

ANNUAL ACTION PLAN

2008-09

(Approved in 146th meeting of the Board held on 12.04.2008)



CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment & Forests)

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CPCB, 200 Copies, 2008

Published by: Dr. B. Sengupta, Member Secretary, Central Pollution Control Board, Delhi-110032
Printing Supervision and Layout: Keyur Shah and Satish Kumar
Composing and Laser Typesetting: Ripudaman Swami
Designed and Produced by: Ashok Creatives, India Tourism Development Corporation, Scope Complex, Core 8, 5th Floor
7 Lodi Road, New Delhi-110003
Printed by: I. G. Printers Pvt. Ltd., New Delhi-110020



डा. बी. सेनगुप्ता
सदस्य सचिव

Dr. B. SENGUPTA
Member Secretary

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
(भारत सरकार का संगठन)
पर्यावरण एवं वन मंत्रालय

Central Pollution Control Board
(A Govt. of India Organisation)
Ministry of Environment & Forests

Note from Member Secretary

Schemes approved for 2008-09 will be implemented by the concerned divisions at Head Office and Zonal Offices. The implementation of action plan will be monitored by Member Secretary, and will be assisted by the Additional Director & Incharge PCP (ABA), Scientist "C" (SKN) of PCP along with financial monitoring by the Finance and Accounts Section, including F&AO (PCP). Assistance on follow-up with MoEF relating to Progress Reports (Physical and Financial) will be provided by Private Secretary (SKA) to Incharge PCP.

Divisional and Zonal Officers (ZOs) are requested to note following points for compliance:

1. Divisions/ZOs will forward write-up along with Quarterly Targets (Physical and Financial) for each scheme to PCP Division and the same will be attached with the proposal of Administrative Approval.
2. Divisions/ZOs will forward Quarterly Progress Reports (Physical and Financial) at the end of each quarter to PCP Division.

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3. Divisions/ZOs will seek Administrative Approvals of each scheme before **30.06.2008**. In case of projects where project duration is over, due justification will be forwarded for extension of project. However, such practice will be avoided.
4. Divisions/ZOs are required to communicate addition/deletion of any scheme to PCP Division for further approval of Competent Authorities.
5. Process relating to procurement of laboratory equipment and office equipment should be completed before **October, 2008**.
6. Finance and Accounts Section will forward fund utilization statements to the office of MS/CCB (including PCP) Division on monthly basis. Such statement will indicate Project Head-wise and Division-wise expenditures.
7. Divisions and Zonal Offices should indicate activities assigned to each Scientific and Technical Officials (up to JLA and JRF levels) as per AAP and also indicate activities assigned in addition to AAP and forward to MS office and copy to PCP Division before **31.05.2007**.
8. Divisional Heads and Incharge of Zonal Offices will hold monthly review meetings on Physical and Financial progress and forward the monthly review report to MS before 10th of every month.



(Dr. B. Sengupta)

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1 - Introduction

Central Pollution Control Board (CPCB) constituted under the Water (Prevention and Control of Pollution) Act, 1974 is a 100% Grant-in-aid institution of the Ministry of Environment and Forests (MoEF), Govt. of India. 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 abatement of pollution. Projects and programmes are executed through in-house efforts and with the assistance of Research Institutions like IITs, Engineering Colleges, Universities and R & D Institutions.

In addition to the implementation of Water and Air Acts, CPCB has planned various programmes relating to implementation of Rules framed under the Environment Protection Act, 1986 such as Hazardous Wastes (Management & Handling) Rules, Bio-medical Waste, Municipal Solid Waste, Plastics Waste and others. The plans and programmes identified for 2008-09 are formulated based on the thrust areas identified by the Planning Commission, Parliamentary Standing Committee, National Environment Policy (NEP), 2006 of Ministry of Environment and Forests and the issues raised by the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) during the Conference of Chairmen and Member Secretaries.



2 - Functions of CPCB

The functions of CPCB are specified under Section (16) of the Water (Prevention & Control of Pollution) Act, 1974 and under the Air (Prevention & Control of Pollution) Act, 1981. CPCB is also coordinating important activities under the Water (Prevention & Control of Pollution) Cess Act, 1977 and various functions entrusted under the Environment (Protection) Act, 1986 and Rules made there under.

2.1 Functions of CPCB are 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 and these are as under:

- ❖ Advise the Central Government on any matter concerning prevention and control of water and air pollution and improvement of the quality of air;
- ❖ Plan and cause to be executed a nation-wide programme for the prevention and control or abatement of water and air pollution;
- ❖ Co-ordinate the activities of the SPCBs and resolve disputes among them;
- ❖ 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;
- ❖ Plan and organise training of persons engaged in programmes on prevention, control or abatement of water and air pollution;
- ❖ Organise through mass media, a comprehensive mass awareness programme on prevention, control or abatement of water and air pollution;
- ❖ Collect, compile and publish technical and statistical data relating to water and air pollution and measures derived for their effective prevention, control or abatement;
- ❖ Prepare manuals, codes and guidelines relating to treatment and pollution and their prevention and control;
- ❖ Lay down, modify or annul, in consultation with State Governments, standards for stream and well and lay down standards for the quality of air; and
- ❖ Perform such other functions as and when prescribed by the Government of India.

3 - Activities and Achievements of 2007-08

3.1 Pollution Assessment Survey & Monitoring

- ❖ Water Quality Monitoring (WQM) is carried out at 1032 Stations (through SPCBs/PCCs) under Nation Water Quality Programme (NWQP) covering 206 Rivers, 60 Lakes, 6 Tanks, 3 Ponds, 3 Creeks, 4 Canals, 17 Drains and 321 Wells located in 27 States and 6 Union Territories. Water quality data is regularly received for 964 WQMs electronically.
- ❖ Ambient air quality monitoring is carried out at 341 locations in 126 cities /towns covering 25 States and 4 Union Territories. Air quality data for 339 stations is being received from SPCBs/PCCs electronically.
- ❖ Source apportionment studies which are primarily based on measurement and tracking down the sources through receptor modeling have been initiated for Delhi, Bangalore, Pune, Mumbai, Chennai and Kanpur.
- ❖ Inter-State Water Quality Monitoring of rivers carried out and State Boards have been directed to initiate actions for restoration of water quality of rivers before leaving the State.

3.2 Laboratory Management

- ❖ CPCB operates Continuous Ambient Air Quality Monitoring (CAAQM) at three fixed locations viz. ITO, Siri Fort and Delhi College of Engineering. In order to make these data available to public without any time gap, a network for online real-time data transmission has been established. Data of every 15 minutes (customizable) is being updated and displayed through CPCB's website.
- ❖ Ambient air quality monitoring was conducted at two locations in Delhi with the help of Mobile Monitoring Van (MMV).
- ❖ Training organized on "Analytical procedure for trace metals and pesticides analysis for hydrology project".
- ❖ Portable water samples were collected from water treatment plants for PAH analysis.
- ❖ Ground water samples collected from 22 metro cities for pesticides residue analysis.
- ❖ Development and standardization of methodology for analysis of dioxin (PCDDS) etc. is under progress.
- ❖ Trace Organics Laboratory for analysis of persistent organic pollutants (POPs) specially VOC, dioxin-furans and Poly Chlorinated Biphenyls (PCBs) have started functioning in CPCB.
- ❖ Setting up of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) are in progress in 16 cities and out of these, CAAQMS have been commissioned and operated in Bangalore, Hyderabad, Kolkata, Delhi, Mumbai, Pune and Solapur.



3.3 Training

Fourteen training programmes for the officials of CPCBs and SPCBs on different subjects relating to abatement of pollution were organized which were attended by more than 300 officials. Four one-day programmes on interpersonal skill organized in CPCB.

3.4 Information (Database) Management & Library

For setting up of Environmental Data Bank (EDB), modules on air and water quality are made operational. On-line data entry of air and water quality monitoring data is being done by SPCBs/PCCs. EDB could be accessed through CPCB's website. Data of 342 air and 965 water quality monitoring stations is regularly entered.

