

INDIA
Capacity Building for Industrial Pollution Management Project
Third Implementation Review Mission: June 18 - 29, 2012

Aide Mémoire

I. Introduction and Objectives

1. The third Implementation Review mission of this project was undertaken over the period June 18-29, 2012 which included discussions with the Ministry of Environment and Forests (MoEF), Pollution Control Boards of Andhra Pradesh and West Bengal (APPCB and WBPCB respectively), field visits to some of the pilot sites and meetings with key stakeholders and remediation design consultants.

2. The objectives of the mission were to: (i) review overall status of implementation, since last review mission; (ii) discuss findings of detailed investigations of the pilot sites; (iii) assess implementation of social and communication activities around pilot sites; and (iv) review financial management and procurement activities and disbursement status.

3. Wrap-up meetings were held with the Dr. Chatterjee, Secretary, MoEF, Dr. Sudarshan Ghoshdastidar, H.E. Minister of State for Environment, Mr. R.P.S.Kahalon, Principal Secretary Environment, Government of West Bengal, Mr. M. Samuel, Special Chief Secretary and Mr. B.S.S. Prasad, Special Secretary, Environment, Government of Andhra Pradesh, Chairpersons of WBPCB and APPCB and the Department of Economic Affairs (DEA)

4. The *Aide Memoire* summarizes the discussions and agreed next steps. The World Bank project mission team¹ wishes to thank the officials from MoEF and the Governments of Andhra Pradesh and West Bengal for their support, commitment and cooperation. The list of people met during the mission is presented in Annex I.

II. Key Project Data

Project Data		Project Performance Ratings		
Board Approval:	3 June 2010	<i>Summary Ratings:</i>	<i>Last</i>	<i>Now</i>
Effectiveness Date:	13 October 2010			
Original Closing Date:	30 September 2015	Achievement of Project Development Objectives	MS	S
MTR Date:	30 June 2013	Implementation Progress	S	S
Original Grant Amount:	\$ 64.15m			
Amount Disbursed:	\$ 5.6m			

¹ Ruma Tavorath (Sr. Environment Specialist, TTL), A.S.Harinath (Environment Specialist, co-TTL), Sangeeta Kumari (Social Development Specialist), Wolfhart Pohl (Sr. Environment Specialist, ECA), Abhishek Pruthy (FM Consultant), Anupriya Kataria (FM Analyst) Swayamsiddha Mohanty (Procurement Specialist) and Anita Dawar (Program Assistant). Sanjay Srivastava, (Regional Safeguards Coordinator) joined for selected field visits and Subrata Barman (Sr. Operations Officer, IFC) joined in discussions on ewaste.

III. Project Development Objectives

5. The *development objective* of the project is to build capacity in selected state agencies for undertaking environmentally sound remediation of polluted sites and support the Government of India in the development of a National Program for Rehabilitation of Polluted Sites (NPRPS). All the three consultancy studies required for the development of NPRPS have been initiated and various options for the NPRPS are expected by early 2013. The performance of the project to achieve the PDO is rated as satisfactory.

IV. Current Implementation Progress

6. Project implementation has gathered momentum over the past six months and the MoEF and state level Project Implementation Units (PIUs) have initiated and mostly completed all the key procurement activities related to detailed assessment of remediation pilots and technical studies. The mission rates implementation progress over the past six months as Satisfactory. The sections below detail critical issues and actions agreed with each individual implementing agency. Detailed reports on physical and financial progress were received from both states and MoEF (attached as Annexes VI-VIII). A list of agreed actions is detailed in Annex II.

IV (A) MoEF:

National Program for the Rehabilitation of Polluted Sites (NPRPS):

7. Three consulting firms have been contracted during April - May, 2012 by MOEF, for the three base studies on (i) preparation of NPRPS (ii) development of methodologies and (iii) carrying out the inventory of polluted sites, for the development of the NPRPS. The three consulting firms presented their inception reports during technical sessions organized by MOEF and a roundtable discussion with the technical experts from Technical Evaluation Panel (TEP), Central Pollution Control Board (CPCB) and the two state Pollution Control Boards (PCBs).

8. *Study on Inventorization and mapping:* The mission emphasized the need to reach an early agreement (by end July, 2012) on a 'workable definition of polluted sites' between all the three consultants and the MoEF. This will enable the consultants to progress on the subsequent steps, and the definition may be refined subsequently, depending on the findings of the study. The mission also requests MoEF to ensure that the data formats of inventory are modified to reflect the characteristics of Indian conditions and the consultants follow a structured approach to the inventory, rather than simply collecting information from state PCBs and various other secondary sources. Such an approach could form the basis for future updating of the inventory of polluted sites by MoEF, CPCB and state PCBs, while implementing the NPRPS.

9. *Development of methodologies:* The draft structure of the methodological approach to be included in NPRPS was presented at the technical discussions. While the structure looks comprehensive, it will be useful if the consultants review the structures followed in various countries and share sample documents prior to recommendation of any specific structure. The mission also reiterated the need to recommend specific technologies for remediation of typical contaminated sites (chrome, mercury, lead, POPs, etc.), along with broad cost

estimates. These costs shall be used by the NPRPS consultants for estimation of total funding requirement and financial model for the implementation of NPRPS.

10. *Review of policy, financial and institutions and development of the NPRPS:* A key recommendation for this study is that the consultant needs to shift focus towards the specific requirements for the regulatory authorities (both at GoI and state level) regarding laws, provisions and regulations that enables effective enforcement to prevent formation of hazardous waste contaminated sites and implementation of remediation plan in already contaminated sites. The legal analysis needs to focus on a thorough review of laws on environment, water, groundwater, hazardous waste etc., but also other legislations that might contain provisions that can be used for enforcement of pollution management (on land, land use planning, construction codes, industrial acts, etc.). A clear and well-functioning linkage should be established between the study and resulting recommendations for the NPRPS and the actual cases and pilots projects implemented by the state PCBs. The consultant firm has been requested to assemble a more cohesive team which includes all key members, as required in the Terms of Reference. Detailed comments on all three studies have been shared with MOEF.

Training:

11. The organization of the national training on cost-benefit analysis of remediation processes was assigned to the Administrative Staff College of India (ASCI) and successfully completed in February 2012. Technical experts were invited from USEPA, Blacksmith Institute, the Netherlands and from ASCI. The 5 day workshop was well attended by participants from CPCB, and various state PCBs. The training sessions focused on tools and techniques of site characterization, remediation technologies, risk management strategies, specific case studies with reference to heavy metal contamination and a field visit to a TSDF² site.

12. The international study tour organized by MoEF and executed by ASCI, in collaboration with USEPA was successfully completed in April 2012. The project team visited a number of completed and ongoing remediation sites, laboratory facilities and also spent considerable time discussing with USEPA experts. During the study tour, the consultant team gave a presentation on detailed investigation findings of NMK Lake to technical experts at the World Bank office in Washington DC.

