prevention and Control of Water Pollution and also State Boards to deal effectively with



## ***Institutional Capacity Building - MPCB***

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the problem of water pollution in the country. It provides deterrent penalties for contravention of the provisions of the Act.

The Boards were renamed respectively as Central/State Pollution Control Boards by an amendment in 1988 to deal with both water and air pollution control. They were given powers to issue directions including directions for closure or stoppage of water and electricity supply to the offending establishments. The amendment also enabled citizens to file criminal complaints against offenders after giving 60 days' notice to the Board, which had to furnish all relevant information to the complainants.

### **The Water (Prevention and Control of Pollution) Cess Act, 1977**

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This law was enacted to provide for the levy and collection of a cess on water consumed by persons carrying on industries and by local authorities, with a view to augmenting the resources of the Central Pollution Control Board and the State Pollution Control Boards constituted under Water (Prevention and Control of Pollution) Act, 1974 for the prevention and control of water pollution

### **The Forest (Conservation) Act, 1980**

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The purpose of this Act is to check indiscriminate dereservation and diversion of forestland for non-forest purposes. The Act envisages constitution of an Advisory Committee by the Central Government to advise it regarding the grant of approval for proposals from the State Governments for dereservation of reserved forests and for diversion of forest land for non-forest purposes and any other matter connected with the conservation of forests.

The Act was amended in 1988 to incorporate stricter penal provisions against violators. Some of the important amendments are as follows:

(1) No State Government or other authority may issue orders directing that any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organization not owned, managed or controlled by Government without prior approval of the Central Government.

(2) No forestland or any portion thereof may be cleared of trees, which have grown naturally in that land or portion, for the purpose of using it for afforestation without prior approval of the Central Government.



### ***Institutional Capacity Building - MPCB***

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(3) The scope of the existing definition of non-forest purposes has been extended to include the cultivation of tea, coffee, spices, rubber, palms, oil bearing plants, horticultural crops and medicinal plants.

(4) The power to clear proposals relating to forest lands and their diversion for non forest purposes in respect of cases involving area of less than one hectare has been delegated to the Regional Chief Conservator of Forests. Those involving more than ten hectares of land are to be placed before the Advisory Committee.

### **The Air (Prevention and Control of Pollution) Act, 1981**

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The Act provides for the preservation of the natural resources of the earth, which among other things include the preservation of the quality of air and the control of air pollution. It empowers Central and State Boards set up for the prevention and control of water pollution under the Water (Prevention and Control of Pollution) Act, 1974 to perform similar functions in respect of the prevention, control and abatement of air pollution as well.

### **The Environment (Protection) Act, 1986**

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This is a general legislation on environmental protection which, inter-alia, should enable coordination of activities of various regulatory agencies, creation of an authority or authorities with adequate powers for environmental protection, regulation of discharge of environmental pollutants and handling of hazardous substances, speedy response in the event of accidents threatening the environment and deterrent punishment to those who endanger human environment, safety and health. The Act envisages establishment recognition of environmental laboratories and appointment/recognition of Government analysts for the purpose of analysis of samples of air, water, soil or other substances sent for analysis to any environmental laboratory established or recognized under the Act.

The Central Government under this Act has full powers to make rules and also to issue any directions/instruction for the purpose of protecting and improving the quality of the environment and for preventing, controlling and abating environmental pollution. The following rules have been issued under the provisions of the Act:

- Hazardous Waste Management Rules
- Municipal Solid Waste Management Rules



### ***Institutional Capacity Building - MPCB***

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- Bio Medical Waste Rules
- Lead Acid Battery Collection and Recycling Rules
- Fly ash Utilisation Rules
- Environmental Impact Assessment Notification
- Coastal Zone Notification and Regulation
- Chemical Accidents and Emergency Response Rules
- Recycled Plastics Rules
- Hazardous Chemicals Rules
- Noise Pollution Rules
- Ozone Depleting Substances Rules
- Genetically Engineered Organism or Cells Rules
- Notification of Dahanu as “Ecologically sensitive area”

### **The Public Liability Insurance Act, 1991**

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This law has been enacted to provide for public liability insurance for the purpose of ensuring immediate relief to the persons affected by accidents occurring while handling any hazardous substance and other related matters. The Act came into force with effect from 1 April 1991.

