

# ANNUAL ACTION PLAN (2005-2006)

*{Approved in the 133<sup>rd</sup> Board Meeting held on 24.03.2005}*



**CENTRAL POLLUTION CONTROL BOARD**  
(Ministry of Environment & Forests, Govt. of India)  
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अध्यक्ष

**Dr. V. RAJAGOPALAN, IAS**  
CHAIRMAN

## केन्द्रीय प्रदूषण नियन्त्रण बोर्ड

(भारत सरकार का संगठन)  
पर्यावरण एवं वन मंत्रालय

### Central Pollution Control Board

(A Govt. of India Organisation)  
Ministry of Environment & Forests  
Phone : 22304948 / 22307233

## FOREWORD

The Central Pollution Control Board (CPCB) is a grant-in-aid institution of Ministry of Environment and Forests. Out of the Plan Allocation of Rs. 39.00 Crores sanctioned for the year 2005-06, programmes have been formulated covering different areas relating to prevention and control of pollution. During the year, emphasis has been laid on various activities which include setting-up of Continuous Ambient Air Quality Stations (CAAQMS) in major cities and urban areas, Strengthening of National Ambient Air Quality Monitoring Stations, Strengthening of surface and ground water quality monitoring especially for pesticides and toxic metals, Initiating monitoring of Hazardous Air Pollutants (HAPs) in polluted and urban areas, Developing emission standards for HAPs, Source Apportionment Studies in 7 cities, Developing and demonstration of solid waste management technologies, Development of appropriate technology for plastics waste disposal, Performance evaluation of TSD/CETPs/CBMWF, Vehicular emission checking and fuel quality improvement programme, Implementation of Honorable Court Orders etc. Also, implementation of Hazardous Waste (Management & Handling) Rules, Municipal Solid Waste (Management & Handling) Rules, Recycled Plastics Manufacture and Usage Rules, Biomedical Waste (Management & Handling) Rules etc. will continue during 2005-06.

*V. Rajagopalan*  
(V. Rajagopalan)



डा. बी. सेनगुप्ता  
सदस्य सचिव

**Dr. B. SENGUPTA**  
Member Secretary

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### **Implementation & Performance of Annual Action Plan 2005-06**

Schemes approved for 2005-06 will be implemented by the concerned divisions at Head Office and Zonal Offices. The implementation of action will be regularly monitored by Member Secretary, CPCB, Dr. A.B. Akolkar, Additional Director and Dr. S.K. Nigam, Scientist "C" of PCP alongwith financial monitoring by the concerned Account Officer.

**Divisions and Zonal Officers (ZOs) are also required to note following points:**

1. Divisions/ZOs should forward one **Para** write-up alongwith quarterly targets for each scheme to PCP Division.
2. Divisions/ZOs may forward **Quarterly Progress Report** (Physical & Financial) at the end of each quarter to PCP Division.
3. Divisions/ZOs should seek **Administrative Approvals** of each scheme on or before **30.06.2005**. Divisions/ZOs should attach **Quarterly Targets** of each scheme alongwith Administrative Approvals.
4. Divisions/ZOs are required to communicate additions/deletions of any scheme to PCP Division for further approval of Competent Authority.

**(Dr. B.Sengupta)**  
Member Secretary

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## **1.0 INTRODUCTION**

Central Pollution Control Board (CPCB) is body under the aegis of the Ministry of Environment and Forests (MoEF), Govt. of India set up in September, 1974, under the provisions of the Water (Prevention & control of Pollution) Act, 1974. CPCB serves as a technical wing of MoEF and coordinates with the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) for Implementation of plans and programmes relating to pollution control. MoEF provides grant to CPCB for Plan and Non-Plan expenditures. CPCB undertakes the project and programs through in-house efforts and also with the assistance of different Research Institutions.

The Central Pollution Control Board has been playing key role in controlling pollution by generating relevant data, providing scientific information, rendering technical inputs for formation of national policies and programmes, training and development of manpower, through activities for promoting awareness at different levels of the Government and Public at large. CPCB, in addition to the implementation of Water and Air Act, has planned various programmes relating to implementation of rules framed under the Environment Protection Act such as Hazardous Wastes (Management and Handling) Rules, Bio-medical waste, Municipal Solid Wastes and Plastics Waste.

The plans and programmes for 2005-06 are prepared based on the thrust areas identified by the Ministry of Environment and Forests and as per decisions taken in the Chairmen and Member Secretaries Conferences of State Pollution Control Boards and Pollution Control Committees.

## **2.0 FUNCTIONS OF CPCB**

The functions of CPCB are specified under Section (16) of the Water (Prevention and Control of Pollution) Act, 1974 and under the Air (Prevention and Control of Pollution) Act, 1981. CPCB is also co-ordinating important activities under the Water (Prevention and Control of Pollution) Cess Act, 1977 and various functions as delegated upon under the Environment (Protection) Act, 1986 and Rules made hereunder. The important rules relate to; Hazardous Wastes (Management and Handling) Rules, 1989; Manufacture, Storage and Import of Hazardous Chemical Rules 1989; Bio-medical waste (Management and Handling) Rules, 1998, Recycled Plastics Manufacture and Usage Rules, 1999 and the Municipal Solid Wastes (Management and Handling) Rules, 2000.

CPCB has been associated and efforts are put into the various Committees and Authorities constituted by the Govt. 'Environment Pollution (Prevention and control) Authority' constituted for National Capital Region is one of such Committee in which CPCB has been providing significant inputs.

**2.1** Functions of Central Board (CPCB) as specified under Section 16(2) of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 are as below:

- (i) Advise the Central Govt. on any matter concerning prevention and control of water and air pollution and improvement of the quality of air;
- (ii) Plan and cause to be executed a nation-wide programme for the prevention and control or abatement of water and air pollution;
- (iii) Co-ordinate the activities of the SPCBs and resolve disputes among them;
- (iv) Provide technical assistance and guidance to State Boards; carry out and sponsor investigation and research relating to problems of water and air pollution and for their prevention, control or abatement;
- (v) Plan and organise training of persons engaged in programmes on prevention, control or abatement of water and air pollution;
- (vi) Organise through mass media, a comprehensive mass awareness programme on prevention, control or abatement of water and air pollution;
- (vii) Collect, compile and publish technical and statistical data relating to water and air pollution and measures derived for their effective prevention, control or abatement;
- (viii) Prepare manuals, codes and guidelines relating to treatment and pollution and their prevention and control;
- (ix) Lay down, modify or annul, in consultation with State Governments. concerned, the standards for stream or well, and lay down standards for the quality of air ; and
- (x) Perform such other functions as and when prescribed by the Govt. of India.

### **3.0 ACTIVITIES AND ACHIEVEMENTS OF 2004-05**

#### **National Air Quality Monitoring Programme ( NAMP)**

- Central Pollution Control Board initiated National Ambient Air Quality Monitoring (NAAQM) programme in the year 1984 with 7 stations at Agra and Anpara. Subsequently the programme was renamed as National Air Monitoring Programme (N.A.M.P.). The number of monitoring stations under N.A.M.P. has increased, steadily, to 313 by 2004-05 covering 113 cities/towns in 28 States and 4 Union Territories of the country.