13. The mission team had a brief discussion about the next set of training to be conducted by MoEF in FY13 and it was agreed that this needs to be further discussed with the training expert group. MoEF could also consider consulting external training experts for further ideas.

14. The mission team and MoEF discussed and agreed to revisit the monitoring indicators of the project since quantifiable and distinct targets are essential for project evaluation. As revision of project monitoring indicators requires a restructuring, it was agreed that MoEF will send an appropriate formal request to the Bank, through the DEA. During the restructuring, consideration could also be given to changing the project name to make it aligned with the project objectives and activities as highlighted in many high level policy discussions earlier.

Institutional Issues:

² Treatment, Storage and Disposal Facilities

15. The mission pointed out the need for strengthening technical capacity of the project team at MoEF, especially for stringent management and evaluation of the 3 base studies of the NPRPS and provision of necessary technical guidance for the implementation of pilot projects in the states. While expertise is sourced in from CPCB and the two states, this constraint needs to be addressed and MoEF is in the process of hiring experts in hazardous waste and municipal solid waste. It was agreed that the process of hiring will be completed by August 2012.

16. The mission discussed the possible shared institutional structure with MoEF and CPCB for managing the CBIPM project (implemented by MoEF) and the national program for remediation funded under the National Clean Energy Fund (implemented by CPCB) with the Secretary MoEF and the Chairman CPCB. Such cooperation would be mutually beneficial and will address the need for technical expertise for the project and ensure knowledge sharing besides program support to NCEF and allow uniformity in implementation between project and program. The mission anticipates a decision on these modalities prior to the departure of the Project Director in September 2012.

17. MoEF has reconstituted the Technical Evaluation Panel (TEP) in November 2011 for providing technical advice and quality review of all key documents related to the project. The mission requested MoEF to organize more regular meetings of the TEP so that they can provide technical inputs and guidance to NPRPS baseline studies and the investigation studies and proposed remedial action plans for the four pilot sites.

18. The mission was informed that the capacity building plans have been approved by the Secretary MoEF who is the Chairman of the Project Oversight Committee. The next POC meeting is expected to be organized soon since considerable implementation progress has been made in the past year.

19. The mission team notes that the project needs to strengthen the disclosure requirements for procurement, environment and social safeguards and Financial Management activities. Specific actions are detailed in the respective sections, which will need to be implemented expeditiously.

IV (B) Andhra Pradesh:

20. The investment component related to remediation activities for the two pilot sites is progressing satisfactorily. Detailed investigation of sites is being undertaken by the consulting firms, and detailed issues related to each site are presented below:

Pilot site: Noor Mohammad Kunta Lake (NMK):

21. The mission undertook field visit to the NMK Lake site and APPCB presented the progress of investigations and studies, which appear satisfactory. APPCB has completed the inventory of 320 industries in the Katedan Industrial Area (KIE), which is classified according to products, status of authorization, and verification of their solid, liquid and hazardous waste disposal methods. The main contaminant in the upper soil layers of the KIE is lead while the lake water shows high BOD and COD levels, as expected from the substantial sewage discharge. Sediment samples from the lake and downstream drainage system reflect elevated heavy metal contents of the surrounding soils, with lead being the contaminant with the

highest concentrations. APPCB observed the presence of aromatic hydrocarbons from the analysis results of the ground water in the south-west corner of the KIE area. It was proposed that APPCB will monitor the residential colony near this area as it is outside the scope of the project. Depending upon the groundwater sample results APPCB may inform the local residents on the contamination level and its use restrictions if any, to be followed through legal /regulatory advice (including notice boards) to the concerned water supply department and communities. The consultant team is expected to complete the investigations and propose a menu of remedial options by end of July. More detailed comments on the technical aspects of the pilot project are provided in Annex III.

22. The APPCB has been consistently following-up with all key stakeholders³ to ensure that they fulfill their obligations, which are prerequisites for execution of remediation works. One major agreement that has been reached between all key stakeholders is that the remediation efforts should result in cleaning up the NMK Lake to irrigation standards. In addition (i) the HMDA has agreed to maintain the existing 4mld sewage treatment plant (STP) at current standards; (ii) APIIC has initiated actions for one-time clean up and implementation of door-to-door collection of solid waste; (iii) The final drawings for fencing of the lake are under preparation by the consultants after discussions with the irrigation department and APPCB;(iv) APIIC is also constructing storm water drains, although the final outlet point of these drains has not been finalized. Further APPCB needs to obtain necessary permissions from relevant government departments for utilizing the adjoining open land for the construction activities / facilities during the implementation of remediation works (dredging, dewatering, and staging the solid waste) in the NMK area. The APPCB also has suggested the need to assess the waste water flows from another industrial site (Gagan Pahad Industrial area) further upstream of the KIE and domestic sewage from residential areas in the neighborhood of the NMK Lake. This will enable implementation of necessary measures to prevent continued and future contamination of NMK Lake.

23. While many activities have been initiated as committed, the mission notes with concern that there is still continued discussion and no agreement on some of the other major prerequisite actions, such as (i) pretreatment of industrial effluent from the KIE industries, (ii) connection of second drain to the STP and (iii) the financial responsibility of operations and maintenance costs of the STP and the pre-treatment facility by the industries. These were detailed out in the Memorandum of Agreement, which has been signed by the key stakeholders in 2011. The mission flagged this as a critical factor in continued progress of the pilot site, as execution of remediation works will not be able to proceed unless these prerequisites are met.

24. While the remediation plans for NMK is being finalized, the APPCB raised the issue of certification of the quality of civil construction and infrastructural works related to remediation and the lack of engineering expertise with APPCB, as compared to line ministries or departments (irrigation, Public Health, Public Works). It was agreed that APPCB will either hire a civil engineer or related subject specialist as a consultant or seek deputation of engineers from suitable department who will support the project in quality assurance and certification to engineering aspects of the remediation activity. The consultants currently

³ Andhra Pradesh Industrial Infrastructure Corporation Ltd. (APIIC), Hyderabad Metropolitan Development Authority (HMDA), Irrigation Department and Greater Hyderabad Municipal Corporation (GHMC),

working on the preparation of remediation plans will continue to provide supervision support as per the scope of the assignment during the implementation phase of the pilot project.

25. In order to ensure long term sustainability of the lake and prevent future contamination, the mission recommends that GoAP could consider forming a NMK Lake conservation committee with local representatives, NGOs and other stake holders. The mission also recommended that, as part of the ongoing studies, APPCB review the issue of rag pickers in the KIE and explore the option of alternate livelihood such as involving them in the new door to door collection system to be instituted for solid waste management in KIE. This will ensure livelihood support to the vulnerable population in the project area and compliance with the social safeguard policies of the Bank.