### **5.3 INSTITUTIONAL SET UP IN INDIA**

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The Ministry of Environment and Forests (MoEF), the apex policy making body in the field of environment, acts through the Central Pollution Control Board (CPCB) and the State Pollution Control Boards (SPCBs). The CPCB, a statutory organization, was formed in 1974 under the Water Act. As the nodal agency in pollution control, its role is to advise the Central Government on matters concerning pollution, plan and execute a nation-wide programme for prevention and control of pollution, coordinate and provide technical assistance to the State Boards, organize programmes for mass awareness, disseminate pollution - related information, lay down, modify or annul, in consultation with State Governments, standards for air and water quality and so on. The CPCB has a network of zonal offices located in New Delhi, Kolkata, Shillong, Kanpur, Bangalore and Vadodara.



### ***Institutional Capacity Building - MPCB***

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Each State Board has a two-tier administrative set-up. The first tier – comprising its Chairman, Member Secretary and other members, not exceeding 15, all nominated by the concerned State Government – generally meets once in three months unless an emergency warrants an urgent meeting. The second tier - consisting of appointed regular staff - manages the day-to-day administration of the Board under the supervision of the Member Secretary and Chairman. The sources of a State Board’s financial resources include grants-in-aid from the concerned State Government, funds received for specific projects from the Central Government, the concerned State Government and the CPCB, reimbursement of water cess charges collected by the State Board and credited to the Consolidated Fund of India, consent fee collection, sample testing fees/analysis charges, fines and forfeitures, interest on investments, other grants, etc.

Each State Board may establish regional offices and district level offices depending on areas of significant pollution stress. The Board may constitute committees consisting wholly of members or wholly of other persons or party of members and partly of other persons for specific purposes. There is a provision for Joint Boards for two or more contiguous states. The SPCBs exercise their powers principally through three instruments:

- (a) Consent to establish to potential polluting units (NOC),
- (b) Consent to operate such units, and
- (c) Implementation of environmental standards.

The main functions entrusted to the SPCBs can be categorized into

#### **a) Advisory / Policy-related**

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- To plan a comprehensive programme for prevention, control and abatement of water and air pollution in the State.
- To advise the State Government on matters concerning prevention, control or abatement of water and air pollution.
- To lay down, modify or annul effluent standards for sewage and trade effluents and for the quality of receiving waters (not being water in an interstate stream) and to classify waters of the State.





### ***Institutional Capacity Building - MPCB***

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- To develop economical and reliable methods for treatment of sewage and trade effluents for their utilization in agriculture and for their disposal on land.
- To advise the State Government in respect to the location of any industry the carrying on of which is likely to cause water and air pollution.
- To lay down, in consultation with and having regard to the standards set by the CPCB, its own standards for emission of pollutants into the atmosphere from different sources except ships and aircraft.

### **b) Administrative**

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- To inspect sewage or trade effluents and works and plants for the treatment of sewage and trade effluents.
- To grant, suspend or cancel authorizations for collection, reception, treatment, transport, storage and disposal of hazardous wastes and to allow for import of these wastes for processing and re-use as raw materials.
- To perform such other functions as may from time to time be entrusted to it by the Central Board or the State Government.
- The Board may establish or recognize a laboratory or laboratories to enable the Board to perform its functions under the Water Act, 1974 and the Air Act, 1981 efficiently.
- To lay down standards for treatment of sewage and trade effluents to be discharged into any particular stream.
- To make, vary or revoke any order for the prevention, control or abatement of discharges of wastes into streams or wells.