- Under N.A.M.P., four air pollutants viz., Sulphur Dioxide (SO<sub>2</sub>), Oxides of Nitrogen as NO<sub>2</sub> and Suspended Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM/PM<sub>10</sub>), have been identified for regular monitoring at all the locations. Besides this, additional parameters such as Respirable Lead and other toxic trace metals, Hydrogen Sulphide (H<sub>2</sub>S), Ammonia (NH<sub>3</sub>) and Polycyclic Aromatic Hydrocarbons (PAHs) are also being monitored at selected locations
- Epidemiological Study has been carried out to find the Effect of Air Pollutants especially Respirable Suspended Particulate Matter (RSPM) and other carcinogens on Human Health. The study is being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata and is sponsored by CPCB.
- A study has been carried out on Health effects of air pollution on Children in Delhi. The study is being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata. The duration of the study is two years. The objective of the study is

#### **National Water Quality Monitoring Programme :**

- Central Pollution Control Board in collaboration with State Pollution Control Boards has established a network comprising of 870 stations (Fig. 1) in 26 States and 5 Union Territories spread over the country. The monitoring is done on monthly or quarterly basis in surface waters and on half yearly basis in case of ground water. The monitoring network covers 168 Rivers, 53 Lakes, 5 Tanks, 2 Ponds, 3 Creeks, 3 Canals, 12 Drains and 181 Wells.
- The water quality data on rivers, lakes, ponds, tanks and groundwater locations being monitored under the NWMP network for 2002 and 2003 is evaluated against the water quality criteria and the monitoring locations in exceedence with respect to one or more parameters are identified as polluted and require action for restoration of water quality
- Domestic sewage is the major source of pollution in India in surface water which contribute pathogens, the main source of water borne diseases along with depletion of oxygen in water bodies. There are 423 class I cities and 498 class II towns harboring population of 22.2 Crores generate about 26254 mld of wastewater of which only 7044 mld is treated

#### **Water Quality Assessment Authority**

The Water Quality Assessment Authority (WQAA) has constituted a Task Force in exercise of powers conferred by sub-section (1) and (3) of Section 3 of the Environment (Protection) Act, 1986 on 9<sup>th</sup> September 2003 under the Chairmanship of Chairman, Central Pollution Control Board, to recommend

measure for optimum Water Quality Observation Network and coordinated data collection and dissemination system to assist the Water Quality Assessment Authority

## **Ambient Air Quality in Delhi**

### *Sulphur dioxide*

With the reduction of sulphur content in diesel, the sulphur dioxide concentrations have shown a declining trend at most of the locations in Delhi. Sulphur dioxide in residential areas during 2004 has shown no change with respect to 2003 ( $10 \mu\text{g}/\text{m}^3$ ), the change observed at BSZ Marg traffic intersection was also found to be insignificant.

### *Nitrogen dioxide*

Nitrogen dioxide is showing an upward trend since 2001. During 2004, it increased in residential area ( $40 \mu\text{g}/\text{m}^3$ ) and industrial area ( $42 \mu\text{g}/\text{m}^3$ ) by 5 and 17 percent respectively, while in traffic intersection ( $89 \mu\text{g}/\text{m}^3$ ) it decreased by 5 percent in comparison to 2003.

### *Suspended Particulate Matter*

Annual average SPM concentration during 2004 registered a decrease of approximately 4 and 2 percent respectively in industrial areas ( $339 \mu\text{g}/\text{m}^3$ ) and traffic intersection ( $500 \mu\text{g}/\text{m}^3$ ). SPM concentration at residential areas ( $330 \mu\text{g}/\text{m}^3$ ) registered an increase of 5 percent.

### *Respirable Suspended Particulate Matter*

RSPM recorded  $135 \mu\text{g}/\text{m}^3$  in industrial areas and  $228 \mu\text{g}/\text{m}^3$  in traffic intersection during 2004. These are 4 and 7 percent respectively lower than the values recorded in 2003. RSPM at residential areas ( $131 \mu\text{g}/\text{m}^3$ ) registered an increasing trend of only 3 percent.

### *Carbon monoxide*

CO levels measured at BSZ traffic intersection during 2004 was found to be  $2581 \mu\text{g}/\text{m}^3$  as against  $2831 \mu\text{g}/\text{m}^3$  recorded in 2003, thus indicating a decline of 9 percent.

## **Ambient Air Quality During Deepawali**

- Ambient air quality is being measured during Deepawali days for the past many years. During Deepawali days, the air quality deteriorates alarmingly due to the bursting of crackers. In order of assess the air pollution caused due

to bursting of crackers, ambient air quality was measured at selected locations in Delhi during 2004

- Except for sulphur dioxide, the levels of all other pollutants at almost all the locations exceeded the air quality standards. RSPM and SPM levels during 2004 at all were found to be higher than that recorded during 2003. Gaseous pollutants namely Nitrogen dioxide and Sulphur dioxide recorded mixed trend in 2004 as compared to 2003

### **On-line volatile organic compounds (vocs) monitoring in the ambient air of Delhi (2004)**

Central Pollution Control Board is regularly monitoring volatile organic compounds (VOC's) in the ambient air at Sirfort using continuous Analyzer. Sirfort monitoring station is located in the premises of electric sub station. The surrounding area is flat plateau with dense residential localities, commercial establishments and a famous sports complex

### **Health Studies of Landfill Site Staff**

A study was instituted by CPCB on assessment of health status of conservancy staff and other community associated with handling of solid waste management. The study was taken-up at Kolkata through Chittaranjan Cancer Research Institute and at Chennai with the assistance of Sri.Ramchandra Medical College. The objective of the study is to assess health status of each target group involved in handling of municipal solid waste (MSW).

### **Methane Emissions from Landfill sites**

Improper disposal of waste through landfilling may cause several environmental problems. Amongst such, emission of gaseous decomposition products as well as organic compounds may also affect the health of surrounding population. It is becoming essential to monitor landfill gaseous emissions (LFG) to observe the status of LFG emission for establishing appropriate analytical methodology and evolve strategy for their control. CPCB through NEERI, Nagpur and IARI, Delhi took-up a study on assessing levels of methane generation from landfill sites located at Delhi and Nagpur

### **Status of Solid Waste Management**

CPCB through NEERI, Nagpur has initiated a comprehensive survey for assessing status of solid waste management in the country. The survey includes following objectives;

- Assessment of quantity of wastes
- Assessment of characteristics of wastes

- Assessment of existing status of collection, storage, transportation, treatment and disposal activities.
- Studies on financial and institutional aspects
- Review of the situation in the perspective of existing legislation

### **Recycling of Plastics through Environmentally Sound Process**

Jadavpur University, Kolkata in collaboration with CPCB, Delhi has re-engineered a process for plastics recycling. The existing extrusion process are not considered to be environmentally sound as they cause noise and fugitive emissions. The machine developed and tested by the Department of Mechanical Engineering, Jadavpur University, Kolkata is equipped with pollution monitoring and control device and has been tested for fugitive emissions, which were found far less.

### **Experimental Studies on Utilisation of Plastics in Road Construction**

Studies have been carried out at Dept. of Chemistry, Thiagarajar on this line and it has been observed that polymer coated aggregate with Bitumen is a better material for road construction in terms of strength and resistance to rain water. In addition, by this process, the plastic waste finds a very useful disposal technique and a new technology can come into existence.

### **Environmental Standards, Stack Height Regulations and Siting Criteria for Refractory Industry**

The study entitled 'Environmental Standards For Refractory Industry Including Pollution Control/ Prevention Technologies' has been completed by the Central Pollution Control Board with the help of the National Council for Cement & Building Materials (NCCBM), New Delhi. Environmental (emission, effluent and solid waste) Standards and Stack Height Regulation

### **Creation of Environmental Data Bank**

Environmental Data Bank (EDB) has been established. The EDB software is installed in internet and will be, subsequently, used for building up the database on various environmental components. Databank facilitates on-line entry and access of data on various environmental parameters. Receiving data for Air Quality and Water Quality module, subsequently, data entry for other modules (Coastal Water Quality, Industrial Pollution, Cleaner Technology, Hazardous Waste Management, Urban Solid Waste, Urban Pollution and Environment Experts/Consultants) will be initiated.