Pilot Site: Kadapa Solid waste dumpsite:

26. The consulting firm has completed the detailed site investigation and is in process of preparing the remedial options. While the remedial options are being finalized, the mission recommended that the consultants to recheck and analyze the solid waste samples as per the parameters listed in the Municipal Solid Waste Management (MSW) Rules, Schedule - 2 of Hazardous Waste Management Rules and conduct the geo-technical investigations in the area as per the CPHEEO manual on solid waste management. The mission also reiterated the need to ensure compliance to landfill closure specifications of the MSW Rules and Solid Waste Management Manual and the need for establishment of post-closure monitoring arrangements at the site. For this purpose, the mission advised the consultants and APCB to review similar efforts in Mumbai and other parts of India and incorporate necessary changes in the current project.

27. The mission was informed that although funds have been allocated and land for the alternative landfill site (that would be required in lieu of the current site, which will be remediated in the current project) has been identified and approved by APPCB, the construction of the new landfill has not yet commenced. The Kadapa Municipal Commissioner informed that as per the present plan of action, the new landfill will be operational only by May 2013, which will delay the execution of remediation actions by almost 9 months. In the meanwhile, dumping of waste at the current site is still continuing. The mission raised this as a critical factor in continued progress of the project, as this will not only delay the execution of remediation works but also have financial implications for the supervisory component of the existing contract with investigation consultancy firm. APPCB will inform the Bank and MoEF on way forward and timelines by end July 2012.

28. During presentation by the consultants, suggestion was made to analyze the contamination level of ground water in the nearby areas under residential use/declared as residential under the city development plan. Mission also urged the consultants to assess the number and dependency level of the rag pickers on the existing dumpsite and suggest alternate support options as part of the social impact assessment study.

29. *Social:* APPCB has recruited a social specialist and professional staff to manage the consultations for both pilot sites. The consultation strategy and communication plan, as identified in the approved Environment and Social Management Framework has been substantially delayed. To ensure maximum disclosure and facilities for grievances, it is suggested that APPCB install display boards at strategic locations in the project

implementation area. All the developments of the project need to be uploaded in a timely manner and all grievances must be recorded and monitored regularly. The mission reiterated that proceedings of stakeholder consultations must be well recorded and disclosed for wider feedback. APPCB needs to take steps to make the complaint/feedback mechanisms effective and report the progress on the same as part of periodic progress reports. So far no periodic progress reports on the social aspects with respect to pilot sites have been shared with the Bank.

Laboratory Strengthening:

30. APPCB has procured 4 pieces of equipment⁴ which have been installed, and another 6⁵ which are expected to be procured by August 2012. Instead of building a new lab, APPCB has decided to refurbish the existing laboratory as per the optimal specifications required to house the sophisticated equipment. APPCB needs to synchronize the timing of obtaining the new equipment and repack the equipment already received and store them safely until the new lab is ready. APPCB will also prepare the monitoring indicators format which will help quantitative evaluation of utilization rate and economics of operating and maintaining their own equipment instead of outsourcing. The on-site and international training of lab technicians which was built into the suppliers' contracts is also going on satisfactorily.

Studies:

31. The consultancy for the development of the business strategy for ECAC was awarded in April 2012. A strategic planning workshop was organized during the mission, to discuss the draft vision, goals and objectives of the proposed ECAC in line with Government of AP's requirements. The workshop was well attended by participants from industries, industrial associations and representatives from Pollution Control Boards of Maharashtra, Gujarat and West Bengal.

32. Detailed discussions were held with regard to the proposed studies on Hazardous waste inventorization and forecasting the assimilative and carrying capacity of industrial areas. It was agreed that the latter study will build capacity at APPCB and also enable GoAP to make informed decisions about sustainability of its industrial siting and accurately estimate how many industries can be authorized to operate within specific zones.

33. Discussions were held along with International Finance Corporation (IFC) on a proposed initiative to institute a formalized collection and recycling system for electronic waste in AP. IFC has shared a proposal with APPCB, which details the components related to formalizing the informal sector, awareness generation among various stakeholders and devising mechanisms to encourage producers, recyclers and dismantlers to set up collection centres across the state, This partnership will benefit from the E-Waste Inventory Study that is presently being undertaken under the project.

34. The Project Steering committee has met twice in the last fiscal year and while approving the annual plans, has also been kept informed of significant activities such as shortlists of consultants, agreements with stakeholders and MoA. The APPCB also organized a field visit

⁴ Flash point analyzer, ICP-AES, Gas Chromatograph (GC-MS), Microwave Accelerated reaction systems

⁵ Bomb Calorimeter, X-ray Fluorescence Spectrometer, Solid Waste Extraction Assembly, TCLP apparatus assembly, Isokenetic Stack sampling (VOST) and High Volume Sampler with PUF sampler

to the NMK lake site for the Committee members, along with presentations on the remediation process by the technical consultants.

IV (C) West Bengal:

Institutional Issues:

35. The Project Implementation Unit (PIU) structure within WBPCB continues to have multiple reporting and administrative arrangements. Multiple channels of communication with the Bank have resulted in delays in some approvals and errors in some contractual arrangements. The role and responsibility of the newly recruited Project Coordinator has needs to be clearly defined. The mission requested that focal points for the project and for procurement be clearly designated from WBPCB staff, to ensure consistency of quality, communication and accountability. Overall the mission requested WBPCB to provide an organogram detailing the roles, responsibilities and delegation of authority of PIU.

36. The investment component related to remediation activities for the two pilot sites has been initiated. Preliminary investigations at both sites have commenced by the consulting firms, and detailed issues related to each site are presented below:

Pilot site - Hooghly:

37. The consultant team has completed its preliminary assessment and made a detailed presentation for the mission. An 18km² stretch has been delineated as the study area under the area based approach. Based on preliminary visual, XRF and SPR linkage screenings, the consultant's team has identified 20 potential hot spots, in addition to the original 7 identified during project preparation. Chromium has been determined to be the primary contaminant of concern, along with varying traces of other metals like mercury, zinc, copper, etc. Geophysical investigations which seem to indicate that potential impact at most hot spots appear to be localized and may be restricted to a shallow depth (2-3 below ground level). It was agreed that the consultants will prepare a qualitative analysis of the information collected on the project area and identify the potential contaminated areas/hot spots. Based on these identified areas, the consultants will prepare a Sampling and Analysis Plan and undertake aquifer performance tests in subsequent phase of the detailed investigations, so that the hot spots are identified for implementation of remedial plans. It was agreed that the sampling and analysis plan will be prepared by July 15 and the detailed investigations will be carried out expeditiously.