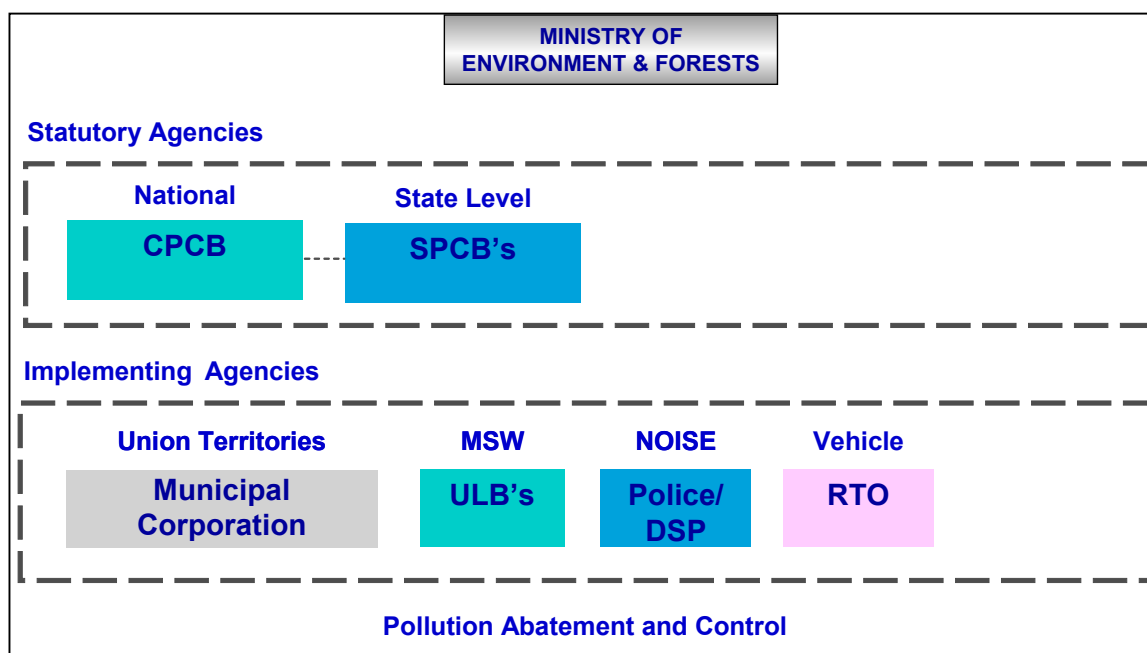
### **c) R&D, Training and Awareness**

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- To collect and disseminate information relating to water and air pollution and the prevention, control or abatement thereof.
- To encourage, conduct and participate in investigations and research on water pollution problems.

## *Institutional Capacity Building - MPCB*

- To collaborate with the Central Board in organizing the training of persons engaged or to be engaged in programmes relating to prevention, control and abatement of water and air pollution and to organize mass education programmes thereto.



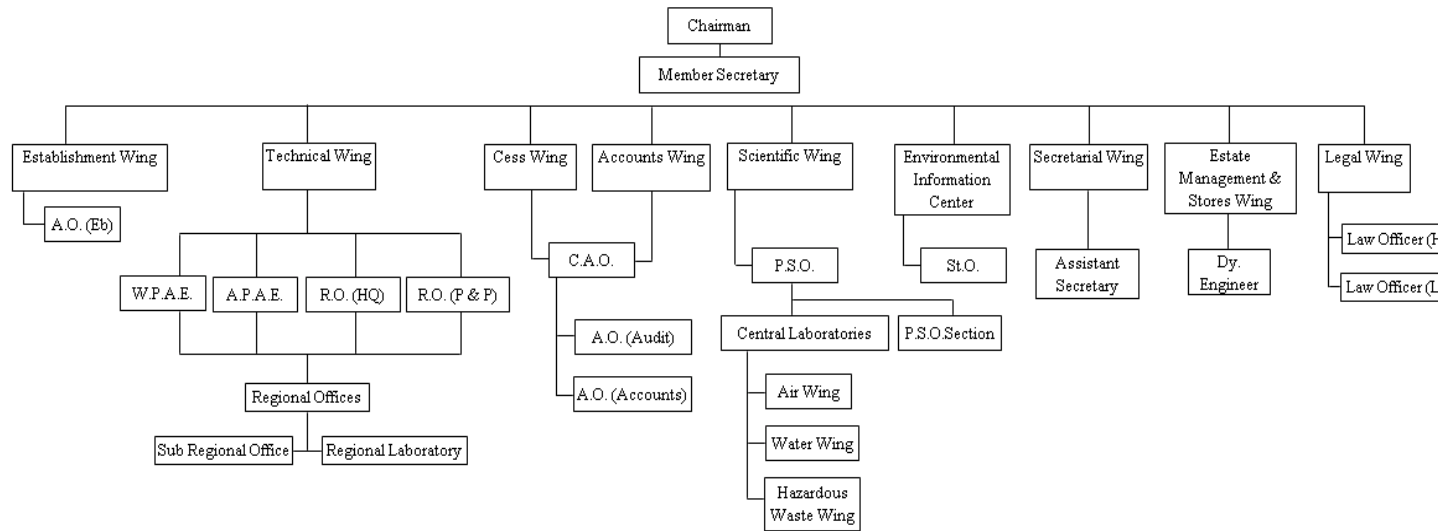
**Figure 6:** Current Institutional set up - Illustration