Environmental Data Bank (EDB)

On-line entry for data on air quality monitored under national air monitoring programme and water quality monitored under GEMS/MINARS is being done regularly by SPCBs/PCCs. EDB could be accessed through CPCB's website (<http://www.cpcb.nic.in>). Raw as well as analyzed data could be viewed, downloaded and used for further analyses/ interpretation. So far, data entry has been initiated in respect of 353 air quality monitoring stations covering 27 States/UTs and 964 water quality monitoring stations covering 33 States/UTs.

Updation of CPCB Website

CPCB's website has been restructured and redesigned. 21 new reports were uploaded under new items. Comments/opinions were invited on "Guidelines for environmentally sound recycling of E-waste and Guidelines for water quality monitoring"

3.5 Industrial Pollution Control

- ❖ Emissions standard for petrochemicals, incinerator (pesticides), petroleum oil refinery, and sulphuric acid plant finalized and forwarded to MoEF. Draft National Ambient Air Quality Standard finalised. Cost-benefit analysis of recycling of ash pond effluent of thermal power plant carried out.
- ❖ Monitoring carried out of co-incineration of used tyres, paint sludge, etc. sludge in cement kiln. Monitoring in 17 categories of highly polluting industries continued.
- ❖ Five problem areas reviewed for assessment of environmental quality and report prepared.
- ❖ Out of 2744 units identified under 17 categories of highly polluting industries, 1991 units have been reported as complying for setting up of requisite pollution control facilities. Forty-six directions have been issued to the defaulting industries including seeking compliance on specific issues relating to pollution control through SPCBs.
- ❖ Carried out performance evaluation in respect of common bio-medical waste treatment facilities, common effluent treatment plants and sewage treatment plants.

- ❖ Monitoring and inventory of volatile organic compounds in urban air of Delhi and Mumbai completed. Vehicular emission factor finalized and draft report placed on CPCB's website. Review and implementation of action plan in non-attainment cities continued.
- ❖ Plastics waste disposal through Plasma Pyrolysis Technology (PPT) has been initiated. Assessment and characterization of plastics waste in railways and airports initiated.
- ❖ The study of polymer-coated bitumen road has been completed and final draft report will be referred to Indian Road Congress for evolving Standards/Codes for utilizing plastics waste for road construction.
- ❖ CREP recommendations for Distilleries, Paper & Pulp, Iron & Steel, Thermal Power Plant, Cement Plants are implemented through Task Forces.
- ❖ Policy on use of high calorific value hazardous waste as fuel in Cement Kiln, have been finalized and issued to SPCBs/PCCs for implementation.

3.6 Mass Awareness, Publications and NGO Activities

- ❖ Forty two technical reports were brought out on various subjects relating to abatement of pollution. Theme based "Parivesh" newsletter and Annual Report were published.

3.7 Spatial Environmental Planning

- ❖ Out of a total 112 zoning atlases prepared earlier, 94 have been completed and 18 are under finalization.
- ❖ District specific siting guidelines are prepared for 94 atlases.
- ❖ One hundred and six district environmental atlases are prepared; 62 more are under preparation. Further, 7 State level environmental atlases are prepared and work for 10 States is under progress.
- ❖ Work on Eco-city projects at or Kottayam, Ujjain, Tirupati, Vrindavan and Puri, is at different stages of completion.

3.8 Hazardous Waste Management

- ❖ Carried out performance evaluation in respect of common bio-medical waste treatment facilities, common effluent treatment plants and sewage treatment plants during 2007-08.
- ❖ Twenty-one (21) TSDF sites have been commissioned under private sector partnership mode for management of hazardous wastes.
- ❖ Three Common Hazardous Waste Incinerators have been set-up under private sector partnership mode for disposal of Incinerable Hazardous Waste.
- ❖ Inventorisation of illegal dumpsite has been completed and remedial work is being planned.
- ❖ Guidelines for mercury waste management for fluorescent lamps have been drafted.



4 - Thrust Areas for 2008-09

{A} WATER QUALITY ASSESSMENT

1. Formulation of Action Plans to meet water quality criteria (by 2012) in selected river stretches.
2. Assessment of river water quality at inter-state boundaries.
3. Addition of 300 new water quality monitoring stations in the existing 1032 stations. Selected water quality monitoring stations will be scanned for assessing the levels of micro-pollutants.
4. Assessment of fisheries status in rivers (Ganga, Yamuna, Godavari, Tunga bhadra) and linking with the water quality.
5. Assessment of ground water quality in Metro-cities and State Capitals with reference to micro-pollutants. Emphasis will be laid on assessment of ground water quality in critically polluted areas.
6. Assessment of Municipal Waste generation (sewage and solid) in Class-I cities and Class-II towns (previous assessment done in 2003-04), and Performance evaluation of sewage treatment plants.
7. Assessment of water quality of lakes and action plans for restoration of water quality.
8. Finalisation of revised water quality criteria.

{B} AIR QUALITY ASSESSMENT

9. Continuing assessment of ambient air quality in cities/towns (341) and addition of 50 new air quality monitoring stations. Undertaking monitoring of PM_{2.5} and other air pollutants.
10. Completion of source apportionment studies for Delhi, Bangalore, Pune Mumbai, Chennai and Kanpur.
11. Monitoring of Poly-nuclear Aromatic Hydrocarbon (PAH), Benzene and Ozone in Delhi.
12. Setting up of Continuous Air Quality Monitoring Stations (CAAQMSs) (16 stations in polluted cities and 12 stations, three each in Delhi, Bangalore, Lucknow and Chennai) and networking of these stations (28) with central computer of CPCB.
13. Continuation of water quality monitoring of river under Yamuna Action Plan-NRCD sponsored project. Studies include performance of sewage treatment plants set up under Yamuna Action Plan (YAP) and also monitoring quality and quantity of effluents let out by different drains/outfalls in the river.
14. Water quality assessment at religious places (Badrinath, Kedarnath, Gangotri and Yamunotri), including biological characterization (particularly water reference to bacteriology) for river Ganga.
15. Analytical standardization relating to;
 - (i) Source apportionment of ambient particulate through ED-XRF

- (ii) Correlation of TOC, BOD, COD
 - (iii) Trace metal characterization of solid waste through ED-XRF
 - (iv) Measurement of Volatile Organic Compounds (VOCs) by Purge and trap GC-MS
 - (v) Monitoring of Dioxin (PCDDs) and Furan (PCDF) - Standardisation of methodology for sampling and analysis for source emission and ambient air.
 - (vi) Laboratory accreditation and participation in Proficiency Testing (PT) programmes.
16. A few R&D programmes initiated during 2007-08 and proposed for initiation during 2008-09 are given as under:
- ❖ Development of BOD Biosensor for rapid estimation of BOD for 17 categories of industries.
 - ❖ Sludge Reagent Product (SRP) - An innovative process for water and wastewater treatment-Flocculation study and setting up of pilot plant at Bhagirathi water works, Delhi.
 - ❖ Development, distribution and fabrication of Water Testing Kits.
 - ❖ Characterization of Hazardous waste in TSDF (Treatment, Storage, Disposal Facility) and illegal dump sites.
 - ❖ Indoor & outdoor air-micro flora study at Delhi.
 - ❖ Microbial production of ethanol from different waste-starches.
 - ❖ Production of hydrogen (H₂) gas from drainage effluents of Delhi.
 - ❖ Assessment of Persistent Organic Pollutant Residues (POP's) in Human Population of Delhi with Special reference to adverse health effects and Morbidity (collaborative project with UCMS and GTB hospitals).
 - ❖ NABL-Laboratory Accreditation activities and preparation in PT programme.

{C} INDUSTRIAL POLLUTION CONTROL

17. Revision/development of industry-specific effluent and emission standards. including preparation of Comprehensive Industrial Document (COINDS) for; Dyes and Dye intermediates, Pesticides, Bulk Drugs, Basic Organic Chemicals, Soda Ash, Man-made Fibre, Paint, Steel, Non-recovery Coke Oven, Beehive Coke Oven, Coal briquetting, Cement, Explosives, Cu, Zn, Pb Smelters, Aluminum, Fermentation, Soft Drinks, Slaughter Houses, Textile, Soaps and Detergents, Plaster of Paris, Tanneries, Automobile, Service Stations, Arc and Induction Furnaces, Pickling, Starch, Re-rolling, Plywood, Food Processing, Brick Kiln, Secondary Pb Smelting, Hot Mix, Glue and Gelatin and Poultry Farms.
18. Formulation of Pollution prevention guidelines/ technologies on specific sectors like:
- (i) Vapour recovery for Gasoline filling stations.
 - (ii) Tail gas treatment for incineration plant.