38. Most of the hotspots found in Hooghly are due to illegal dumping of industrial waste by various chrome chemical manufacturing units that had once flourished in the district of Hooghly but are now all closed except for one. Such dumps, the hazardous waste mud and sludge which was easily and cheaply available have also been used as fillers for reclaiming low lying land and for building access roads to houses and industries in and around the project area. The practice is still prevailing in the area and there is need to enforce restrictions on industries who sell the contaminated waste and contractors who procure and use it. There is also the need to increase awareness of individuals and communities with regard to the potential health and environmental impacts of chromium and heavy metals and their mobilization to deter such practice. The mission urged the WBPCB to take immediate steps to address these issues. It was suggested to design a awareness and mobilization plan for

industries and community around the project area and launch the same by August 31, 2012. The possibility of mobilizing citizen monitors may also be explored.

39. A number of stakeholders need to be involved in this larger pollution prevention and enforcement strategy, including the land authorities, Public Works department, district administration, NGOs, etc. With guidance from the consultants, the WBPCB needs to identify the key public sector stakeholders, define their responsibilities and obtain their formal commitment for current and future activities. The Principal Secretary assured the mission that the GoWB will take up the discussion and ensure agreement at senior levels.

Pilot site - Dhapa:

40. After significant delays, the consultant firm was hired in March 2012 to undertake the detailed site investigation and develop the Remedial Action Plan for the Dhapa dumpsite. The firm made a presentation to the mission team on its methodology and preliminary investigations which have commenced recently.

41. The chemical analyses of the samples recovered during site investigations are ongoing. The mission supports the consultant's recommendation to investigate the possibility of re-mining the dump's material, as this could: (i) generate mineral substrate for cover and structural purposes; and (ii) reduce the dump volume by extracting recyclables, and thus allow shallower slope angles while keeping to the same footprint. The subsequent activities will proceed according to the TOR and to the plan outlined in the consultant's report.

42. The Memorandum of Agreement has been signed between WBPCB and Kolkata Municipal Corporation in April 2011 which formalizes the hand-over of site and also the KMC's consent for the proposed remediation activities. Dumping on the pilot site area, which measures 8.21 hectare, was stopped in April 2009, while waste continues to be dumped in the adjoining 23 hectare area, which is also expected to reach full-capacity in the next 1-2 years. The mission notes that the KMC has not yet started construction of the alternative sanitary landfill due to different issues related to the two potential plots of land which have been identified. The Principal Secretary assured the mission that this issue will be taken up with senior officials of the KMC and concrete actions will be initiated to develop the new sanitary landfill.

Studies:

43. Sector specific study for tannery and chrome chemicals has been initiated recently. The assignment for assessment of contamination and design of Remediation Plan for five contaminated areas has been recently awarded. The mission visited 2 mercury and naphthalene waste generating industries which have been identified as principal sources of pollution in this study. Based on these visits, the mission understands that these sites are not legacy or orphan sites as 4 of the 5 identified polluters are private industries, while one is Government owned; all but one are operational units. Both the sites visited cover a large area with numerous industrial installations and have been under industrial use for several decades, with a seemingly long and complex pollution history. Both sites showed visible evidence of unregulated storage of hazardous substances and hazardous waste and strong indications of pollutants contaminating soil, and possibly groundwater. The mission notes that WBPCB has not initiated a dialogue or agreement with the concerned industry owners for future remedial

actions. Given the potentially high health risk around these sites, the mission agrees to the continuation of this study which will also support WBPCB in capacity building for such area-based investigative studies. However, the key challenge is the administrative and regulatory approach of the WBPCB to ensure action by the polluters (industry owners) towards site characterization, pollution inventory and remediation planning and execution. The mission therefore requests that the following action be initiated immediately by WBPCB:

- Administrative agreement and timelines with the 5 industry owners with regard to financing of the remedial action plans, as approved by WBPCB and TEP, with the understanding that legal action will be resorted to in case of future default in clean-up.

Social:

44. While mitigation and future improvement of environmental and potential health impacts are the primary reasons for this program, direct impacts of heavy metal pollution on health is complex, random and often long-term. WBPCB has recently hired a Social consulting firm to support them in the management of the social and communication aspects of this sensitive activity to prevent wide-spread panic or unreasonable expectations of the community. The consultants are expected to provide the relevant key expertise to review and ensure the quality of the outputs with regard to management of social issues during preparation and implementation of the remediation plans. All consultations carried out under the project must be well documented and disclosed through project websites in the respective states.

Environmental Compliance Assistance Centers (ECAC):

45. The ECAC has been non-functional for the past 8-9 months and was already highlighted during the last mission in October. Considerable funds have been spent on renting premises and procuring equipment and furniture for the ECAC, which is not being utilized effectively. As agreed during mission discussions, WBPCB has submitted a roadmap and a sequential action plan for reactivating the ECAC, including designating the required manpower. This Action Plan now under implementation. The consultancy for the development of business strategy of the ECAC has also been delayed by over 8 months and it is urged that the procurement process be completed by mid August 2012.

46. *Laboratory Strengthening:* WBPCB has procured 4 major pieces of equipment⁶ which are in various stages of installation and another 7 which are expected to be procured and installed by August 2012.

V. Environment

47. As highlighted in the earlier visits, the mission reiterated the need for carrying out environmental assessments of the remedial actions being proposed by the consultants (for all the four pilot sites). These assessments should include the environmental impacts of the proposed remedial activities to be prepared as a separate volume to the detailed assessment and should recommend necessary mitigation and management plans. The EA documents shall also record stakeholder consultations and comply with the safeguard policies of the Bank.

⁶ Flash point analyzer, X-ray Fluorescence Spectrometer, ICP-AES and Bomb Calorimeter Gas Chromatograph (GC-MS), Microwave Accelerated reaction systems

48. One aspect of environment safeguards is the possible lack of access and/or impacts on the graveyard adjoining the NMK Lake either to enter the lake to perform religious rituals or associated activities. The mission advised APPCB to carry out consultations with the local communities on this aspect and include suitable mitigation measures including provision of access or other amenities in the overall remediation strategy.

VI. Social

49. Overall the progress on assessment of social issues for pilot sites and the consultations with primary stakeholders has been slow. The mission urged the WBPCB to expedite the activity for social and communication aspects, particularly since the remediation assessment and design work is in progress. The mission also highlighted the need to strengthen the internal monitoring, reporting and grievance handling by the state PCBs. The mission reiterated that the analysis of alternatives must be provided in the Social impact assessment reports to be prepared under the project. Apart from other impacts, dependency level of rag pickers must be established for all the relevant pilot sites and alternate support options must be explored and recommended as part of social management plans.