**5.4 CURRENT ORGANISATION STRUCTURE**

MPCB is managed by a Board, comprising a Chairman, Member Secretary, Principal Secretary from the Departments of Home, Urban Development, Environment and Public Health and other members. The structure of the organization is given below:

**Organization Structure of M.P.C.B.**



**Abbreviations Used :-**

WPAAE - Water Pollution Abatement Engineer  
 APAE - Air Pollution Abatement Engineer  
 RO (HQ) - Regional Officer (Head Quarter)  
 RO (P & P) - Regional Officer (Project & Planning)  
 St. O. - Statistical Officer

AO (EB) - Administrator Officer  
 CAO - Chief Accounts Officer  
 AO (Audit) - Accounts Officer (Audit)  
 AO (Accts.) - Accounts Officer (Accounts)  
 AO (Accts.) - Accounts Officer (Accounts)

**Figure 7: Current Organisation Structure**



## **5.5 ROLE AND FUNCTIONS OF MPCB**

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Maharashtra Pollution Control Board is the implementation agency for various environmental legislations in the State of Maharashtra. It was established in 1970 under the provisions of the Maharashtra Prevention of Water Pollution Act, 1969. During the course of its functioning, it has been entrusted responsibilities for enforcement under other Acts as well. MPCB functions under the administrative control of the Ministry of Environment & Forests.

MPCB is responsible for ensuring compliance of various laws. The principal ones being:

- The Water (Prevention and Control of Pollution) Act, 1974
- The Air (Prevention and Control of Pollution) Act, 1981
- The Water (Cess) Act, 1977

Besides being fully responsible for the above-mentioned legislations, the Board is also partly responsible for:

- Hazardous Waste Management Rules
- Municipal Solid Waste Management Rules
- Bio Medical Waste Rules
- Lead Acid Battery Collection and Recycling Rules
- Flyash Utilisation Rules
- Environmental Impact Assessment Regulation
- Coastal Zone Regulation Rules
- Chemical Accidents and Emergency Response Rules
- Recycled Plastics Rules
- Hazardous Chemicals Rules
- Noise Pollution Rules
- Ozone Depleting Substances Rules
- Genetically Engineered Organism or Cells Rules
- Notification on Dhanu as an “Ecologically sensitive area”

The role and functions of MPCB have been increasing over a period of time. However, the supporting infrastructure and manpower requirements of the organization have not been increased commensurately..