- (iii) Solid waste management in Integrated Iron and Steel Plants.
 - (iv) Fugitive emission control in thermal power plants.
 - (v) Utilisation of spent wash for composting and water conservation in Distilleries.
 - (vi) Underground storage tanks - specification for Petrol pumps.
 - (vii) Clean technology for BOD plant of Steel industry, Sintering plants, Ferro-alloys, Lime stone mining.
 - (viii) Reduction in green house gaseous emissions from cement plants by using options of blended meteors, etc.
 - (ix) Co-incineration of used tyres/ paint sludge, etc.
19. Co-ordination with SPCBs/PCCs on monitoring compliance with the standards and recommendations of Corporate Responsibility for Environmental Protection (CREP) in respect of 17 categories of industries. Random inspections of industries and joint inspections of industries with the Regional Offices of MoEF will be continued.
 20. Pollution control compliance of industries discharging waste water into rivers and lakes.
 21. Assessment of improvement in environmental quality in critically polluted areas (Problem areas).
 22. Updating inventorisation of Red category of industries, including small scale industries.
 23. Follow-up with SPCBs/PCCs on implementation of District level guidelines and zoning atlases for siting of industries. Understanding sector specific preparation of environmental management plans.

{D} TRAINING

24. Organising twenty - six training programmes in co-ordination with 14 Nodal Training Institutes (NTI) for SPCBs/PCCs and other personnel engaged in pollution abatement programmes.
25. Designing, development and implementation of Integrated Management System in CPCB.

{E} VEHICULAR POLLUTION CONTROL

26. Assessment of aldehydes, ketones and methane emissions in vehicular exhausts using different fuels.
27. Performance evaluation of catalytic converters in on-road vehicles.
28. State-specific issues on vehicular pollution control and mass awareness programmes.

{F} WASTE MANAGEMENT

29. Implementation of Municipal Solid Wastes (Management and Handling) Rules, 2000 to include:
 - (i) Setting up of Demo projects
 - (ii) Environmental monitoring around landfill facilities.

- 30 Implementation of Recycled Plastics Manufacture and Usage Rules to include;
- (i) Assessment of plastics waste generation at Railway Stations and Air Ports.
 - (ii) Performance studies in Plasma Pyrolysis Technology.
 - (iii) Collaboration with Central Road Research Institute (CRRI) and Indian Roads Congress on evolving codes/guidelines for polymer-bitumen roads.
 - (iv) Impacts of Plastics waste disposal on environment and status of degradable plastics.

{G} HAZARDOUS WASTE MANAGEMENT

- 31 Guidelines for management of Electronic waste and Mercury.
- 32 Management of Dump sites /contaminated sites to cover:
- (i) Trainings/workshops on management aspects.
 - (ii) Review of assessment of sites and rehabilitation plans.
 - (iii) Development of guidelines and evolving criteria for remediation of contaminated sites.
- 33 Performance evaluation of Treatment Storage Disposal Facilities (TSDF).
- 34 Identification of hazardous waste, their characterization and waste minimization options in; Iron and Steel, Aluminum, Sodium, Galvanising, Textiles, Dyeing and hardening of steel industries.
- 35 Implementation of rules relating to batteries waste management.
- 36 Implementation of Hon'ble Supreme Court directives on management of hazardous waste management.
- 37 Implementation of Bio-medical Wastes (Management and Handling) Rules, 1998;
- (i) Evaluation of State-of-the-art technology.
 - (ii) Performance study of common facilities.

{H} CO-ORDINATION ACTIVITIES

- 38 Field activities and co-ordination with State Pollution Control Boards through 6 Zonal Offices of CPCB.
- 39 Co-ordination with SPCBs on implementation programmes sponsored by MoEF and CPCB to SPCBs and PCCs (National and State-specific).



5 - Summary of Budget Estimate for 2008-09

HEAD OFFICE

Name of the Division	Proposed Budget (Rs. in Lakh)
Pollution Assessment Survey & Monitoring	609.00
Laboratory Management	408.50
Pollution Control Implementation-I	169.10
Pollution Control Implementation-II	93.85
Pollution Control Implementation-III	99.25
SSI Division	149.10
Urban Pollution Control Division	173.00
Pollution Control Planning Division (PCP)	330.75
PR, Hindi Section	61.00
AS Section	27.00
Library	18.20
Hazardous Waste Management	125.70
Training Division	72.50
Building Maintenance	196.00
Computer Division	65.00
Total (A)	2597.95

ZONAL OFFICES

Name of the Zonal Office	Proposed Budget (Rs. in Lakh)
Kolkata	156.55
Vadodara	154.50
Bhopal	78.00
Shillong	56.00
Lucknow & Agra	171.00
Bangalore	236.00
Total (B)	852.05

GRANDTOTAL (A+B)= Rs. 3450.00 Lakh.

6 - Summary of Project Head-wise Allocation for 2008-09

Sl. No.	Project Heads	Allocation (Rs. in Lakh)		
		Head Office	Zonal Offices	Total
1	Pollution Assessment – Survey & Monitoring	609.00	89.85	698.85
2	Lab Management	408.50	337.10	745.60
3	Development of Standards and Guidelines	190.35	0.00	190.35
4	Training	72.50	10.50	83.00
5(a)	Information (Database) Management	65.00	14.00	79.00
5(b)	Library	18.20	5.00	23.20
6	Pollution Control Enforcement	923.30	390.60	1313.90
7	Pollution Control Technology	115.40	0.00	115.40
8	Mass Awareness, Publications & NGO Activities	70.00	4.00	74.00
9	Hazardous Waste Management	125.70	1.00	126.70
Total		2597.95	852.05	3450.00



7 - Plans & Programmes of Head Office for 2008-09 (Scheme-wise Allocations)

7.1 Pollution Assessment Survey & Monitoring (PAMS) : Project Head-I

Scheme No.	Schemes	Allocations (Rs. in Lakh)
1	National Water Quality Monitoring Programme surface and ground water (monitoring of toxic and critical pollutants) (on going)	100.00 (RE:100.00)
2	Coliform Standard for treated sewage (on going)	2.00
3	Status of River Water Quality at Inter State Boundaries (on going)	2.00
4	Status of municipal waste (sewage and solid) management in Class I cities and Class II towns (on going)	10.00 (RE:2.00)
5	Performance evaluation of Sewage Treatment Plants in India (on going)	3.00
6	Assessment of groundwater quality in Metropolitan cities and class-I towns (on going)	30.00
7	Calibration & Evaluation of Air Quality Monitoring instruments in NAMP Stations (on going)	30.00
8	Inventory of lakes and wetlands in India (new)	15.00
9	National Air Quality Monitoring Programme (on going)	300.00 (RE : 200.00)
10	Strengthening of National Air Quality Monitoring Programme (on going)	50.00
11	Initiation of PM 2.5 and other air pollutants monitoring as per new draft Air Quality Standards (new)	50.00
12	Epidemiological studies/ Health Impact (AIIMS)	6.00
13	Finalisation of revision of water quality criteria	1.00
14	Action Plan preparation with SPCBs/PCCs to meet with quality criteria in selected river by 2012	10.00
Total		609.00