VII. Procurement:

50. The mission reviewed the procurement status vis-à-vis the procurement plan and adherence to agreed procedures of the three implementing agencies i.e. MoEF, APPCB, WBPCB. The mission notes that project procurements need to follow the schedules detailed out in the procurement plan and comply satisfactorily with Bank's mandatory disclosure requirements. A Procurement Post Review (PPR) for FY12 had been conducted in April for APPCB and the PPR report was shared during the mission. The PPR for WBPCB was conducted during the mission and the report will be shared by mid July 2012. There were no major non-compliance observed during PPR and the findings were discussed with the respective implementing agencies. The implementing agencies have agreed to provide the list of post review contracts for FY13 by August 2012. All agencies have agreed to send the status of revised procurement plan with details of number of packages for which contract has been awarded along with value with respect to the agreed procurement plan. The mission discussed procurement issues on some of the contracts under implementation and way forward.

51. The mission noted that the implementing agencies have not fully complied with the requirement of mandatory disclosure of procurement information and reiterated that all information related to procurement, i.e. Approved Procurement Plans, Procurement Notices and Contract Award details must be published on the respective websites. The provision for complaint handling must be instituted in the respective websites, with contact details of the authority to whom the complaints shall be addressed.

52. The mission observed that the implementing agencies have adequate Procurement staff. However, in WBPCB, the mission observed that more coordination is needed between Procurement Consultant and Procurement staff to prevent non adherence to procurement targets. It is recommended that the Procurement staff of the PCB have single point responsibility for all procurement matters and be provided with procurement support by

Procurement Consultant and Procurement Assistant. Further, the procurement Consultant needs to be sent for training in Bank procurement procedures in an institution of repute like ASCI (Hyderabad) or NIFM (Faridabad).

53. As discussed in para 23 above, APPCB will be starting the process of Procurement of Works and it is recommended to have a staff deputed from Public works or Irrigation or other relevant departments who have adequate contract management experience. The same arrangement shall be required for WBPCB as well. The process for hiring of Project Management Consultant (PMC) for MoEF has now been officially terminated and a fresh process for project management with revised terms of reference will have to be initiated, if deemed necessary.

54. Procurement rating is assigned as “MS (Moderately Satisfactory)”, which will be reviewed over next six months vis-à-vis the agreed actions and progress of procurement. The procurement risk at this stage continues to be rated as Moderate. A report on Procurement issues is attached in Annex IV.

VIII. Financial Management

55. The mission notes that the project has taken action to resolve some of the financial management issues identified in the earlier review mission of October 2011. These include: (a) submission of annual audit report for the financial year 2010-11; (b) monitoring of the actual expenditures vis-à-vis budget and reporting the same in the quarterly Interim Unaudited Financial Reports (IUFs) of December 2011 and March 2012; and (c) initiating the hiring process of the statutory auditors for APPCB and WBPCB. The MoEF has made an adequate budget provision in FY 2012-13 for the implementation of the project activities carried out jointly by MoEF, APPCB and WBPCB.

56. The project has to now focus on the following aspects to strengthen the financial management arrangements. These include: (a) appointment of statutory auditors for the state PCBs for FY 2011-12 and FY 2012-13; (b) submission of annual audit report of the three implementing agencies for the financial year 2011-12 before the due date of September 30, 2012; and (c) public disclosure of FY 2010-11 audit report by MoEF and APPCB in the project website.

57. The mission flagged a critical issue with regard to the budget provision of State Government of AP and requested that the share for 3 consecutive years (FY 2010-11, 2011-2012 and 2012-2013) be made by the state finance department in the Revised Estimate of FY 2012-13 and the funds received into the project bank account. Likewise, for West Bengal, the WBPCB needs to ensure that budget provision for the shortfall in the state share for FY 2012-13 is made by the state finance department in the Revised Estimate of FY 2012-13 and the funds are received into the project bank account.

58. The mission requested APPCB to look into the appointment of finance head to maintain continuity after the incumbent retires. It is also recommended that the state Project Steering Committees assemble frequently to monitor and review the project progress, implementation and financial management arrangements, including adoption and approval of the project financial statements. A detailed report on FM issues is attached in Annex V.

IX. Project Operations Manual

59. The Project Operations Manual needs to be revised and the mission requested the state PCBs and MoEF to send their amendments with regard to any changes in institutional structures and any changes in procedures.

XI. Agreed Next steps and Mission

60. The next formal Implementation review mission is scheduled for November 2012. Technical discussions are to be organized in early August in Delhi, to discuss the draft investigation reports and remediation plans and the second iteration of the NPRPS reports. Activities to be undertaken within the next six months are detailed in Annex II.

ANNEX I

List of Persons Met

Ministry of Environment and Forests

Dr. T. Chatterjee, Secretary
Mr. Rajiv Gauba, Joint Secretary
Mr. Aniruddhe Mukherjee, Director (Project Director)
Mr. R.B. Lal, Deputy Director
Mr. R.K. Gupta, Procurement Consultant
Mr. G. Rambabu, Assistant Environmental Engineer
Mr. R.S. Mishra, Accounts Officer

Department of Economic Affairs

Mr. Nilaya Mitash, Director (MI)

Government of Andhra Pradesh

Mr. M. Samuel, Special Chief Secretary, Environment, Forests, Science & Technology
Mr. B.S.S. Prasad, Special Secretary (Environment), Department of Environment, Forests, Science & Technology

Andhra Pradesh Pollution Control Board

Ms. Janaki R. Kondapi, Chairperson
Mr. Ravi Chandra, Member Secretary (Project Director)
Dr. K.V. Ramani, Joint Chief Environment Scientist
Mr. N.V. Bhaskara Rao, Sr. Environment Engineer
Mr. A. Surendar Raj, JCEE
Mr. B.V.S.S. Prakasa Rao, Chief Accounts Officer
Mr. S.S.S. Murali, Environment Engineer
Mr. W.G. Prasanna Kumar, Social Scientist
Mr. Y. Atchuta Ramayya, Procurement Specialist
Mr. D. Prasad, Monitoring Evaluation Specialist,
Ms. K. Sudha, AEE,
Ms. Sudha Poleni, SCA,
Mr. Madan Mohan Reddy, Dy. EE

Government of West Bengal

Dr. Sudarshan Ghoshdastidar, H.E. Minister of State for Environment
Mr. R.P.S. Kahlon, Principal Secretary, Environment

West Bengal Pollution Control Board

Prof. Binay K. Dutta, Chairman
Mr. Sandipan Mukherjee, Member Secretary (Project Director)
Dr. Tapas Kumar Gupta, Chief Engineer
Mr. Ujjal.K. Mukhopadhyay, Chief Scientist
Mr. Debanjan Gupta, Scientist
Mr. S.K. Adhikary, Sr. Environment Engineer
Ms. Sarmishta Kundu, Environment Engineer
Ms. Nupur Sengupta, Assistant Environmental Engineer