#### 4.0 THRUST AREAS/SALIENT FEATURES OF THE ANNUAL ACTION PLAN

- Monitoring of National Ambient Air Quality Monitoring Programme (NAMP)
- Strengthening of NAMP
- Strengthening with respect to number of Stations; and Strengthening with respect to additional pollutants monitoring
- Continuation of National Water Quality Monitoring Programme (NWMP)
- Study of Ground Water Pollution
- Assessment of non-point sources of pollution
- Epidemiological study
- Preparation of Environmental Status Report
- Development and demonstration of appropriate liquid and solid waste Management technologies for semi-urban area
- Laboratory Management and Research & Development Activities for prevention and control of pollution
- Development and Review of Effluent/Emission Standards and Guidelines;
- Environmental Information and Management System
- Pollution Control Implementation in major polluting industries, Implementation of Municipal Solid Waste (Management & Handling) Rules, Recycled Plastics Manufacture and Usage Rules, Biomedical Waste (Management & Handling) Rules, Vehicular and Noise Pollution Control etc.
- Cleaner Production and Environmental Auditing and Common Effluent Treatment Plants (CETPs)
- Implementation of Hazardous (Management & Handling) Rules
- Spatial Environmental planning and Natural Resource Protection
- Preparation and updating of Zoning Atlas

## 5.0 SCHEMES OF ANNUAL ACTION PLAN 2005-06

Sr. No.	PROJECT HEADS	Allocation (Rs. in lakh)		
		Head office	Zonal offices	Total
I	Pollution Assessment – Survey & Monitoring	477.0	89.75	566.75
II	(a) Laboratory Management (Operation and Maintenance and R&D) (b) Setting-up of Continuous Ambient Air Quality Monitoring stations in Major Cities	1728.0	206.66	1934.66
III	Development of Standards and Guidelines	198.329	4.5	202.829
IV	Training	77.00	5.1	82.1
VA	Information (Database) Management	43.05	11.5	54.55
VB	Library	21.2	3.5	24.7
VI	Pollution Control Enforcement	580.831	208.95	789.781
VII	Pollution Control Technology	83.83	-	83.83
VIII	Mass Awareness, Publications & NGO Activities	79.00	2.8	81.8
IX	Hazardous Waste Management	75.00	4.0	79.0
	<b>TOTAL</b>	<b>3363.24</b>	<b>536.76</b>	<b>3900.00</b>

## 6.0 PLANS & PROGRAMMES OF HEAD OFFICE 2005-06 (SCHEME-WISE ALLOCATION)

### 6.1 Pollution Assessment Survey & Monitoring (PAMS) (Project-I)

(Rs. in lacs)			
S. No	Schemes	Total cost of Project	Allocation for 2005-06
1.	National Water Quality Monitoring Programme (NWQMP) including implementation of findings of review of network (on-going). Monitoring of water quality with respect to pesticides and heavy metals.	200	80.00 (RE-120.0)
2.	National Air Quality Monitoring Programme (NAMP) including inclusion of toxic and critical pollutants monitoring in urban areas and critically polluted areas (on going)	350	150.00 (RE-200.0)
3.	Development of methodology for assessment of diffused pollution (on going)	-	5.0
4.	Court matters (on going)	-	1.0
5.	Assessment of ground water quality in five metro cities of India (on going)	-	10.0
6.	Epidemiological study to find the effect of air pollution on human health (on going)	-	4.0
7.	Calibration & Evaluation of National Ambient Air Quality Monitoring Stations	-	25.0
8.	Ambient Air Quality; Respiratory Symptoms and Lung function of Children: A study in Delhi	-	2.0
9.	Review of National Air Quality Monitoring Programme (NAMP)	-	2.0
10	Microbiological quality standards for STPs	-	15.0
11	Indian Meteorological Department (IMD)-Operation & Maintenance of meteorological station at Agra.	-	22.0
12	Development of software for data management under NAMP & NWMP	-	5.00
13	Investigation of Soil & Water Contamination vis-à-vis Landuse of changes near mining fields of Tinsukla District, Assam using Remote Sensing and GIS.	-	2.00
14	Strengthening of NAMP as per autofuel policy a) Introduction of PM 2.5 in Major cities b) Augmentation of monitoring stations	-	50.00 25.00
15	Evaluation of various tertiary sewage technologies for coliform removal	-	2.00
16	Health Studies in affected areas by sewage contamination	-	10.00
17	Source apportionment of Particulate matter in ambient air of Delhi	-	10.00
18	Inventorisation of air polluting sources in 16 cities	-	32.00
19	Decentralize low cost sewage demonstration scheme	-	10.00
20	Water Quality Survey of Lakes in India	-	15.00
	<b>TOTAL</b>		477.00

## 6.2 Laboratory Management and R&D (Project-II)

S. No.	Schemes	(Rs. in lacs)	
		Total cost of Project	Allocation for 2005-06
<b>AIR LABORATORY</b>			
1	Operation and maintenance of continuous of air quality monitoring stations in Delhi including BTX	-	20.00
2.	Quality assurance in air quality measurements	-	1.50
3.	Polynuclear aromatic hydro-carbon: sampling and analysis in Delhi	-	2.00
4.	Standardization of methodology for sampling (action and passive) and analysis of Benzene using GC-MS ATDGC & GC_FID, GC_MS, GC_ATD,GC_FID	-	2.50
5.	Assessment of noise level in Delhi	-	0.50
6.	Monitoring of benzene in Delhi and Kanpur/ Lucknow (Passive sampling method)	-	3.00
7.	Inspection of Authorized Pollution checking centers in Delhi	-	0.50
8.	Air quality assessment in different areas including traffic intersections in Delhi	-	2.00
9.	Studies on spatial and temporal distribution of ambient Ozone in Delhi	-	0.50
10	Development and strengthening of monitoring of ambient PM <sub>2.5</sub> at Delhi	-	5.00
11	NPL Research Projects on FOG formation mechanism as early warning system	-	-
12	Manual monitoring of ambient air quality in 5 Zonal Offices and ( each one location) and HO for reporting in television.	-	5.00
13	Development of certified reference material (CRM) of air mixture.	-	5.00
14	Rain water characterization in Delhi	-	0.50
15	Operation and maintenance of SODAR system and weather station	-	1.00
16	Fabrication of new mobile van with the facilities for the Measurement of SO <sub>2</sub> , CO, O <sub>3</sub> , PM <sub>10</sub> and NO-NO <sub>2</sub> -Nox including meteorological parameters.	90.00	- (RE-90.0)
17	Characterization of particulate matter and source identification	-	2.00
18	Standardization of source emission methods including CS <sub>2</sub> & H <sub>2</sub> S	-	1.00
19	Standardization of method for measurement of Hydrocarbon in source emission <b>(New)</b>	-	3.00
20	Purchase of new Gypsy for field activity in air lab (replacement of old vehicle)	-	4.50
	Sub total	-	59.50

(Rs. in lacs)

S.N.	Schemes	Total cost of Project	Allocation for 2005-06
	<b>WATER LABORATORY</b>		
21.	Analytical quality control (AQC/ Water) for Central and State Pollution Control Boards, Pollution Control Committees & for laboratories recognized under E.P.Act.	-	2.50
22.	Development & standardization of soil and solid waste analysis for Analytical Quality Control.	-	1.00
23.	A comparative studies on Methodology of Analysis and Characterization of Hazardous Wastes	-	0.50
24.	Sludge reagent product (SRP) – an innovative process for water and waste water treatment- flocculation study and setting up of pilot plant at Bhagirathi water works-Delhi	-	22.00
25.	Development and Distribution Water Testing kits (WTK)	-	2.00
26.	Evaluation of Environmental Awareness among students community in Delhi <b>(New)</b>	-	2.00
	Sub total:	-	30.00
	<b>BIO-SCIENCE LABORATORY</b>		
27.	Bio monitoring of rivers/ lakes for assessment of water quality	-	0.50
28.	Bio monitoring of River Ganga and its tributaries	-	0.50
29.	Water quality assessment through bio monitoring of major wetlands in Wild life habitats of India	-	2.00
30.	Water Quality Monitoring of River Yamuna sponsored by NRCD, MoEF	-	NRCD
31.	Performance study of sewage treatment plants in Delhi & Haryana under Yamuna Action Plan	-	NRCD
32.	Performance Monitoring of Oxidation Pond based Sewage Treatment Plants in U.P, under Yamuna Action Plan	-	NRCD
33.	Bio-monitoring of Surface Water Bodies on Major Dams used for Hydro Electric Power Generation in India	-	2.00
	Sub total:	-	5.00
	<b>TREATABILITY LABORATORY</b>		
34.	Enzymatic removal of trace aromatic compounds from Drinking water by immobilized Peroxidases	-	2.00
35.	Removal of toxicity from Industrial wastewater using selective chemical treatment methods (Ozone, Hydrogen peroxide, Fenton reagent etc.)	-	1.50
36.	Production of ethyl alcohol/ single-cell protein from organic wastes <b>(New)</b>	-	2.00
	Sub total	-	5.50