7.2 Laboratory Management and R & D :Project Head-II

Scheme No.	Schemes	Allocations (Rs. in Lakh)
AIR LABORATORY		
1	Operation & Maintenance of Continuous Air Quality Monitoring Stations in Delhi (including BTX monitoring) (on going)	15.00
2	Quality Assurance in Air Quality Measurements (on going)	2.00
3	Assessment of Polynuclear Aromatic Hydrocarbon (sampling and analysis in Delhi) (on going)	3.00
4	Validation of Methodology for Sampling and Analysis of Benzene using GC-MS, GC-ATD & GC-FID (on going)	3.00
5	Assessment of Noise Level in Delhi (on going)	1.00
6	Monitoring of Benzene in Delhi (passive sampling method) (on going)	3.00
7	Inspection of Authorised Pollution Checking Centres in Delhi (on going)	0.50
8	Operation & Maintenance of Ambient Air Quality Monitoring Stations at seven locations in Delhi (Manual) (on going)	8.00
9	Air Quality Assessment in different areas including Traffic Intersections in Delhi (on going)	2.00
10	Studies on Spatial and Temporal Distribution of Ambient Ozone in Delhi (on going)	0.50
11	Development and Strengthening of Monitoring of Ambient PM _{2.5} at Delhi (on going)	5.00
12	Manual Monitoring of Ambient Air quality in five Zonal Offices (each one location) and HQ for reporting in television (on going)	5.00
13	O & M of SODAR SYSTEM and Weather Station (on going)	2.00
14	Rain Water Characterization (on going)	2.00
15	Setting up of Continuous Air Quality Monitoring Stations in 16 cities as per directions of Hon'ble Supreme Court & networking of sixteen cities data with central computer of CPCB, Delhi (on going)	8.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
16	Standardization of Method for measurement of Hydrocarbon in source emission (on going)	3.00
Sub-total		63.00
WATER LABORATORY		
17	Analytical Quality Control (AQC/water) exercises for Central and State Pollution Control Boards, Pollution Control Committees & for laboratories recognized under EP Act (on going)	2.70
18	Analytical Quality Control (AQC) executes for Soil and Solid Waste) for Central and State Pollution Control Boards, Pollution Control Committees & for laboratories recognized under EP Act (on going)	1.00
19	Development of BOD Biosensor for rapid estimation of BOD for 17 categories of industries (on going)	10.00
20	Sludge Reagent Product (SRP) - An innovative process for water and wastewater treatment- Flocculation study and setting up of pilot plant at Bhagirathi water works, Delhi (on going)	10.00
21	Development, distribution and fabrication of Water Testing Kits (on going)	3.00
22	Characterization of hazardous waste in TSDF (Treatment, Storage, Disposal Facility) and illegal dump sites (new project)	1.00
Sub-total		27.70
BIO-SCIENCE LABORATORY		
23	Water Quality Assessment through Bio-monitoring in various aquatic source particularly for water bodies/ river located in an around problem areas (on going)	10.00
24	Bacteriological characterization of River Ganga and its tributary and impact of barrages-collaborative project with PCRI (BHEL), Haridwar	2.00
25	Water Quality of River Yamuna sponsored by NRCD, MoEF (on going)	NRCD Funds
26	Performance study of sewage treatment plants in Delhi and Haryana under Yamuna Action Plan (on going)	NRCD Funds

Scheme No.	Schemes	Allocations (Rs. in Lakh)
27	Performance monitoring of oxidation pond based sewage treatment plant in UP under Yamuna Action Plan (on going)	NRCD Funds
28	Studies of Environmental stress in Himalayan sub-region due to religious tourism at Char Dham (Badrinath, Kedarnath, Gangotri and Yamunotri) at Uttaranchal – collaborative project with PCRI (BHEL), Haridwar (on going)	0.80
29	Survey & monitoring of wastewater generation and outfalls to Yamuna River and other impoundment in NCT-Delhi (collaborative project with PAMS division) (New Project)	1.50
Sub-total		14.30
TREATABILITY LABORATORY		
30	Indoor & outdoor air-micro flora study at Delhi	3.00
31	Microbial production of ethanol from different waste-starches	3.00
32	Production of hydrogen (H ₂) gas from drainage effluents of Delhi	3.00
33	Upgradation of treatability lab	5.00
Sub-total		14.00
INSTRUMENTATION LABORATORY		
34	Source Apportionment of Ambient Air Particulate in various cities through EDXRF (collaborative project along with Air lab)	2.00
35	Studies on correlation between TOC, BOD, COD	2.50
36	Trace metal characterization of solid and hazardous waste using ICP	2.00
37	Development of facilities for Trace Metal Characterization of solid waste through EDXRF	3.50
38	Annual maintenance contract of various equipments (AAS, AOX Analyzers, etc.)	1.00
Sub-total		11.00
TRACE ORGANIC LABORATORY		
39	Determination of volatile organic compounds (VOCs) by purge and trap GC-MS	1.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
40	Operational contract for Air Handling Unit, Electrical & Fire Fighting maintenance	8.00
41	Annual maintenance contract of Major Instruments/Equipments	5.00
42	Measurement of hazardous organic compounds Dioxin (PCDDs) and Furan (PCDF) development and standardization of methodology sampling and analysis	8.00
43	Source Emission and Ambient Monitoring of Dioxin (PCDDs) and Furan (PCDF) in selected industries	5.00
44	Assessment of Persistent Organic Pollutant Residues (POP's) in Human Population of Delhi with special reference to adverse health effects and Morbidity (collaborative project with UCMS and GTB hospital)	3.50
45	Monitoring of pesticides residues at national level- sponsored project by Ministry of Agriculture/IARI, New Delhi	IARI
Sub-total		30.50
INFRASTRUCTURE LABORATORIES: GENERAL		
46	Pilot project in identified cities for involving private participation in the management of Continuous Ambient Air Quality Monitoring Station/Network under the Operation Contract (OC)	70.00
47	Pilot project in identified cities for involving private participation in the management of Continuous Ambient Air Quality Monitoring Station/Network under the Build, Own & Operate (BOO)	20.00
48	NABL- Laboratory Accreditation activities and preparation in PT programme	5.00
49	Implementation of LIMS (Laboratory Information Management System) in laboratory and upgradation of networking	9.00
50	Upgradation of laboratories	30.00
51	Procurement of instruments, equipment and spare parts for various labs of CPCB	105.00
52	Telephone, Fax, Laboratory infrastructure, services, etc	5.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
53	Service activities for Indo-GTZ projects etc.	1.00
54	Recognition of laboratories under The Environment Protection Act	1.00
55	Performance evaluation of CAAQMS & networking of CAAQM maintained by industries	2.00
Sub-total		248.00
Grand Total		408.50

7.3 PCI-I :Project Head- III, VI

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-III : Development of Standards & Guidelines		
1	Review of effluent standards and development of emission standards for dyes and dye intermediate industries	6.00
2	Finalisation of Ambient Air Quality Criteria/Standards and action plan to meet new standards by 2012	7.00 (RE : 3.00)
3	Guidelines for vapour recovery systems at gasoline filling station	3.00
4	Preparation of COINDS document & revision of status on pesticides industry	6.00
5	Development of National Emission Standards for Bulk Drug Industries	1.00
6	Review of Effluent Standards and Development of Emission Standards for Basic Organic Chemicals Manufacturing Industry	3.00
7	Design, operation and tail gas treatment for pollution control from the chemical waste incineration	6.00
8	Review of effluent standards for Soda Ash Industry	1.00
9	Preparation of COINDS document & revision of status on Man-made Fiber Industry (New)	6.00
10	Preparation of COINDS document & revision of status on Paint Industry (New)	6.00
11	Computation of Societal Risk abatement cost and long run marginal financial cost of Hazardous waste incinerator (New)	5.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
	Sub total	50.00
	Project Head-VI : Pollution Control Enforcement	
1	Implementation of action points agreed under CREP for: Oil Refineries and Petrochemical Industries, Dyes & Dye Intermediates, Pharmaceutical & Pesticides and Chlor-Alkali & Fertilizers	4.15
2	Air Quality Monitoring, Emission Inventory and Source Apportionment Studies for Six Cities	100.00
3	Monitoring of ground water and soil quality near old petrol pumps and formulating guidelines for underground storage tanks	6.00
4	Implementation of standards and ESS activities	5.00
5	Determination of Optimum Water Consumption Limit for Bulk-drugs Manufacturing Industry	1.05
6	Control of offensive Odour Substances with specific Reference to Selected industrial Processes	1.80
7	Identification of Hazardous Wastes Streams in Paint Sector, their Characterization and Waste Minimization Option	1.00
	Sub-total	119.10
	Grand Total	169.10