Mr. S.K. Khamrui, Finance & Accounts Manager
Mr. Subhasis Paul, Finance & Accounts Manager

Technical Evaluation Panel

Mr. Vinod Babu, Sr. Environment Engineer, Central Pollution Control Board
Mr. K.P. Nyati, Chief Executive Officer, Sustainable Mining Initiative, Federation of India Mineral Industries
Dr. Tapan Chakrabarti, Scientist, Council of Scientific and Industrial Research, at National Environmental Engineering Research Institute (NEERI)
Dr. A. K. Nema, Associate Professor, Indian Institute of Technology, (IIT) Delhi

ANNEX II
List of Agreed Actions

Agreed Actions	Responsibility	Target Date
Agree on a 'workable definition of polluted sites' to enable consultants to progress on subsequent steps	MoEF	July 31
2. Host regular meetings (at least once in two months) with all 3 consultants, along with TEP to discuss progress and quality of all the reports	MoEF	First meeting on July 27; second meeting on August 14
Send formal request to the Bank, through DEA, for restructuring	MoEF	August 31
Complete the process of hiring experts in hazardous waste and municipal solid waste	MoEF	August 31
Develop modalities for shared institutional structure with MoEF and CPCB (prior to the departure of the Project Director)	MoEF/CPCB	August 31
Organize next POC meeting	MoEF	August 31
Finalize next set of training to be conducted in FY13 after discussion with training expert group	MoEF	August 31
Revise sections of Project Operations Manual	MoEF/ APPCB WBPCB	August 31
Consolidated Annual Work plan for FY 2012-13	MoEF/ APPCB WBPCB	August 15
Develop system for electronic network for information dissemination for SPCBs through NIC	MoEF	2013
Complete NMK lake pilot site investigations and propose a menu of remedial options	APPCB/ Consultants	October 15
Identify and obtain necessary permissions for implementing remediation works in the NMK area.	APPCB	September 25
Assess waste water flows from Gagan Pahad Industrial area and domestic sewage from residential areas in the neighborhood of the NMK Lake.	APPCB	August 10
Agree on specific implementation plans for all the major prerequisite actions with key stakeholders for NMK lake	APPCB/ stakeholders	August 15
Hire Consultant or seek deputation of engineers to support quality assurance and certification of engineering aspects	APPCB	September 15
Form a NMK Lake conservation committee with local representatives, NGOs and other stake holders	GoAP	December 15
Review the issue of rag pickers in the KIE and Kadapa explore the option of alternate livelihood	APPCB	August 15
Consult local communities on access and/or impacts on the graveyard adjoining the NMK Lake and include suitable	APPCB	August 30

mitigation measures in the remediation strategy.		
Complete Kadapa pilot site investigations and propose a menu of remedial options	APPCB/ consultants	August 15
Complete environmental and social assessments of the remedial actions for both pilot sites	APPCB/ consultants	October 15
Draft consultation and communication plan for both pilot sites shared with Bank	ABPCB/ Consultants	July 30
Finalize consultation plan and commence consultations with communities	ABPCB/ Consultants	August 15
Agreement reached for construction and operations of alternative landfill for Kadapa and timelines	APPCB/ stakeholders	July 31
Install display boards at strategic locations in pilot sites	APPCB	August 30
Upload all project developments and monitor grievances	APPCB	August 15
Prepare a monitoring indicators format for lab functioning	APPCB	December 15
Provide revised PIU organogram with responsibilities and delegation of authority	WBPCB	July 30
Complete Hooghly site investigations and propose a menu of remedial options	WBPCB/ Consultants	November 30
Draft consultation plan for both pilot sites shared with Bank	WBPCB/ Consultants	July 30
Finalize consultation plan and commence consultations with communities		August 15
Identify key public sector stakeholders for remediation activities and obtain necessary agreements	WBPCB/ consultants	August 15
Agree on major prerequisite actions with key stakeholders for Hooghly site	WBPCB	September 15
Review institutional set-up needed to support PIU for certification of engineering aspects	WBPCB	November 30
Agreement reached for alternative landfill for Dhapa and timelines	WBPCB/ stakeholders	September 30
Complete Dhapa pilot site investigations and propose a menu of remedial options	WBPCB/ consultants	November 30
Complete environmental and social assessments of the remedial actions for Hooghly and Dhapa	WBPCB/ consultants	November 30
Review the issue of rag pickers in the Dhapa and explore the option of alternate livelihood	WBPCB/ consultants	September 30
Install display boards at strategic locations in pilot sites	WBPCB	September 15
Upload all project developments and monitor grievances	WBPCB	August 30
Agree on timelines with 5 industry owners on financing of remediation	WBPCB	September 30
Finalize roadmap and sequential action plan for ECAC	WBPCB	Completed
Complete procurement process for the development of business strategy of the ECAC	WBPCB	July 31
Provide the list of post review contracts for FY13	All	August 2012
Publish approved Procurement Plans, Procurement Notices	All	ongoing

and Contract Award details on the respective websites.		
Ensure provision for complaint handling is instituted in respective websites	All	asap
Procurement Training of new Procurement staff	APPCB, WBPCB	By end of July 2012
Prepare status of awarded contracts with value for each category (Goods, Works, Consultancy) vis-à-vis the procurement plan	All	By first week of July 2012
Submit updated Procurement Plan for Bank's review	All	August 15
Submission of consolidated IUFR as of June 2012	MoEF/ APPCB WBPCB	August 15, 2012
Appointment of statutory auditors by APPCB and WBPCB for FY 2011-12 and 2012-13	APPCB, WBPCB	July 31, 2012
Submission of annual audit report for the FY 2010-11	All	September 30, 2012
Budget provision of the state share for three consecutive years to be made by the state finance department and receipt of funds into the project bank account	APPCB/state finance dept	November 30, 2012
Budget provision for the shortfall in state share for FY 2012-13 to be made by state finance department and receipt of funds into the project bank account	WBPCB/state finance dept	November 30, 2012
Appointment of finance head in APPCB to maintain continuity	APPCB	July 31, 2012
Public disclosure of FY 2010-11 audit report in the project website	MoEF and APPCB	July 31, 2012

ANNEX III

Technical Notes

Noor Mohammad Kunta Lake

AP-PCB presented the progress of investigations and studies for both NMK Lake and Katedan Industrial Area (KIE), which appeared satisfactory. The inventory of potential pollution sources, both active industries and historic stock, in KIE has been completed by the detailed assessment of 320 plots and is available as GIS based database. Concluding from the inventory active polluters appear to have decreased.