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
	<b>INSTRUMENTATION LABORATORY</b>		
37.	Standardization of methodology for measurement of certain hazardous organic compounds (PCBs)	-	2.00
38	Development and standardization of methodology for measurement of Trihalomethanes (THMs) in drinking water	-	0.50
39.	Geo-accumulation and Bio-accumulation of Heavy metals and pesticides on solid and crop vegetation during waste water irrigation	-	0.50
40.	Development of infrastructure facilities for measurement of Hazardous Organic Compound- Dioxin/Furan	-	30.00
41.	Establishment of Methodology for Extractable Organic Halides (EOX) in Soil and Sludge (New)	-	1.00
42.	Determination of Poly-aromatic Hydrocarbons (PAH's) in Surface Water in Delhi Stretch of Yamuna River (New)	-	0.50
43.	Determination of Volatile Organic Carbon (VOC's) in Drinking Water by GC-MS (procurement of purge & trap attachment of GC-MS (New)	-	1.00
44.	Risk Assessment of Pesticide Residues in Humans with Special Reference to Adverse Reproductive Outcomes in Delhi Population (collaborative project with UCMS & GTB Hospital) (New)	-	2.50
	Sub total:	-	38.00
	<b>INFRASTRUCTURE-LABORATORIES: GENERAL</b>		
45.	NABL- Laboratory Accreditation activities	-	3.00
46.	Participation of Proficiency Testing (PT) programme for various physic-chemical and biological parameters.	-	2.00
47.	Implementation of Laboratory Information System (LIMS) and procurement of computers	-	13.00
48.	Up gradation of laboratories	-	30.00
49.	Procurement of instruments, equipment and spare parts for various labs of Central Pollution Control Board	200.0	100.00 (RE-100.0)
50.	Maintenance of laboratories (electricity, water, telephone, fax, repair & services etc.)	-	30.00
51.	Service activities for Indo- GTZ projects, etc.	-	1.00
52.	Recognition of laboratories under Environment Protection Act.	-	1.00
	Sub total		180.00

(Rs. in lacs)

S.N.	Schemes	Total cost of Project	Allocation for 2005-06
	<b>Continuous Ambient air quality Monitoring (CAAQM)</b>		
53.	Setting of continuous Ambient air Quality Monitoring Stations in Major cities on the basis of B.O.O./B.O.T	500.0 0	500.00
54.	Setting up of sixteen continuous Ambient Air Quality Monitoring station in 16 cities as per direction of Hon'ble Supreme Court (Release of funds of SPCB's)- 8 stations.	-	320.00
55.	Networking of CAAQM in 10 cities	10.00	10.00
56.	Networking of CAAQM maintained by industries	50.00	50.00
57.	Japanes Debt Relief Grant Assistance Project for import of equipment; (Instrument/equipment required for Toxic Pollutants Monitoring)	-	530.00
	Sub total		1410.00
	<b>Grand total</b>		<b>1728.00</b>

6.3 Name of the Division: PCI-I (Project III,VI,VII,IX)

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
<b>Budget Head III-Development of Standards &amp; Guidelines</b>			
1.	Finalisation of emission standards for oil refinery	-	0.25
2.	Development of emission Standards for fertilizer industries	-	2.25
3.	Review of emission & effluent standards & solid waste management practices for dyes & dye intermediate industries	-	3.00
4.	Review of ambient air quality standards (IIT Kanpur)	-	9.00
5.	Guidelines for vapor recovery systems at gasoline filling stations	-	10.00
6.	Preparation of COINDS for Cashew Seed	8.00	2.00
7.	Preparation of COINDS for Dall & Besan (NPC)	12.40	1.00
8.	COINDS for Producer Gas Plant	13.00	3.00
9.	Service station & workshop	8.50	5.30
10.	Arc & Induction furnace (COINDS document)-NPC	16.25	11.75
11.	Improve upon the Awas and design of Vertical Bhatti & Earthenware's	6.00	-
12.	Material Safety Data Sheet	-	-
13.	Preparation of COINDS document & revision of status on pesticides industry (in house)	5.00	5.00
14.	Preparation of COINDS document on waste water management in Bulk Drug industries Development of National Emission standards for Bulk Drug Industries	15.00	6.00
15.	Preparation of COINDS on soaps & Detergents	12.00	2.30
16.	Preparation of COINDS on Plaster of Paris	12.5	2.50
17.	Environmental Standards for Bullion Industry	-	2.449
18.	Environmental Standards for paints, varnishes lacquers and enamel industry	10.0	7.00
19.	Vulcanization and retreading used tyres and tubes	5.00	3.00
20.	Basic Organic Chemical Industry (Review of effluent standards & development of emission standards)	10.00	4.00
21.	Chemical Waste incinerator (Standard and guidelines development-NPC)	30.00	25.00
22.	To develop Environmental Standards (Air, Water & Noise) and good practices for Plywood and seasoning industry (New)	-	5.00
23.	Comprehensive Industry Document: Development of Emission Standards and Good Practices for re-rolling mills (New)	-	5.00
24.	Development of comprehensive Industrial Document (COINDS) on X ray Machines & Photographic Labs: Environmental Standards for Effluent Emission (New)	-	5.00
	Sub - total		119.799

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
	<b>Budget Head VI Pollution Control Enforcement</b>		
01.	Status and prospects of natural dyes in India	-	0.65
02.	Performance evaluation study of air quality models	-	3.00
03.	Preparation of manuals for conducting air quality modeling studies	-	0.10
04.	Monitoring of Ground Water Soil quality near old petrol pumps and formulating guidelines for under ground storage tanks	-	10.00
05.	CREP Implementation (Oil refinery and Petro-chemicals)	-	0.50
06.	CREP for Dyes	-	2.00
07.	Preparing a National Profile to Assess the National infrastructure for Management of Chemicals	CIDA funded Project	
08.	Implementation of CREP Recommendations in case of Chlor-alkali & Fertilizer Sectors	-	2.00
09.	CREP Implementation for Tannery Sector	-	2.0
	Sub-total:		20.25
	<b>Budget Head VII Pollution Control Technology</b>		
01.	Review on control technologies and preparation of guidelines for reduction of SO <sub>2</sub> emission in sulphuric acid plants	-	0.25
02.	Implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Chemical Industries in India	3.00	3.00
03.	Organizing Training programme for the officers of Central & State Pollution Control Boards on Hazard Identification and Risk Assessment due to isolated storages	2.00	2.00
04.	Control of offensive odour substances with specific reference to selected industrial process	6.4	4.00
05.	Development of Technologies for Pollution Control in Selected Drugs Manufacturing Units-Paracetamol-a case study	5.5	1.5
06.	Study on Environmental Contamination with polychlorinated dioxins Viz. TCDDs	20.1	4.98
07.	Review on control technologies and preparation of guidelines for reduction of SO <sub>2</sub> emission in sulphuric acid plants	-	0.25
08.	Removal of suspended impurities in the Saline Water Stream to Obtain Better Salt in the Solar Evaporation Pans (Nov. 2002)	7.00	2.00
09.	Establishment of Common Chrome Recovery Unit (CCRU) at Kanpur	5.00	1.00
10.	Performance Evaluation of Brick Kiln	16.50	6.00
11.	Evaluation & Improvement in design of clamp kilns for brick manufacturing (Good Practices, Practicable Energy Conservation Measures and Environmental Standards thereof (New)	-	-
	Sub-total:		24.98

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
<b>Budget Head IX Hazardous Waste Management</b>			
1.	Identification of Hazardous Waste streams in paint sector, their characterization and waste minimization option	11.00	6.00
2.	Identification of Hazardous Waste Streams, their Characterization in selected small scale sectors (Textile, Dyeing, Hardening of Steel through PPCB)	4.5	0.45
3.	Identification of hazardous waste streams their characterization and waste minimization options in Iron steel, Aluminium, Sodium dichromate and Galvanizing Sector	4.5	0.45
4.	Sector specific documentation to identify waste streams in various sectors/ processes as per Hazardous Waste (M &H) Amendment Rules 2003 * Pesticides & Solvent manufacturing sectors	8.00	17.62
5.	Review of effluent standards for Soda Ash industry	14.00	4.00
	Sub-total:		28.52
<b>MoEF Project</b>			
1.	Development of National Standards for Rubber Products Manufacturing Industries	3.70	1.48
	Sub-total:		1.48
	<b>Grand Total:</b>		<b>195.029</b>