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

Scheme No.	Schemes	Allocations (Rs. in Lakh)
	Project Head-III : Development of Standards & Guidelines	
12	Development of guidelines for the management of solid waste and hazardous waste generated in Integrated Iron & Steel Industry (MECON) (on going)	13.80
13	Review of notified standard and development of Clean Technology for BOD Plant of Steel Industry	0.50
14	Development of environmental standards and guidelines for pollution prevention for no-recovery type coke oven plants (on going)	0.50

Scheme No.	Schemes	Allocations (Rs. in Lakh)
15	COINDS for cement plants (on going)	5.50
16	Assessment of fugitive emissions and development of environmental guidelines for control of fugitive emissions in Thermal Power Plants	4.75
17	Preparation of comprehensive industry document on explosive manufacturing unit (new)	6.00
18	Development of COINDS on primary copper, lead & zinc industries (on going)	1.00
19	Revision of Comprehensive Document (COINDS) for Aluminium Industry (on going)	1.00
Sub-total		33.05
Project Head-VI : Pollution Control Enforcement		
8	Standardization of monitoring and analysis procedures for by-product recovery type coke oven emissions	0.50
9	Standing committee on Emissions from RIC Engines for off road applications	1.00
10	National Committee on Noise Pollution Control	1.00
11	Implementation of noise/emission standards for generator sets	1.00
12	Compliance testing of fire-crackers	2.00
13	Ambient noise monitoring in Metro Cities	5.00
14	Assessment of green house gas emission from cement plants and suggestions for its reduction by using options of blended material/ alternate fuel/ newer technologies	9.20
15	Demonstration of coincineration of used tyres/paint sludge/CETP sludge in cement kiln	3.00
16	Task force for Thermal Power Plant & Iron & Steel, implementation of standards, project staff salary etc.	5.00
17	Preparation of Environmental Status Report on Coal mines (new)	5.00
Sub-total		32.70



Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-VII: Pollution Control Technology		
1	Development of Clean Technology and environmental standards for sintering plant of steel industry (MECON)	3.50
2	Development of Clean Technology and environmental standards for Ferro-Alloys Industry (new)	7.00
3	Description of clean technology and development of environmental standards for limestone mining	0.25
4	Assessment of green house gas emission potential of various clean coal technologies (Supercritical, IGCC and CFBC) in comparison to conventional (sub-critical) power generation technology in Indian context	5.60
5	Energy efficiency/Clean Technology adoption in few Air polluting industries	5.00
6	Development of clean technology and environmental standards for bauxite mining	6.75
	Sub-total	28.10
	Total (A)	93.85

7.5 PCI-III : Project III, VI, VII

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-III : Development of Standards & Guidelines		
20	Guidelines for utilization of spent wash for composting (on going)	2.00
21	COINDS for fermentation industry (on going)	3.00
22	Revision of COINDS for soft drinks industries (on going)	5.00
23	Development of guidelines for water conservation in distilleries (on going)	0.50
24	Revision of COINDS for slaughter houses, including effluent standards (new)	5.00
25	Revision of COINDS for Textile industries (new)	5.00
26	Revision of COINDS for Malteries & Breweries	(RE : 6.00)

Scheme No.	Schemes	Allocations (Rs. in Lakh)
27	Development of guidelines for water conservation in sugar mills	(RE:0.50)
	Sub-total	20.50
	Project Head-VI: Pollution Control Enforcement	
18	Performance efficiency evaluation of bio-gas digesters & two stage aeration system and treatability study of two stage aeration system for distillery effluent (on going)	6.00
19	Pollution control in 17 category (on going)	0.25
20	Inventorisation of industries in red category industry (on going)	10.00
21	Monitoring of ESS inspection and follow up actions (on going)	0.50
22	Pollution Control in Problem Areas (on going)	0.50
23	Industrial pollution control along rivers & lakes (on going)	0.50
24	Study on environmental status of a few industrial estates/ areas (on going)	10.00
25	Environmental Surveillance Squad-PCI-III activities (new)	6.00
26	Training programme on slaughter house waste management (new)	5.00
27	Performance evaluation of air pollution control system in sugar mills	(RE:4.00)
	Sub-total	38.75
	Project Head-VII : Pollution Control Technology	
7	Utilization of distillery effluent as a source of nutrient for crop production in different agro-climatic regions of India	32.00
8	Performance evaluation of Air Pollution Control System in pulp & paper industry (new)	3.00
9	Assessment of the status of Lignin Removal Plants (LRP) installation (new)	5.00
10	Feasibility study on Waste water management for textile sector in Tirupur	(RE:12.00)
	Sub-total	40.00
	Grand Total	99.25

**7.6 SSI Division: Project III, VI, VII**

Scheme No.	Schemes	Allocations (Rs. in Lakh)
	Project Head-III : Development of Standards & Guidelines	
28	Preparation of COINDS on soaps & detergents (on going)	4.50
29	Preparation of COINDS on plaster of paris (on going)	0.60
30	Revision of COINDS on tanneries (on going)	10.00
31	Compilation of MSDS for 708 hazardous, toxic and/or flammable chemicals (on going)	2.50
32	Standard guidelines for service station/workshop (on going)	5.00
33	COINDS: Development of environmental standards and good practices for arc furnaces and induction furnace in SSI sector (on going)	2.20
34	Preparation of COINDS for pickling industries and development of environmental standards	5.00
35	Revision of COINDS for starch industries and development of environmental standards	7.00
36	Pollution control Guidelines and Standards for re-rolling industries (on going)	5.00
37	Development of Guidelines and Standards for plywood industry (on going)	5.00
38	Environmentally Sustainable Production Capacity for Certain SSI Sector (new)	5.00
39	COINDS for Food Processing Industries (new)	5.00
40	Finalisation of COINDS for Secondary Lead Processing industries (new)	1.00
41	COINDS for paint manufacturing industries (new)	5.00
42	COINDS for brick kilns (new)	8.00
43	COINDS for hot mix plant (new)	5.00
44	Promotion of cleaner productions in electroplating industries (new)	5.00
45	Development of environmental standards and COINDS for glue and gelatin industry	1.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
46	Development of COINDS for activated carbon manufacturing industries	5.00
Sub-total		86.80
Project Head-VI : Pollution Control Enforcement		
28	CREP implementation for Tannery Sector (on going)	—
29	Demonstration of a model unit on implementation of standard in stone crusher (New)	5.00
30	COINDS for electroplating industries	2.00
31	Quantification of pollution load from SSI	1.00
32	Environmental Management in Beehive Coke Oven	7.00
Sub-total		15.00
Project-VII : (Pollution Control Technology)		
11	Evaluation and improvements in design of clamp kiln (on going)	5.00
12	Demonstration plant for natural gas based brick kilns (on going)	10.00
13	Inventorisation of SSI units (through SPCB's)	20.00
14	Cost-benefit analysis and utilization of dust from stone crusher unit/cluster (new)	5.00
15	Demonstration Plant for Recovery of Chromium from Leather Shavings	5.00
16	Green House Gas Emissions Accounting in SSI units	2.00
17	Development of environmental standards for poultry farms	0.30
Sub-total		47.30
Grand Total		149.10

7.7 Urban Pollution Control Division : Project –VI

Scheme No.	Schemes	Allocations (Rs. in Lakh)
33	Spatial Environmental Planning Programme (on going) and Remote Sensing in Assessment of Pollution (new)	50.00 (RE:100.00)



Scheme No.	Schemes	Allocations (Rs. in Lakh)
34	Eco city programme (on going)	30.00 (RE:70.00)
Sub-total		80.00
35	Ambient Air Quality Status of Kolkata with reference to Ozone, VOC's Aldehydes	17.00
36	Assessment of Aldehydes, Ketones and Methane emissions in Vehicle exhaust, using different fuels (Petrol, Diesel, LPG, CNG, Ethanol in Petrol, Biodiesel and Hythane)	25.00
37	Performance evaluation of Catalytic converter in On Road Vehicles	25.00
38	Auditing of PUC centers in ZO of CPCB	6.00
39	Nation-wide assessment of vehicular pollution control measures	20.00
Sub-total		93.00
Grand Total		173.00