An extensive sampling and analytical program has been executed for KIE, NMK, surrounding estates and the downstream-located agricultural university. The analytical results show the following contamination pattern:

1. Soil / ground: The main contaminant is lead (Pb) which appears consistently in upper soil layers throughout KIE.
2. Surface water: The lake's water and that of the drainage leading out show the high BOD and COD expected from the substantial sewage discharge into the lake. Else NMKs water is appears insignificantly affected by the contamination of the surrounding soils, and its own sediments.
3. Groundwater: The groundwater in the project area lies rather deep (below 50 m bgl.) in an aquifer defined by impermeable crystalline rock, where water mobility is confined to the system of discontinuities (joints and fissures). The groundwater quality in most tested wells is generally unaffected. Notable exceptions are a contamination observed in 80 m depth bgl in the SW sector of KIE by aromatic hydrocarbons (BTEX) and a TPS (total petroleum substances) contamination of a well on the grounds of the agricultural university.
4. Sediment: In both NMK and the downstream drainage system sediments reflect the elevated heavy metal contents of the surrounding soils, with Pb being the contaminant with the most pronounced concentrations. Diffuse spread of lead containing particles by the former lead smelters, and their direct deposition into the lake, is also a likely cause for the elevated Pb concentrations.

The **key recommendation** for the site is to focus further investigations on the groundwater contamination by aromatic hydrocarbons in the SW corner of KIE in about 80 m depth bgl., which could become a potential hazard for the drinking water supply of an adjacent residential area. Pump tests could be used to assess the permeability of the main aquifer of the project area. These would involve the pumping of a defined rate from a borehole of well, while in adjacent wells the drawdown off the GW table is measured. From the shape of the drawdown funnel, and the recovery speed in the well after pumping stops, the permeability coefficient for the rock mass can be determined. Furthermore, drinking water wells in the adjacent residential area should be sampled and tested for BTEX.

Hoogly Hotspot Cluster

The Consultant has produced a preliminary risk ranking based on screening environmental and social analysis. During the preliminary screening for potential contaminants about 15 heavy metals were measured with a handheld XRF (X-ray fluorescence detector), Cr came out as the most consistently elevated parameter involved in most contamination situations.

In subsequent phases of the assignment the screening will be complemented by selective, targeted analysis of soil and (ground)water samples. The chemical analyses will be carried out in laboratories with modern methods (e.g. ICPMS, GCMS) that will include a wider scope of parameters (other than Chromium) and provide more precision regarding the prevailing concentrations. The **key recommendations** to improve the current ranking system are

- (i) To take the existing spatial plans as well as any know future trends or intentions (e.g. phasing out industry versus encouraging industrial development) into account. However, land administration appears weak and inconsistent, thus making any prediction on future land use is very difficult.
- (ii) To treat as flexible as possible the issue of 27 hot spots identified as compared with the 7 initial ones from the “national priority list”. PCBs should not restrict the Consultant to the detailed investigation of the original 7 sites, but select those sites for further analysis, that have been ranked with the highest risk according to the Consultant’s preliminary environmental screening.

Group of 5 Industrial Hot Spots

Two of the five industrial hotspots identified by WBPCB were visited during the mission, the (1) Hindustan Heavy Chemicals Ltd. site and (2) Shentracon Chemical Ltd site. Both sites were found to cover a large area with numerous industrial installations of considerable scale. Both sites have been under industrial use for several decades and have a long and complex pollution history. Both sites showed visible evidence of considerable pollution during the missions walkover survey, including evidence of unregulated storage of hazardous substances and hazardous waste, strong indications of pollutants contaminating extensive volumes of soil, and strong indications that the groundwater under the site (at least the shallow, uppermost aquifer) is impacted by pollutants originating from the sites.

The Hindustan Chemicals site’s main CoCs (components of concern) are (i) Mercury (Hg) containing sludge, caustic substances stored in derelict sheds ($\text{Ca}(\text{OH})_2$, NaOH) as well as liquefied Chlorine stored in pressurized steel canisters. The latter is of highly toxic nature and – if accidentally released into the environment – could cause human loss of life and serious injuries on significant scale.

The Shentracon Chemical site’s key problems appear to be a pervasive contamination of the building substance and soil by Chromium compounds. This is evidenced by almost omnipresent discolorations of walls, floors, soil by Cr-salts, and by Cr-compounds found in derelict storage facilities, in ditches, shafts and pits. Visual observations also suggest that significant quantities of fuel oil (stored in two now damaged 10m^3 tanks) leaked into soil and are very likely affecting the groundwater.

The mission reviewed the TOR produced by WBPCB, and the proposal presented by the consultant firm. Both documents were found to be adequately addressing the key issues, defining appropriate measures and deliverables, and containing all necessary tasks and activities to collect and evaluate all information required for the regulatory approach and measures for risk control and site remediation.

The **key challenge** identified by the mission is the administrative and regulatory approach by WBPCB, and the legal instruments and required evidence to initiate action by the sites' owners towards site characterization, pollution inventory and remediation planning / execution. These are discussed in the subsequent Section 2 on the improvement of PCB's enforcement capacity.

Dhapa Municipal Dumpsite

The Consultant has commenced project activities, produced a site investigation plan and progressed considerably with drilling, testing and sampling activities. The chemical analyses of the samples recovered during SI (site investigations) is ongoing. The Bank team commented on the investigation and analytical concept and agrees to the responses received by the Consultant. The further activities may proceed according to the TOR and to the plan outlined in the Consultant's report. The team supports the Consultant's recommendation to investigate the possibility of re-mining the dump's material, as this could (i) generate mineral substrate for cover and structural purposes and (ii) reduce the dump volume by extracting recyclables, and thus allow shallower slope angles while keeping to the same footprint.

ANNEX IV
Procurement

APPCB :

	No. of Packages Planned	No. of Packages Awarded	No. of Packages Pending
Goods	12	11	1
Consultancy	8	4	4

WBPCB :

	No. of Packages Planned	No. of Packages Awarded	No. of Packages Pending
Goods	18	9	9
Consultancy	30	10	20

MoEF :

	No. of Packages Planned	No. of Packages Awarded	No. of Packages Pending
Consultancy	4	3	1 (PMC)

Status of Agreed Actions during last mission :

Sl. No.	Agreed Actions	Action to be taken by	Date	Status
1.	Status of awarded contracts with value for each category (Goods, Works, Consultancy) vis-à-vis the procurement plan	MoEF, APPCB, WBPCB	1 st week of November 2011.	Submitted
2.	List of Contracts for PPR for FY12	MoEF, APPCB, WBPCB	Mid- November 2011	Submitted
3.	Recommendation from MoEF for way forward on PMC Contract.		End of October 2011	Submitted
4.	Uploading of procurement disclosures including procurement plan on respective websites	MoEF, APPCB, WBPCB	End of November 2011	Partially done
5.	Uploading of contact details for complaint handling on respective websites.	MoEF, APPCB, WBPCB	End of November 2011	Partially done
6.	Procurement Training of new Procurement staff	APPCB, WBPCB	End of December 2011	Not completed for all procurement staff

ANNEX V

Financial Management

Budgeting & Funds Flow: The MoEF has made a budget provision of Rs 311.00 million for the financial year 2012-13 representing 85% of the project expenditures financed by the Bank. The budget provision made by MoEF for the financial year 2012-13 is adequate to meet the fund requirements for implementing the project activities carried out jointly by MoEF, APPCB and WBPCB. The MoEF since project inception has transferred Rs 87.816 million & Rs 79.056 million into the project bank accounts of APPCB and WBPCB respectively. There have been no delays noticed in the transfer of funds by MoEF to the respective state pollution control boards.