#### 6.4 Information (Database) Management (Computer) (Project V-A)

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
<b>01.</b>	<b>Preparation of Water &amp; Air Quality Reports and procurement of Software</b>		
(a)	Antivirus	-	0.75
(b)	Non Computer Stationery	-	0.50
(c)	MS-Office 50 x 14000	-	7.00
(d)	Data recording software	-	0.05
(e)	Procurement of DVD Writer & Acrobat Writer	-	0.30
	Sub-total:		8.60
<b>02.</b>	<b>Operation &amp; Maintenance of Computer Hardware &amp; Peripherals</b>		
(a)	AMC of LAN, Printer, Server, Nodes, UPS	-	5.00
(b)	Computer Stationery	-	0.50
(c)	AMC of Acs	-	0.30
	Sub total:		5.80
<b>03.</b>	<b>Information/Data transmission &amp; retrieval through Computer Network</b>		
(a)	Salary of D.E.O.	-	1.30
(b)	Payment for Network connectivity	-	6.00
	Sub total:		7.30
<b>04.</b>	<b>Strengthening of Network</b>		
(a)	Procurement of Mail Server, Switches, Software for monitoring auditing etc. for smooth functioning	-	7.50
(b)	Training of RDBMS	-	1.50
	Sub total:		9.00
<b>05.</b>	Library Automation	-	0.60
<b>06.</b>	Implementation of LIMS	-	-
<b>07.</b>	MIS support to SPCBs	-	-
<b>08.</b>	Development of an integrated software for creating Environmental Data Bank (EDB)	7.00	7.00
<b>09.</b>	Web site maintenance and updating	0.75	0.75
<b>10.</b>	On-line access of emission data from Oil Refineries & Thermal Power Plants	3.00	3.00
<b>11.</b>	Computerization of activities of Material Section and HR Division	1.00	1.00
	<b>Grand Total:</b>		<b>43.05</b>

6.5 PCI-II (Project- III, VI,VII)

(Rs. in lacs)

S. No.	Scheme	Total cost of Project	Allocation for 2005-06
<b>Project Head-III</b>			
25.	COINDS for Thermal Power Plants	-	2.40
26	Development of SO <sub>2</sub> & Nox emission standards for coal fired thermal plants	-	2.00
27	Monitoring of Human Risk Assessment Studies in Asbestos Based Industries in India	-	2.5
28	Assessment of Fugitive Emissions and Development of Environmental Guidelines for Control of Fugitive Emissions in Cement Manufacturing Industries IIT+NPC	-	9.0
29	Review of Notified Standard and Development of Clean Technology for BOD Plant of Steel Industry (New)	-	5.00
30	Guidelines for pollution prevention for Asbestos (Chrysotile) mining including clean mining practices (New)	-	3.00
31	Development of Environmental Standards and Guidelines for Pollution Prevention for Non-recovery Type Coke Oven Plants (New)	-	5.0
32	Revision of Environmental Standards for Bee-hive Coke Oven Plants, Soft Coke Plants and Coal Briquette Industry (New)	-	5.0
33	Development of COINDS on primary Copper, Lead & Zinc Industries (New)	-	5.00
<b>Sub-total:</b>			<b>38.90</b>
<b>Project Head-VI</b>			
10.	Expert committee on emissions from RIC engines for OFF-road applications	-	1.00
11.	National Committee on Noise Pollution Control	-	1.00
12	Compliance inspection of genset/engine manufacturing facilities	-	2.00
13	Compliance testing of fire crackers (including development of testing facilities)	-	5.00
14.	Implementation of Standards in TPPs, Iron & Steel, Cement, Aluminium, Pb,Zn & Copper Smelters etc. including inspection/visits, stationary including Computer stationary such as floppy, CDs, Software's etc., telephone, transport and salaries of DEO & JRFs ( to be appointed)	-	7.00
15.	Strengthening of facilities for Monitoring of Asbestos fiber including purchasing Optical Microscope & Monitoring kit etc. (New)	-	20.00
16	Preparation of Manual for Monitoring & Analysis of Furan, Dioxin, PAH etc. and imparting training to industrial managers (New)	-	4.00
17.	Source apportionment study for Asbestos in Ambient Air (New)	-	5.00
18.	Expert Committee on Odour pollution Control inclusive of procurement of one computer and printer (New)	-	2.00
19.	Ambient Noise Monitoring in Delhi	-	0.50

(Rs. in lacs)

S. No	Scheme	Total cost of Project	Allocation for 2005-06
20.	Revision of Compliance Procedure for Noise Limits for Petrol/ Kerosene Generator sets (New)	-	5.00
21.	Workshop on genset noise & emission compliance (New)	-	2.00
22.	Workshop on co-incineration of Hazardous Waste in Cement Industries (New)	-	3.00
23.	Assessment water consumption & waste water generation per MW of electricity generation (both for coal & gas fired) thermal power plants including scope for further conservation of water (New)	-	0.50
24.	Development of measurement facility for HC/PAH from aluminum plant (New)	-	2.00
	Sub-total:		60.00
	<b>Project Head-VII</b>		
12.	Cost benefit analysis of recycling of ash pond effluent	-	2.30
13.	Assessment of leach ability of trace toxic metals from ash pond to ground water	-	0.90
14.	Study of Environmental Problems of Aravalli Hills and Preparation of Action Plan for Restoration of Environmental Quality-Chittorgarh & Udaipur district Rajasthan	-	4.50
15.	Description of Clean Technology and Development of National Environmental Standards for Sponge Iron Plant (MECON)	-	5.00
16.	Standardization of Monitoring and Analysis Procedures for By-Product Recovery Type Coke Oven Emissions	-	5.00
17.	Demonstration of Co-incineration of Used tyres, paint sludge, CETP Sludge etc. in Cement Kiln (New)	-	10.00
18.	Flue Gas Conditioning to improve ESP efficiency in existing thermal power plants (New)	-	4.00
19.	Study on the Characteristics of Different Types of Coals for Blending/ Beneficiation to meet the Requirement of coal ash content not more than 34% and use of the alternate Fuel, vis-à-vis their Impact on PF Combustion (New)	-	10.00
	Sub-total:		41.70
	<b>TOTAL(A):</b>	-	<b>140.60</b>
	<b>Building Project (P-VI)</b>		
25.	Maintenance of Parivesh Bhawan building	60.00	40.00
26.	Fuel and maintenance charges for vehicles to be used for various visits/ inspection/ monitoring/ attending meeting etc.	30.00	30.00
27.	Modernization of 2nos. existing elevators of Olympus makes (work started in 2004-05)	30.00	30.00
28.	Procurement of 380 KVA D.G. Set with acoustic enclosure.	20.00	20.00
29.	Overhauling and up gradation of electrical sub-station	15.00	15.00
30.	Development of lawn & plantation	1.00	1.00
31.	Renovation of halls	5.00	5.00
32.	Energy Saving Devices	6.00	6.00

(Rs. in lacs)

S. No	Scheme	Total cost of Project	Allocation for 2005-06
33.	Renovation & furnishing of reception area, gallery, corridors	3.00	3.00
34.	Construction of security cabin & modernization of main entrance	1.00	1.00
35.	Distempering, painting & polishing work in Parivesh Bhawan	4.00	4.00
36.	Renovation of toilets in Parivesh Bhawan	4.00	4.00
37.	Miscellaneous civil works in Parivesh Bhawan	1.00	1.00
38.	Modernization of Fire Detection system at Parivesh Bhawan by replacing existing control panel, local panel, detectors etc.	3.00	3.00
	<b>TOTAL: (B)</b>		<b>163.00</b>
	<b>Grand Total: (A + B)</b>		<b>303.60</b>