7.8 Pollution Control Planning Division: PCP -Project –VI

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-VI : Pollution Control Enforcement		
40	Co-ordination with SPCBs including assistance for subject specific programmes (on going)	80.25 (RE : 150.00)
41	Office co-ordination (including Parliamentary matter, salaries of Directors, Additional Directors, ESS Staff, scientific and technical staff of projects office infrastructure/ furniture, stationery to finance, administration and legal enforcement charges (on going))	118.00 (RE : 100.00)
42	Construction of Zonal Office building (on going)	24.00 (RE : 100.00)
Sub-total		222.25
Municipal Solid Waste Management (MSW)		
43	Implementation of MSW Rules, 2000, Demons-tration Projects and specific programmes (on going)	50.00 (RE : 200.00)
Sub-total		50.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Plastics Waste Management (PWM)		
44	Implementation of Plastics Manufacture & Usage (Amendment) Rules, 2003 (demo projects, TCE, Maduari, CIPET, Chennai etc. Salary of JRF, TA/DA, Stationary Charges, Meeting Expenses etc.) (on going)	25.00
45	Assessment of Plastics Wastes Management in Railways & Air ports etc. (payment to RITES + TA/DA) (on going)	6.50
46	Performance study of Plastics Waste Disposal through Plasma Pyrolysis Technology (IPR, Gandhinagar + TA/DA) (on going)	7.00
47	Environment Impact Assessment due to Plastics Waste Disposal etc. (new)	20.00
Sub-total		58.50
Grand Total		334.75

7.9 Building Project :Project Head-VI

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Building Project (P-VI)		
48	Maintenance of Parivesh Bhawan building (on going)	75.00
49	Development and maintenance of lawn & plantation (on going)	3.00
50	Miscellaneous civil work in Parivesh Bhawan (on going)	5.00
51	Renovation of toilets in administrative wing (on going)	10.00
52	Renovation of staircase, lift, lobby area and reception (on going)	5.00
53	Construction of security guard cabin and renovation of drivers' room at on the ground floor	3.00
54	Renovation of library, including double glazed windows	10.00
55	Complete road repairing in front and car parking side	5.00
56	MS grill work on the Boundary Wall of Parivesh Bhawan	2.00
57	Supply and fixing of three phase new cable from substation to each floor for normal power supply	3.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
58	Replacement of 250 Amps FB Type three phase in LT Panel in the sub-station	1.00
59	Implementation of energy audit recommendations like conversion of high energy consuming lights with energy saving lights such as CFL etc. (on going)	3.00
60	Replacement of 02 nos. of exiting elevators of Olympus make (on going)	3.00
61	Installation of New Silent DG Sets (500 KVA & 320 KVA) (on going) - misc. expenses	10.00
62	Modernization of Fire Fighting and Detection System at Parivesh Bhawan (on going)	8.00
63	Re-cabling of all intercom and direct telephone lines	2.00
64	Fuel, maintenance and hiring/running of vehicles	40.00
65	Replacement one vehicle for monitoring	8.00
Total		196.00

7.10 Training : Project Head-IV

Scheme No.	Schemes	Allocations (Rs. in Lakh)
1	Training (on going)	70.00
2	Ecomark (on going)	0.50
3	Design, development and implementation of Integrated Environmental Management Systems in CPCB premises (New)	2.00
Total		72.50

7.11 PR, Hindi Section: Project Head –VIII

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Mass Awareness, Publications & NGO Activities		
1	Exhibitions/ Workshops/ Mass Awareness Activities (on going)	4.00
2	Advertisements (on going)	12.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
3	CPCB Publications (theme based Parivesh Newsletters) (on going)	25.00
4	Infrastructure Development & Salary of ENVIS Staff (on going)	10.00
5	Official Meetings expenses (on going)	4.00
6	Coordinating with SPCBs for study on the methods and effects of various Mass Awareness Programmes organized by SPCBs (on going)	2.00
7	Implementation of Rajbhasha (on going)	4.00
Total		61.00

7.12 AS Section (Project Head –VI, VIII)

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-VI Pollution Control Enforcement		
66	National level & regional level conference of Chairmen & Member Secretaries of CPCB/ SPCBs/PCCs	6.00
67	Staff salary (one DEO)	2.00
68	Board Meetings, including TA/DA of members	8.00
69	Redressal of public complaints	0.50
70	Follow-up of corporate responsibility for Environmental Protection (CREP)	0.50
71	Application received under Right to Information Act (processing etc.)	1.00
Sub-total		18.00
Project Head-VIII Mass Awareness, Publications & NGO Activities		
8	Financial assistance to NGOs for conducting programmes on Abatement of Pollution & Community Action Programme	2.00
9	Training programme for NGOs on prevention & control of pollution	4.00
10	Interaction meet with NGOs	3.00
Sub-total		9.00
Grand Total		27.00

**7.13 Computer Section: Project Head-V(A)**

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-V (A) Computer Division		
1	Operation, Maintenance & Strengthening of Computer Network (on going)	30.00
2	Environmental Data Bank (on going)	5.00
3	On-line access of emission data from major industries (on going)	10.00
4	Intra Portal of Central Pollution Control Board	3.00
5	Real time data transmission from Continuous Air Quality Monitoring Stations of Delhi to CPCB's website (on going)	10.00
6	Website maintenance and updation	2.00
7	Development of computerized system for streamlining the process for inspection of industries and follow-up actions	5.00
Total		65.00

7.14 Library: Project Head -V (B)

Scheme No.	Schemes	Allocations (Rs. in Lakh)
1	Purchase of books, newspapers and magazines	5.00
2	Subscription to journals and periodicals	5.00
3	Renovation of the library	4.00
4	Automation of library	2.00
5	Furniture for library	1.00
6	Binding of journals and damaged publications	1.00
7	Security at the entrance of the library (on going)	0.20
Total		18.20

7.15 Hazardous Waste Management Division : Project Head -IX

Scheme No.	Schemes	Allocations (Rs. in Lakh)
1	Implementation of Hon'ble Supreme Court Directives on Management of Hazardous Waste and related activities	10.00
2	Organization of Regional Trainings or Workshops for the officials of Pollution Control Boards on HW Dumpsites and Remediation of HW Dumpsites	5.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
3	Review of assessment of HW Dumpsites and Review of rehabilitation plans of the HW Dumpsites and related matters	5.00
4	Development of guidelines and evolving criteria for remediation of contaminated sites	15.00
5	Performance Evaluation of Hazardous Waste Treatment, Storage and Disposal Facilities	2.00
6	Identification of hazardous waste streams, their characterization and waste minimization options iron & steel, aluminium, sodium dichromate and Galvanising sector (on going)	0.60
7.	Identification of hazardous waste streams, their characterization and waste minimization options in selected small scale sectors (Textile, Dyeing, hardening of steel through PPCB (on going))	0.60
8.	Registration of the HW recycling/ reprocessing/ re-refining industries and related activities	15.00
9.	Environmentally sound technologies for E-waste recycling	3.00
10	Chracterization of residue and spent clay generated from used oil re-refining (on going)	8.00
11	Inspection of Health Care and Bio medical/ Waste Treatment Facilities	1.00
12	Monitoring of the implementation of BMW Rules in Health Care facilities	2.00
13	Evaluation of state-of-the-art treatment technologies for Bio-medical waste management	1.00
14	Organization / sponsoring of programmes on Bio-medical waste management	2.00
15	Implementation of Battery Rules (on going)	5.50
16	Updating manual on 'sampling, analysis & characterization of HW'	5.00
17	Waste identification, characterization, minimization and management in Hazardous Waste (Schedule 4 items, used oil and waste oil) recycling units	25.00
18	Solidification stablization of HW	20.00
Total		125.70