# 6 VOICE OF STAKEHOLDERS

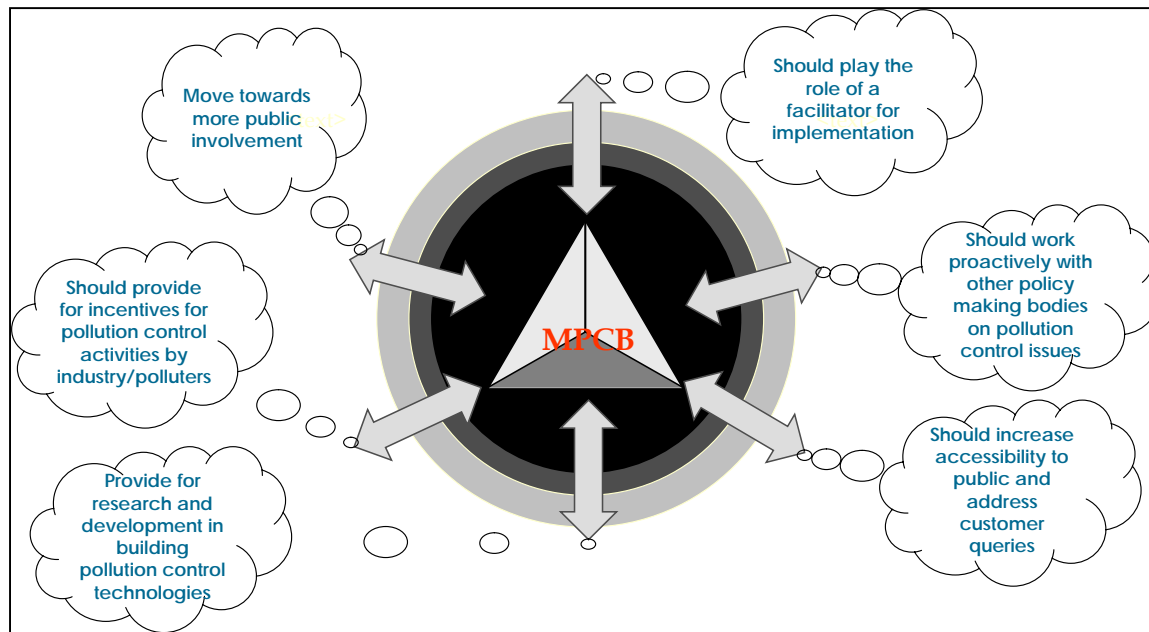


Figure 8: External stakeholders

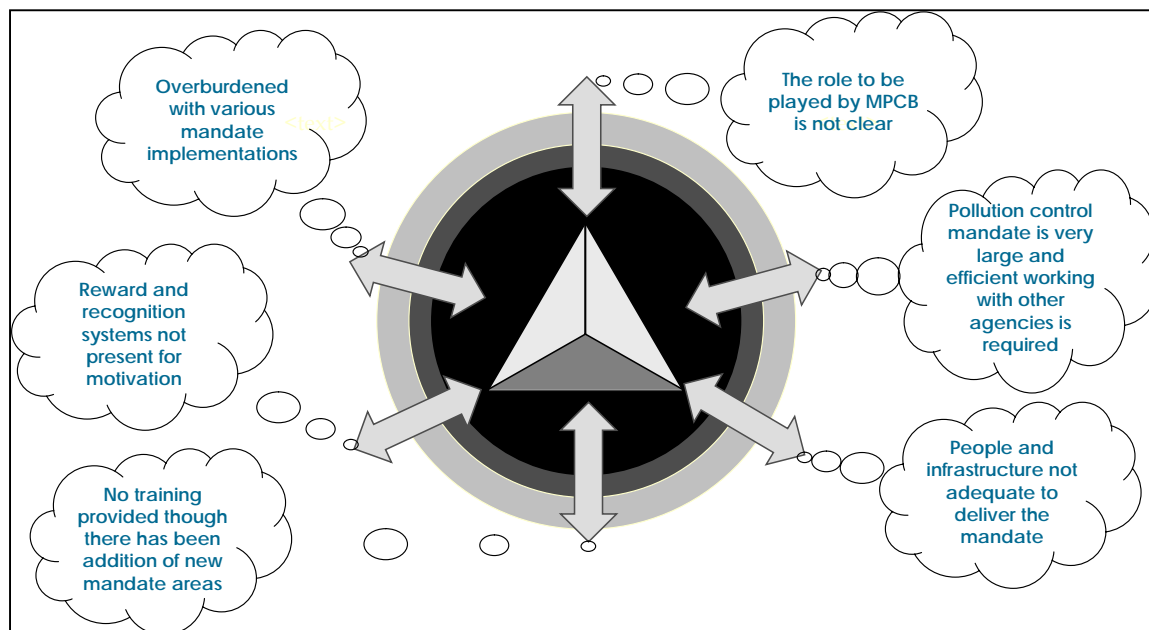


Figure 9: Internal stakeholders