### 6.6.1 (PCI-III) (Project III,VI & VII)

		(Rs. in lacs)	
S. No.	Schemes	Total cost of Project	Allocation for 2005-06
<b>Development of Standards &amp; Guidelines (Project III)</b>			
34.	Revision of COINDS for large pulp & paper industries	11.5	1.00
35	Revision of COINDS for small pulp & paper industries	8.50	1.50
36	Development of standards for Gelatin & Glue industries	6.50	0.65
37	Development of Guidelines for water conservation in pulp & paper industry	13.75	2.00
38	Guidelines for utilization of spent wash for composting	10.40	2.50
39	Guidelines for utilization of effluent from pulp & paper mills for irrigation purpose	34.91	10.00
40	COINDS for poultry farms	3.5	1.80
41	COINDS for fermentation industry (internal	10.00	4.00
42	Revision of COINDS for Maltries & Breweries (New)	14.50	4.35
43.	Revision of COINDS for soft drinks industries (New)	15.00	5.00
44.	Development of guidelines for water conservation in sugar mills	12.00	3.00
45.	Development of guidelines for water conservation in Distillery industry	-	(RE:6.00)
Sub-total:			35.80
<b>Pollution Control Enforcement (Project VI)</b>			
39	Environmental Surveillance Squad (ESS) for pulp & paper, sugar, distillery and other agro-based industries etc.	5.00	5.00
40	Odour control in distilleries	13.67	4.11
41	Odour control in pulp & paper industry	8.75	3.00
42	Performance evaluation of Air Pollution Control System in Sugar mills	8.90	5.34
Sub-total:			17.45
<b>Pollution Control Technology (Project VII)</b>			
20	Demonstration of Electro flocculation technology for colour removal on pilot scale in agro-based pulp & paper mills	23.80	9.21
21	Viable scale of operation of pulp & paper industries & waste treatment options including chemical recovery plant to achieve the environmental standards and viability of lignin recovery technology from black-liquor in agro-based paper mills.	14.35	5.00 (RE:3.50)
22	Innovative technologies for textile waste treatment	0.20	0.15
23	Recycling and reuse of ETP sludge from Textile industry	-	(Re:6.00)
Sub-total:			15.15
<b>Grand Total:</b>			<b>67.61</b>

## 6.7 Urban Pollution Control Division (Project VI)

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
43	Estimation & Inventory of VOC's in the Urban Air	11.50	9.82
44	Inventory of Evaporative Emissions of Hydrocarbons from various sources in Delhi, Kolkata, Mumbai & Chennai	10.80	6.48
45	Air quality monitoring and source apportionment study	1.00	1.00
46	Performance Evaluation of Catalytic Converter in on-road vehicles	-	10.00
47	Auditing of PUC Centers in Delhi	2.00	2.00
48	Spatial Environmental Planning Activities 2005-06	-	100.00 <b>(RE-60)</b>
49	Ecocity Schemes (Kottayam- Tirupati, Ujjain, Varindavan, Puri, Thanjavour, Shillong)	-	50.00
	<b>Sub-total:</b>		<b>179.30</b>
	<b>Municipal Solid Waste Management</b>		
50.	Implementation of MSW Rules, Co-ordination as the SPCBs, Strengthening of infrastructure, sponsoring workshops and under taking subject-specific Programmes	-	10.00 <b>(RE-20)</b>
51.	Implementation of on going programme on Demo Projects for Management of MSW	-	20.00 <b>(RE-100)</b>
	<b>Sub-total:</b>		<b>30.00</b>
	<b>Plastics Waste Management</b>		
52.	Implementation of recycled plastics and usage rules 1999 as amended 2003 ( including pilot projects etc.)	10.00	10.00
53.	Inventorisation and Environmental Management in NCR Delhi (ongoing)	-	5.20
	<b>Sub-total:</b>		<b>15.20</b>
	<b>Training (Project IV)</b>		
1.	Organizing Training Programmes (E.T.U.)	-	75.00
2.	Training Needs Assessment	-	2.00
	<b>Sub total:</b>		<b>77.00</b>
	<b>Zonal Office- Building Construction</b>		
54.	Construction of Zonal Office cum Laboratory Premises	-	40.00 <b>(RE-60)</b>
	<b>Sub-total</b>		<b>40.00</b>
	<b>Grand total</b>		<b>341.50</b>

## 6.8 Plan & Co-ordination & Parliamentary Matters (Project VI)

(Rs. in lacs)			
S. No.	Schemes	Total cost of Project	Allocation for 2005-06
55.	SPCBs/PCCs Cess & Parliamentary Matters	5.00	5.00
56	Office Co-ordination & Salaries of Directors/Additional Director/ ESS Co-ordination (including salaries of Scientific & Technical officers of ZOs)	-	30.251
<b>TOTAL:</b>			<b>35.251</b>

## 6.9 Hazardous Waste Management (Project IX)

(Rs. in lacs)			
S. No.	Schemes	Total cost of Project	Allocation for 2005-06
1.	Registration of the HW recycling/re-processing/ re-refining industries and related activities	-	10.00
2.	Implementation of Hon'ble Supreme Court Directives on Management of Hazardous Waste	-	15.00
3.	Organisation of Regional Training's/Workshops for the officials of Pollution Control Boards on characterization/ re-processing/management of HW activities	-	6.00
4.	E-Waste Management and related activities	-	4.00
5.	Updation of manual on Sampling, Analysis and Characterization of HW	-	3.00
6.	Solidification/ stabilization of Hazardous Waste	-	3.00
7.	Bio-medical Waste Management in NCR with reference to sharing of facilities	-	2.00
8.	Meeting of the Expert Committee on Bio-Medical Waste Management and related activities	-	1.00
9.	Implementation of the BMW Rules/Battery Rules	-	1.00
<b>TOTAL:</b>		-	<b>45.00</b>

#### 6.10 ESS (Project VI)

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
57	Detail updation of 17 categories of industries (HO)	-	1.00
58	Preparation of inventory of RED category of industries (HO)	-	2.5
59	Compilation of all ESS inspections in co-ordination with Zonal Offices	-	0.50
60	Review & update the action plans for the 24 problem areas	-	5.00
61	Status of Section 5 EP Act notification issued from 2001 onwards (HO)	-	1.00
62	Inspection under ESS funds allocated to all the Zonal Office & for Head Office	-	-
63	Computer/ telefax (ESS – HO)	-	1.0
64	Finalisation/NEERI report on Chlorine use	-	-
	TOTAL:		11.00

#### 6.11 Library (Project V B)

(Rs. in lacs)

S. No.	Schemes	Total cost of Project	Allocation for 2005-06
1.	Purchasing of Books, Newspaper and Magazine	-	3.00
2.	Subscription to journals and periodicals	-	7.00
3.	Renovation of the library	-	7.00
4.	To hire services for Automation of library	-	2.00
5.	Photo copier (Xerox Machine)	-	2.00
6.	Security at the entrance of the library	-	0.20
	TOTAL:		21.20

6.12 AS Section (VI) 4

			(Rs. in lacs)	
S. No.	Schemes	Total cost of Project	Allocation for 2005-06	
<b>Pollution Control Enforcement (Project VI)</b>				
65	National level and Regional level Conference of Chairmen & Member Secretaries of SPCBs/PCCs	-	8.00	
66.	Board meetings including TA/DA of members	-	5.00	
67	Redressal of Public complaints	-	2.00	
68	Follow up of CREP	-	1.00	
	Sub total:		16.00	
<b>Mass Awareness, Publication and NGOs Project VIII</b>				
(1)	Financial Assistance to NGOs for conducting Programmes on Abatement of Pollution & Community Action Programme	-	3.00	
(2)	Training Programmes for NGOs on prevention & control of pollution	-	2.00	
(3)	Interaction meet with NGOs	-	2.00	
	Sub-total:		7.00	
	<b>Grand total:</b>		<b>23.00</b>	

6.13 Mass Awareness & Publication and Hindi Section (Project VIII)

			(Rs. in lacs)	
S. No	Scheme	Total cost of Project	Allocation for 2005-06	
4.	Exhibition/ Mass Awareness	-	8.00	
5.	Advertisement	-	12.00	
6.	PIC Renovation	-	6.00	
7.	CPCB Publications	-	30.00	
8.	Infrastructure Development & Salary of ENVIS staff	-	10.00	
9.	Official meeting expenses	-	4.00	
10.	Implementation of Rajbhasha	-	2.00	
	<b>Total:</b>		<b>72.00</b>	

## 7.0 PLANS & PROGRAMMES OF ZONAL OFFICES 2005-06

### 7.1 Zonal Office- Kolkata

(Rs. in lacs)