8 - Plans & Programmes of Zonal Offices for 2008-09

8.1 Zonal Office - Bangalore

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-I : Pollution Assessment Survey & Monitoring		
1	Aquaculture monitoring in Southern Zone	1.00
2	Surveillance of NAMP Stations (on going)	0.50
3	Surveillance of NWMP Stations (on going)	0.50
4	Monitoring of Inter-state river water quality in Southern Zone	1.50
5	Monitoring in respect of pesticides and tri-halo methane in drinking water sources in Bangalore (on going)	6.00
6	Studies on spatial and temporal distribution of Ambient Ozone in Bangalore	3.00
7	Networking of CAAQM (Continuous Ambient Air Quality Monitoring) stations in Bangalore and Chennai along with State Board stations through EDB	2.50
8	Groundwater Quality Monitoring and Modeling for reparation and remediation in Ranipet, Tamil Nadu (on going)	6.00
9	Chemical characterization of Ambient Particulate matters using IC/GC in major cities of Southern Zone	3.00
10	VOC and PAH in urban environment	(RE: 2.00)
11	Monitoring of Lakes in Bangalore	(RE: 1.00)
Sub-total		24.00
Project Head-II : Laboratory Management		
12	Operation and Maintenance of mobile lab (on going)	2.00
13	Development of Infrastructure at new building	90.00
14	Development of facilities for bio-assay test and toxicity analysis of industrial effluent (on going)	2.00
15	Calibration of instruments & equipment and procurement of reference materials (on going)	5.00
16	Activities related to NABL accreditation (on going)	1.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
17	Stationary Lab Operation and Maintenance and Procurement of Instruments	(RE: 25.00)
18	VOC, PAH monitoring facilities at ZO-Bangalore, (procurement of GC/MS with ATD and P & T and other accessory)	(RE: 75.00)
Sub-total		100.00
Project Head-IV : Training		
19	Organizing training for handling/ interpretation/ operation & maintenance of CAAQM stations	1.50
20	Organizing training for officials in conducting AQC/ Proficiency test	2.00
21	Review-cum-training meeting of NAMP, NWMP & EDB	1.00
22	HAPs monitoring, collection and data interpretation	(RE: 3.00)
Sub-total		4.50
Project Head-V : (A) Information (Database Management)		
23	Procurement of computer system and its peripherals, AMC and Local Area Networking (on going)	3.00
Sub-total		3.00
Project Head-V : (B) Library		
24	Development of library & infrastructure, including procurement of international journals books, etc.(on going)	1.00
Sub-total		1.00
Project Head-VI : Pollution Control Enforcement		
25	Verification of compliance of standards in identified categories of industries, in-depth studies in critically polluted areas of Andhra Pradesh, Karnataka, Tamil Nadu and Kerala.	4.00
26	Payment towards electricity, water, rent, salary for project staff (on going)	60.00 (RE: 25.00)
27	Follow-up of Court Directions (on going)	2.50
28	Inspection and Documentation of Municipal Solid Waste Dumping Land-fill Site	2.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
29	Monitoring of STP, CETP, TSDF and CBMWTF for verification of compliance in problem areas (on going)	5.00
30	Infrastructure development of hazardous wastes analysis and its management (on going)	5.00
31	Reject management for plants in Tirupur, Erode and Ranipet	5.00
32	Documentation of TSDF facilities in Southern Zone	1.00
33	Assessment of Hazardous Air Pollutants (HAP) in bulk drug units	5.00
34	Monitoring of Steel Mills in Palakad, Kerala	0.50
35	DEWAT Systems monitoring (on going)	0.50
36	Monitoring of Ambient Noise levels in Bangalore during Deepawali time (on going)	1.00
37	VOC studies in Important Industrial Estates, HAP monitoring and assessment	10.00
38	Inventorisation and verification of fish processing units, waste water and solid waste treatment facilities available in the identified units	1.00
	Sub-total	102.50
	Project Head-VIII : Mass Awareness, Publications & NGO Activities	
39	Organizing Mass Awareness Programmes in High Schools and Pre-University Colleges and public places (on going)	1.00
	Sub-total	1.00
	Grand Total	236.00

8.2 Zonal Office - Bhopal

Scheme No.	Schemes	Allocations (Rs. in Lakh)
	Project Head-I : Pollution Assessment Survey & Monitoring	
1	Surveillance of ambient air and water quality monitoring stations under NAMP/NWMP (on going)	2.50
2	Monitoring of air quality in Bhopal for reporting to TV (on going)	2.50

Scheme No.	Schemes	Allocations (Rs. in Lakh)
3	Groundwater quality monitoring, including heavy metals in selected regions of Madhya Pradesh	1.30
4	Inventorization and assessment of pollution load in Bhilwara Industrial Area, Rajasthan	1.50
5	Environmental Status Report of Raipur Siltara District (Chhattisgarh State)	1.50
Sub-total		9.30
Project Head-II : Laboratory Management		
6	Development of laboratory and monitoring facilities including operation & maintenance of existing laboratory, including payment towards rent, electricity, security (on going)	34.00
7	Operation & maintenance of surveillance vehicle (on going)	0.30
8	Development of facilities for monitoring of PM _{2.5}	1.80
Sub-total		36.10
Project Head-IV : Training		
9	Nomination of Officers/Staff for training/workshops (on going)	1.00
Sub-total		1.00
Project Head-V (A) : Information (Database) Management		
10	Development of computer and other facilities and operation & maintenance of existing computers (on going)	1.00
Sub-total		1.00
Project Head-V (B) : Library		
11	Development of library, subscription of journals and purchase of CDs (on going)	1.50
Sub-total		1.50
Project Head-VI : Pollution Control Enforcement		
12	Pollution Control Enforcement in depth studies in polluted areas of Rajasthan, Chhattisgarh, Madhya Pradesh, including the salary of the officers, telephone charges (on going)	18.00
13	Monitoring of STPs, CETPs, TSDFs and CBMWTFs for verification of compliance status	2.50



Scheme No.	Schemes	Allocations (Rs. in Lakh)
14	Joint inspection of 17 categories of industries with RoS, MoEF (on going)	1.00
15	Visit to industries for verification of application for “ Actual User” registration (on going)	1.00
16	Study the presence of Heavy Metal & Pesticides in soft drinks industries in Central Zone (on going)	0.60
17	Compliance the status of implementation of Battery Rules, Plastic Rules and e-waste in Central Zone	1.50
18	Performance evaluation of Captive Secured Landfill Sites in Central Zone	1.50
19	Assessment of progress of projects executed by SPCBs with financial assistance from CPCB in Central Zone	1.00
20	Updation of list of 17 categories of highly polluting industries in Central Zone	1.00
Sub-total		28.10
Project Head-VIII : Mass Awareness, Publications & NGO Activities		
21	a) Assessment of water quality during festival time of Ganesh Chaturthi and Durga Puja due to immersion of idols	0.40
	b) Mass awareness among children about ill effects of crackers during Diwali	0.60
Sub-total		1.00
Grand Total		78.00

8.3 Zonal Office - Kolkata

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-I : Pollution Assessment Survey & Monitoring		
1	Monitoring of ground water in Arsenic and Fluoride effected areas in Eastern Part of India (on going)	0.50
2	Ambient air quality monitoring in selected towns in terms of PAH, Metals and Ion (on going)	0.50

Scheme No.	Schemes	Allocations (Rs. in Lakh)
3	Studies on environmental status of coastal aquaculture including Effluent Treatment System in West Bengal & Orissa (on going)	0.30
4	Surveillance of air and water quality monitoring stations	2.50
5	O & M of air quality monitoring at Canning under Male Declaration (on going)	4.50
6	Inter-state river monitoring (on going)	2.00
7	Assessment of residual pesticide in Tea Gardens of North Bengal and its impact on agricultural field and surface run off (on going)	0.50
8	Inventory and in-depth studies of red categories of industries (on going)	1.25
9	Studies of coal mining activities in Angul-Talcher area / Dhanbad Jharia area	2.00
10	In-depth study of polluted river stretch of river Brahmani in Orissa (on going)	1.00
11	Studies of HAP in coke oven plants (Central sponsored project)	1.00
Sub-total		16.05
Project Head-II : Lab Management		
12	Strengthening, O & M of laboratory including procurement of sophisticated lab equipment for trace organic lab (on going)	65.00
13	Procurement of chemicals, glassware & filter paper etc. (on going)	6.00
Sub-total		71.00
Project Head-IV : Training		
14	Nomination for training programmes / workshops etc. (on going)	2.00
15	Mass awareness programmes (on going)	1.00
Sub-total		3.00
Project Head-V : (A) Information (Database) Management		
16	Database management (on going)	3.00
Sub-total		3.00



Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-V : (B) Library		
17	Development of library (on going)	0.50
Sub-total		0.50
Project Head-VI : Pollution Control Enforcement		
18	ESS and related activities like performance of TSDF, CBMWTF, STP, CETPs, salaries etc. (on going)	40.00
19	Running and maintenance of vehicles in execution of plan activities (on going)	3.00
20	Renovation of old office at Tollygunge for making it Guest House and Community Hall	20.00
Sub-total		63.00
Grand Total		156.55

8.4 Zonal Office - Lucknow

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-I : Pollution Assessment Survey & Monitoring		
1	Operation and maintenance of Ambient Air Quality Monitoring (AAQM) at Vikas Nagar, Kanpur (IIT Kanpur Project)	8.00
2	Operation and Maintenance of Ambient Air Quality Monitoring at: Lucknow	1.00
3	Characterization of PM ₁₀ , PM _{2.5} and Benzene Soluble Fraction in Lucknow city	1.00
4	Inspection of NAMP and MINARS station located in North Zone	1.00
Sub-total		11.00
Project Head-II : Laboratory Management		
5	Lab operation and maintenance	25.00
6	Operation and monitoring vehicle	3.00
7	Development of facilities for analysis of Hazardous Air Pollutants	2.00
Sub-total		30.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-V : (A) Information (Database) Management		
8	Information (Data Base) Management	3.00
Sub-total		3.00
Project Head-V : (B) Library		
9	Library development	1.00
Sub-total		1.00
Project Head-VI : Pollution Control Enforcement		
10	Pollution assessment from Agro-based units (Paper Distillery) along with performance evaluation of new treatment technologies adopted by industries	1.50
11	ESS/Joint Monitoring with MoEF & public complaints studies in critically polluted areas of U.P., Uttaranchal, Haryana & Punjab	7.00
12	Monitoring of common facilities STP, CETP, CBMWFT, TSDF monitoring in North Zone	3.00
13	Maintenance of office building	8.00
14	Salary of Scientific & Technical Officers	42.00
15	Introduction & Implementation of de-cluttering practices for environmental quality improvement	1.00
16	Development of Networking facility for online data linking of one industry/CETP at pilot scale	2.00
17	Environmental Quality Monitoring in Singrauli Area	7.00
18	Pollution assessment in few selected Pharma Units unit in North Zone	1.00
Sub-total		72.50
Grand Total		117.50
Project Office - Agra		
1	Operation & Maintenance of 4 Ambient Air Quality Monitoring Stations in Agra	30.00
2	Aerosol Profile in PM ₁₀ & PM _{2.5}	3.00
3	Ambient Air Quality in TTZ	3.00
4	Operation & Maintenance of BAM & SODAR	4.00
5	Purchase of one Noise level Meter with computer accessories	5.00
6	Training	0.50



Scheme No.	Schemes	Allocations (Rs. in Lakh)
7	Data Base Management at Agra Office	1.75
8	Development of Library, purchase of Journals, Newspapers, Books	0.25
9	ESS Implementations Public complaints, Parliament questions, interaction, with local Govt./meetings inspections and Rajbhasha	4.00
10	Mass Awareness activities	2.00
	Sub-total	53.50
	Grand Total	171.00

8.5 Zonal Office - Shillong

Scheme No.	Schemes	Allocations (Rs. in Lakh)
	Project Head-I : Pollution Assessment Survey & Monitoring	
1	Co-ordination with State Boards (including visit) regarding strengthening & implementation of various Rules/Regulations; Surveillance of NAMP and WQM (on going)	0.50
2	Status of Ground Water/Supply water quality in major cities of North Eastern (NE) India	0.50
3	Hazardous Wastes Recycles and Random Cross Checking of HW generating industries in NE States as per Hon'ble SC direction	1.00
4	Water quality assessment in major international/inter-state boundary river, polluting river stretches and lakes in the NE region	1.00
5	Performance Studies of CBMWTF and also BMWTF in North Eastern (NE) States	0.50
6	Studies on Status of Environment in Barnihat and Uranium Industrial Estates of Meghalya	1.00
7	Status of MSW Management in Assam	1.00
8	Environmental Status of Major Automobile Workshops in the North Eastern Region	1.00
9	Impact of Jhum Cultivation on Ambient Air Quality in Assam-Nagaland-Arunachal Pradesh	0.50
10	Environmental Status of Oil and Gas Drilling Areas in Assam, Arunachal Pradesh and Tripura	0.50
	Sub-total	7.50

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-II : Laboratory Management		
11	Strengthening and Development of Laboratory (including rent for lab building and new Lab furniture for laboratory)	15.00
12	Operation and maintenance of laboratory, including salary of JRF and security personnel	9.00
Sub-total		24.00
Project Head-IV : Training		
13	Nomination for training/workshop	1.00
Sub-total		1.00
Project Head-V : (A) Information (Database) Management		
14	Database management	1.00
Sub-total		1.00
Project Head-V : (B) Library		
15	Development of library (Purchase of books, periodicals etc.)	0.50
Sub-total		0.50
Project Head-VI : Pollution Control Enforcement		
16	ESS and other Related Activities (Surprise Inspection, Public Complaints, CREP Compliance, Joint Inspection with MoEF)	15.00
17	Monitoring, implementation of MSW mega-projects in NE States; assessment of environmental quality in dumping areas	5.00
18	Running and maintenance of monitoring vehicle	1.00
Sub-total		21.00
Project Head-VIII : Mass Awareness, Publications & NGO Activities		
19	Organizing Mass Awareness Programmes /Training for the Teachers of Degree Colleges/ High Schools	1.00
Sub-total		1.00
Grand Total		56.00



8.6 Zonal Office -Vadodara

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-I : Pollution Assessment Survey & Monitoring		
1	Surveillance of water quality and ambient air quality monitoring stations	0.50
2	Inter-state river monitoring in Gujarat and Maharashtra	1.50
3	Studies of ground water quality around common secured landfill sites in Gujarat and Maharashtra (new)	2.50
4	Performance studies of CETPs, TSDF/CBMWTF and STPs in Gujarat and Maharashtra (new)	2.50
5	Performance studies of CBMWTF and common incinerators in Gujarat and Maharashtra (new)	0.50
6	Status of Environment in Western Coalfields in Vidarbha Region of Maharashtra State (on going)	8.00
7	Inventory & Environmental status around industries located in Non-confirming Agricultural areas of Gujarat state (on going)	1.00
8	Assessment of Fluoride contamination in groundwater in Mehasana District of Gujarat (new)	2.00
9	Assessment of status of Environment in Jamnagar area in Gujarat state	2.50
10	Assessment of Environmental status in Alang Ship Breaking Yard, Alang, Bhavnagar (new)	1.00
11	DOD sponsored project on Land Base Sources of Pollution to the Coastal Waters (new)	—
Sub-total		22.00
Project Head-II : Laboratory Management		
12	Strengthening, operation & maintenance of laboratory and office	70.00
13	Annual maintenance contracts of instruments	3.00
14	Running and maintenance of vehicles	3.00
Sub-total		76.00

Scheme No.	Schemes	Allocations (Rs. in Lakh)
Project Head-IV : Training		
15	Nomination of officials for attending the training programmes	1.00
	Sub-total	1.00
Project Head-V (A) : Data Base Management		
16	Upgradation of Data Base Management, updating of existing computers, comprehensive annual maintenance contract, etc. (new)	3.00
	Sub-total	3.00
Project Head-V (B) : Library		
17	Development of library (new)	0.50
	Sub-total	0.50
Project Head-VI : Pollution Control Enforcement		
18	ESS programmes, including salaries and public complaints and indepth studies indepth studiesin critically polluted areas of Gujarat & Maharashtra	50.00
	Sub-total	50.00
Project Head-VIII : Mass Awareness, Publications & NGO Activities		
19	Mass Awareness Programmes including organizing training programmes for teachers, and awareness programmes for school children	1.00
	Sub-total	1.00
Project Head-IX : Hazardous Waste Management		
20	Registration of hazardous waste recycling industries (new)	1.00
	Sub-total	1.00
	Grand Total	154.50

Note: Outlays in parenthesis indicate additional requirement during Revised Estimate (RE) stage.