S. No	Schemes	Total cost of project	Allocation for 2005-06
<b>Project Head- I</b>			
1.	Surveillance of air and water quality monitoring stations	-	0.50
2.	Assessment of PAH in ambient air and its impact on human health (In collaboration with IICB & WBPCB)	-	2.00
3.	Monitoring of ground water quality in arsenic effected districts in Bihar and West Bengal	-	0.50
4.	Characterization of emissions from different sources i.e. industry and vehicles	-	2.00
5.	Characterization of PM <sub>10</sub> & PM <sub>2.5</sub> of Industrial & Residential areas	-	2.00
6.	Environment status of Beaches in the Eastern Zone	-	0.50
7.	Studies on Environmental Status of Coastal aquaculture including Effluent Treatment System in West Bengal & Orissa	1.00	0.50
8.	O&M of air quality monitoring at Canning under Male Declaration	-	3.50
9.	Study on Role of Urban Water Bodies for sustaining Biodiversity	-	1.00
Sub-total:			12.50
<b>Project Head- II</b>			
10	Strengthening, O&M of Laboratory	-	40.00
11	Procurement of Chemicals and Glassware	-	3.00
12	Organizing Inter Laboratory AQC	-	0.50
Sub-total:			43.50
<b>Project Head- III</b>			
13	Prediction of severe thunderstorms based on different pollutants in ambient air (collaboration with Kolkata University)	-	4.00
14	Prediction of metal solubility in sewage sludge amended soil from accessible soil properties	-	0.50
Sub-total:			4.50
<b>Project Head- IV</b>			
15	Nomination for training programme/ workshops etc.	-	1.00
16	Training programme for Teachers on Environment & Pollution Control	-	0.60
Sub-total:			1.60
<b>Project Head- V (A)</b>			
17	Database Management	-	2.00
Sub-total:			2.00

(Rs. in lacs)			
S. No.	Schemes	Total cost of project	Allocation for 2005-06
	<b>Project Head- V (B)</b>		
18.	Development of Library	-	0.50
	<b>Sub-total:</b>		<b>0.50</b>
	<b>Project Head- VI</b>		
19.	ESS and related activities	-	7.00
20.	Assessment of Pollution Status of Problem Area Durgapur	-	1.00
21.	Status of fish processing industries in Orissa and West Bengal	0.60	0.30
22.	Status of Oil & Gas Extraction Activity in the Eastern Zone	-	0.25
23.	Running & Maintenance of vehicles in execution of plan activities	-	2.00
24.	Shifting of office sum lab to new premises (Southend Conclave)	-	40.00
25.	Study of effect of domestic & industrial waste-water discharge on the biotic life of the rivers of North Bihar (Patna University)	-	-
	<b>Sub-total:</b>		<b>50.55</b>
	<b>Project Head- IX</b>		
26.	Characterisation of Hazardous Waste w.r.t. PCB, PAH and Heavy Metals	-	2.00
	<b>Sub-total:</b>		<b>2.00</b>
	<b>Grand total:</b>		<b>117.15</b>

## 7.2 Zonal Office- Vadodara

(Rs. in lacs)

S. No.	Schemes	Total cost of project	Allocation for 2005-06
<b>Project Head- I Pollution Assessment</b>			
1.	Surveillance of WQM stations	-	0.25
2.	Surveillance of Ambient Air Quality Monitoring Stations	-	0.25
3.	Studied of ground water quality around CETP & Common secured landfill sites located at various places in Gujarat	-	0.75
4.	Performance studies of CETPs and STPs in Gujarat & Maharastra	-	1.0
5.	Performance studies of CBMWTF and common incinerators in Gujarat and Maharastra	-	0.75
6.	Monitoring of coastal aqua culture ponds in Gujarat & Maharastra	-	0.75
7.	Environmental status of Silvassa <b>(New)</b>	-	2.5
8.	Inventorisation of E-Waste in Maharastra <b>(New)</b>	-	10.0
9.	Status of Groundwater Quality Around Chemical Industrial Estates of Maharastra <b>(New)</b>	-	10.0
10.	Inventory & Environmental Status Around Industries located in Non-confirming Agricultural areas of Gujarat State <b>(New)</b>	-	6.0
11.	Assessment of Environmental Impact due to utilization of effluent generated from petrochemical complex area in Vadodara district (through ECP Channel) <b>(New)</b>	-	5.0
12.	Inventory of status of pollution control in industries located in four industrial estate of west zone (Ankleshwar, Nandesari in Gujarat and Taloja, Tarapur in Maharastra) <b>(on going)</b>	-	3.50
13.	Noise pollution monitoring during Deepwali & Navratri in Vadodara <b>(On going)</b>	-	0.25
14.	Case studies on environmental status of Marine National Park, Gulf of kutch, Jamnagar, Gujarat ( to be paid to Gujarat Agriculture University towards III and last instalment)	-	0.35
15.	Studies on pollution potential from fishing harbors to coastal areas w.r.t.Verawal fishing harbors in Gujarat ( to be paid to Gujarat Agriculture University towards III and last instalment <b>( on going)</b>	-	0.40
16.	DOD sponsored project on Land-based source of pollution in coastal waters <b>( on going)</b>	-	-
Sub-total:			41.75

(Rs. in lacs)

S. No.	Schemes	Total cost of project	Allocation for 2005-06
	<b>Project Head-II Laboratory Management</b>		
17.	Strengthening updation & maintenance of laboratory	-	12.00
18.	Annual maintenance contract of instruments	-	2.00
19.	Running & maintenance of vehicles	-	2.00
20.	Rent Lab Office	-	10.0
	Sub-total:		26.00
	<b>Project Head- IV Training</b>		
21.	Registration fees for attending the training programme organizing of training programme.	-	1.00
	Sub-total:		1.00
	<b>Project Head- V (A) Date Base Management</b>		
22.	Purchase of new computers with P-IV including one printer	-	0.50
23.	Miscellaneous expenditure for upgradation of existing computers.	-	1.00
	Sub-total:		1.50
	<b>Project Head- V (B) Library</b>		
24.	Development of Library	-	0.50
	Sub-total:		0.50
	<b>Project Head-VI ESS/ Public Complaints</b>		
25.	ESS Programmes/ public complain investigation	-	3.00
	Sub-total:		3.00
	<b>Project Head-VIII Mass Awareness, Hazardous Waste Management</b>		
26.	Creation of Mass Awareness	-	0.50
27.	Hazardous waste/Reprocessing units in the region & Inventorisation- cross checking.	-	1.00
	Sub-total:		1.50
	<b>Grand total:</b>		<b>75.25</b>

### 7.3 Zonal Office- Bangalore

(Rs. in lacs)

S. No	Schemes	Total cost of project	Allocation for 2005-06
<b>Project Head-I Pollution Assessment Survey &amp; Monitoring</b>			
1.	Monitoring of BTX at the road intersections of the city of Bangalore	-	1.00
2.	Surveillance of NAAQM Stations	-	0.50
3.	Surveillance of MINAR Stations	-	0.50
	Sub-total:		2.00
<b>Project Head-II Laboratory Management</b>			
4.	Operation and Maintenance of Mobile Lab	-	1.00
5.	Development of Infrastructure of Stationery Lab	-	40.00
6.	Development of facilities for Bio-assay Test	-	1.00
7.	Development of facilities for Calibration of instruments and equipments	-	5.00
8.	Calibration of Instruments, Annual Maintenance of equipment and procurement of Reference Materials	-	2.00
9.	NABL related activities	-	2.00
10	Toxicity testing of highly toxic industrial effluents	-	1.00
11	Cross verification of ambient air quality data in major air polluting industries	-	1.00
12	Treatment of Hazardous Wastes containing heavy metals	-	1.00
13	Analysis study of inorganic constituents in AAQ with respect to Sulphate & Nitrates & Explore the possibility of relation to SO <sub>2</sub> & Nox	-	1.00
	Sub total:	-	55.00
<b>Project Head-IV Training &amp; Workshop</b>			
14	Organizing and Attending training/ workshop	-	1.00
	Sub-total:		1.00
<b>Project Head-V(A) Database Management</b>			
15	Procurement of Computer System peripherals and Local Area Networking	-	1.00
	Sub-total:		1.00
<b>Project Head-V (B) Library Management</b>			
16	Development of Library	-	0.50
	Sub-Total	-	0.50
<b>Project Head- VI Pollution Control Enforcement</b>			
17	Development of Office Infrastructure	-	2.00
18	Verification of Compliance of Standards	-	4.00
19	Follow up of Court Directions	-	1.00
20	Monitoring of Bio-medical Waste Management Facilities	-	2.00

(Rs. in lacs)			
S. No.	Schemes	Total cost of project	Allocation for 2005-06
21.	VOC and Pesticides residue analysis and development of organic trace lab and standardizing procedures	-	2.00
22.	Infrastructure development for Hazardous Waste Management	-	2.50
23.	Development of Decentralized Wastewater Treatment System	-	0.50
24.	Designing and Monitoring of Decentralized Wastewater Treatment System	-	0.50
	Sub-total:		14.50
	<b>Project-VIII Mass Awareness and Publications</b>		
25.	Organizing Mass Awareness Programmes	-	0.50
	Sub-total:		0.50
	<b>Grand total:</b>		<b>74.50</b>

## 7.4 Zonal Office- Bhopal

(Rs. in lacs)

S. No	Schemes	Total cost of project	Allocation for 2005-06
<b>Project Head-I</b>			
1.	Surveillance of ambient air and water quality monitoring stations and associated laboratory facilities under NAMP & MINARS	2.50	2.50
2.	Monitoring of air quality in Bhopal for reporting to TV channels	2.00	2.00
3.	Inventorisation and assessment of pollution load in Bhiwadi Industrial Area, Rajasthan <b>(New)</b>	1.50	1.50
4.	Noise level monitoring in ten (10) major cities in Central Zone <b>(New)</b>	1.50	1.50
5.	Determination of assimilative capacity of Narmada river in the stretch of downstream Indira Sagar Dam to Raj Ghat <b>(New)</b>	1.00	1.00
Sub-total:			8.50
<b>Project Head – II</b>			
1.	Development of laboratory and monitoring facilities including operation and maintenance of existing laboratory	14.00	14.00
2.	Operation & maintenance of surveillance vehicle	1.00	1.00
Sub-total:			15.00
<b>Project Head- IV</b>			
1.	Nomination of officers/ staff for training/ workshops	1.00	1.00
Sub-total:			1.00
<b>Project Head-V (A)</b>			
1.	Development of computer and other facilities in the office and operation and maintenance of existing computers	1.00	1.00
Sub-total:			1.00
<b>Project Head-V (B)</b>			
1.	Development of Library	1.00	1.00
Sub-total:			1.00
<b>Project Head- VI</b>			
1.	Pollution Control Enforcement	2.50	2.50
2.	Visit to industries for verification of application for 'Actual User' registration	0.50	0.50
3.	Performance study of CETPs (10 numbers) <b>(New)</b>	2.00	2.00
4.	Monitoring of common bio-medical waste treatment facilities (incinerators-10 numbers) <b>(New)</b>	2.00	2.00
5.	Performance evaluation of sewage treatment plants in three States <b>(New)</b>	0.50	0.50
6.	Monitoring of common TSDF & hazardous waste dumpsites <b>(New)</b>	1.00	1.00
7.	Assessment of the performance of Turbo Mist Evaporator Technology" adopted by industries for disposal of their wastewater <b>(New)</b>	1.00	1.00
8.	Purchase of new surveillance vehicle <b>(New)</b>	9.00	9.00
Sub-total:			18.50

(Rs. in lacs)

S. No.	Schemes	Total cost of project	Allocation for 2005-06
	<b>Project Head – VIII</b>		
1.	NGO meet at Udaipur <b>(New)</b>	0.80	0.80
2.	Financial assistance to NGOs and distribution of water testing kit <b>(New)</b>	0.50	0.50
	Sub-total:		1.30
	<b>Grand total:</b>		<b>46.30</b>

## 7.5 Zonal Office- Shillong

(Rs. in lacs)

S. No	Schemes	Total cost of project	Allocation for 2005-06
<b>Project Head-I</b>			
1.	Surveillance of NAMP and WQM stations & to follow up non-operational stations	1.00	1.00
2.	Water samples for micro-pollutants (pesticides) from State Boards to C.PCB –Kolkata	0.50	0.50
3.	Co-ordination with State Boards with regard to strengthening & implementation of Various Rule/ Regulations (including annual meeting)	1.00	0.50
4.	Ambient Air & Noise monitoring at State Capital of N.E. States (New)	1.00	0.50
5.	Inventorisation of polluting industries in NE States & assessment of pollution load (on going)	2.00	1.00
6.	Assessment of environmental status in NE States and documentation	1.00	0.50
7.	Inventorisation of Hazardous wastes/ recycles in NE States (New)	1.00	0.50
8.	Inventory of institutions/ laboratories capable of undertake environmental study and analysis of environmental parameters in North East India	1.00	0.50
9.	Water quality assessment in polluting river stretches	1.00	0.50
10.	Follow up of BMW rule implementation in NE-States	0.50	0.50
	Sub-total:		6.00
<b>Project Head- II</b>			
11.	Development of Laboratory & activities including furnishing at the new premises	5.00	5.00
12.	Procurement of noise meter	2.50	2.50
	Sub-total:		7.50
<b>Project Head- IV</b>			
13.	Nomination for Training/Workshop	0.50	0.50
	Sub-total:		0.50
<b>Project Head – V(A)</b>			
14.	Database Management	1.00	1.00
<b>Project Head- V(B)</b>			
15.	Development of Library	0.50	0.50
	Sub-total:		0.50
<b>Project Head- VI</b>			
16.	Pollution Control Status in 17 categories of Industries including CREP recommendations	1.00	0.50
17.	Feasibility study of treatment methods with regard to Paper mill effluents and Acidic discharge of coalmine	1.00	0.50
18.	Public complaints investigation	0.30	0.30
19.	Follow up of implementation of MSW/ BMW & plastic waste management and interaction meeting	0.50	0.50

(Rs. in lacs)

S. No.	Schemes	Total cost of project	Allocation for 2005-06
20.	Environmental status of polluting industries at Byrnihat, Meghalaya & assessment of Pollution load	1.00	0.50
21.	Running and maintenance of vehicles	1.00	1.00
22.	Office accommodation rent and maintenance	3.00	3.00
23.	Surprise inspection under ESS	0.50	0.50
	Sub-total:		6.80
	<b>Project Head-VIII</b>		
24.	Organizing mass awareness programs	0.50	0.50
	Sub-total:		0.50
	<b>Grand total:</b>		<b>22.80</b>

## 7.6 Zonal Office- Lucknow

(Rs. in lacs)

S. No.	Schemes	Total cost of project	Allocation for 2005-06
1.	Monitoring of CETPs & STPs of North Zone	-	2.00
2.	Monitoring of CBMWTF	-	1.00
3.	Laboratory Development	-	18.00
4.	Lab Operation and Maintenance	-	12.00
5.	ESS/ Public Complaints	-	10.00
6.	Hazardous Waste Management	-	1.00
7.	Setting of AAQM at Lucknow	-	8.00
8.	Characterization of RSPM	-	1.00
9.	Construction of Pilot Khansari Furnace	-	2.00
10.	Maintenance of Toxicity facility	-	1.50
11.	BTX Monitoring at Lucknow	-	4.50
12.	Database Management	-	5.00
13.	Library Management	-	0.50
14.	Development of strategy control of GW Pollution due to Chromium in identified area of Kanpur	-	3.35
15.	Monitoring of Problem Area	-	1.50
16.	Status of Polluting Industries of Unnao city	-	0.50
17.	Monitoring of interstate Rivers of North Zone	-	6.00
18.	Polluted river stretches of R.Kali from Meerut to Kannauj	-	0.50
19.	Ozone Pollution study in Lucknow with a continuous Ozone analyzer with a calibrator and computer interfacing system	-	7.00
20.	PM2.5, PM10 & CO study at traffic intersections in Lucknow	-	9.00
21.	Assessment of non-exhaust emission measurement at Lucknow	-	1.50
22.	Noise level survey at Lucknow and Agra	-	1.50
23.	AAQM, Kanpur	-	6.66
24.	Development of office building Lucknow	-	40.00
	<b>Sub total:</b>	-	<b>144.01</b>

		(Rs. in lacs)	
S. No.	Schemes	Total cost of project	Allocation for 2005-06
	<b>Agra Office</b>		
1.	Operation & Maintenance of 4 Ambient Air Quality Monitoring Stations in Agra	-	30.00
2.	Source appointment study of PM10	-	10.00
3.	Study of River Yamuna	-	1.00
4.	Operation & Maintenance of Stationery Laboratory	-	8.00
5.	Development of Library, purchase of journals, newspapers	-	0.25
6.	Data-base Management	-	2.00
7.	Surveillance, parliament questions, interaction with local Govt./ meetings, inspections etc.	-	3.00
8.	Mass awareness activity	-	2.00
	<b>Sub-total:</b>		<b>56.25</b>
	<b>Grand total:</b>		<b>200.26</b>