State Government contribution: The Bank team has noted that the Andhra Pradesh has not made the budget provision in the State budget of FY 2010-11, 2011-12 and 2012-13 which signifies lack of commitment by the state for the implementing this project. The state share is presently being contributed by the APPCB from the Board's existing reserves. We therefore request APPCB to address this matter to the state finance department, do adequate follow-up and ensure that adequate budget provision for these three financial years is made in the Revised Estimate (RE) and the funds are received into the project bank account.

For the State of West Bengal, in the last two financial years 2010-11 and 2011-12, there has been a significant delay in the receipt of funds from the State Government into the project specific Bank account. For the current financial year 2012-13, the provision made in the state budget is for Rs 5.1 million as against Rs 16.56 million resulting in a shortfall of Rs 11.46 million (approx). We therefore request WBPCB to follow-up with the state finance department and ensure that the budget provision for this shortfall in the state share for FY 2012-13 is made in the Revised Estimate (RE) of FY 2012-13 and the funds are received into the project bank account.

Disbursement: The project has disbursed an amount of USD 5.595 million (including Designated Account Advance of USD 4.776 million) representing 8.72% of the fund allocation. The below table depicts the details of the funds approved and disbursed under the IDA and IBRD components:

Financing source	Allocation	Disbursement	Allocation	Disbursement
	SDR Million	SDR Million	USD Million	USD Million
IDA 4755	25.700	0.539	39.005	0.819
IBRD 7924*	16.576	0.000	25.147	0.000
DA Advance	-	3.147	-	4.776
Total	42.276	3.686	64.152	5.595
% Disbursed including DA		8.72%		8.72%
% Disbursed excluding DA		1.27%		1.27%

*Excluding front end fees of US\$0.063 million

Exchange rate as of July 03, 2012: 1SDR=1.517 USD (approx)

Staffing: The staffing arrangements for this project are adequate. The FM consultant is in place in MoEF and the finance cell in AP and WB pollution control boards are headed by experienced finance manager and supported by the accounts officers/ assistants. In Andhra Pradesh, since the Chief Accounts Officer (head of finance cell) is retiring on July 31, 2012, the project should identify a successor immediately and engage him/her to work closely with the Chief Accounts Officer for a smoother transition and to maintain continuity.

Accounting and Reporting: A review of the financial management aspects of MoEF, APPCB and WBPCB was carried out during the mission. Both AP and WB pollution control boards have accounting systems in place and these systems are being used for accounting and reporting of project expenditures. In WBPCB, the 'EMIS-II' software developed in-house does not have a user manual. In APPCB, the Tally system is being used, for which the users are not well versed and though the manual is available, it is not being put to use. To ensure effective implementation of system process and controls, a manual on the usage of accounting software should be provided to all the users, and the finance cell must be provided with effective training.

The backup storage and security arrangements in APPCB and WBPCB are weak and inadequate. In Andhra Pradesh, there is currently no system of maintaining back-up for the computerized data. In West Bengal, although the system is in place, but the back-up is not taken on a regular basis. The backups are also not stored at 'Off-site locations' and the physical access to the server room are not restricted. We recommend the project to take effective steps to improve the backup and security arrangements.

The quarterly IUFRRs are currently prepared in the excel spread sheets by printing the trial balances/expenditure details from these accounting systems. The annual budgets are not integrated in the software to monitor the actual utilization of project expenditures vis-à-vis budget. For effective financial management, the project should make efforts to: (i) introduce the budget element in the accounting systems; and (ii) add a module to generate the IUFRRs from the accounting systems.

In WBPCB, stale cheques amounting to Rs. 0.32 Lakhs are appearing in the bank reconciliation statement as on May 31, 2012. The project should take immediate action and if necessary reverse these expenses in the books of accounts.

The project does not have a separate financial manual. The 'Operations Manual' contains a chapter on financial management which briefly describes the financial management and disbursement arrangements. With the proposed increase in activities, the project should either develop a separate detailed financial manual or add modules of financial management chapter to the operations manual detailing: (i) planning process and financial planning; (ii) budgeting (including a budget calendar); (iii) accounting; (iv) fund flow arrangement; (v) financial reporting; (vi) internal control and Internal Audit; (vii) statutory audit. The project staff should also be provided training on the financial management aspects of this project.

Adoption of financial statements, certification and closure of books of accounts: In both the states, the financial statements of year 2010-2011 have not been put up before and adopted / approved by Project Steering Committee. In addition, the books of accounts: (a) are not regularly been certified by the finance head; and (b) have not been closed for the last two

financial years. The Project should place the annual accounts in the next meeting of the Project Steering Committee for its approval/ ratification. The Project should put in place a system to ensure that the books of accounts are certified at periodic intervals and are closed at the end of each financial year.

Meetings of Project Steering Committee: PSC has been formed to monitor and review implementation of the Project. In each of the states, the meetings have been held only thrice since the inception of project with the last meeting held in February, 2012 for West Bengal and in November, 2011 for Andhra Pradesh. To effectively discharge its functions, PSC should meet at least four times in a year with the time gap in any two meetings not exceeding three months.

Visits by MoEF to review financial management aspects: With proposed increase in the project activities, a periodic FM review would be required and we therefore recommend MoEF finance staff to visit these states on a periodic basis.

Internal Audit: The AP and WB pollution control boards have internal audit systems in place and the internal audit is being carried out by an independent firm of chartered accountants appointed by the Board. The internal audit report for financial year 2011-12 of the AP pollution control board was shared during the mission and it was observed that the audit coverage was limited, and the project transactions are not covered under this audit. We therefore request APPCB to initiate steps to increase the scope of the internal audit so that the expenditures incurred under this project are also covered in the next year audit.

The WB pollution control board has shared the internal audit report for the financial year 2010-11 and there were no significant issues reported by the auditor. The internal audit for the financial year 2011-12 is in progress it has been agreed that the internal audit report will be shared with the Bank on receipt.

External Audit: The AP and WB pollution control boards have initiated the auditor's appointment process and it has been agreed that the appointment will be made before July 31, 2012 and the audit report, project financial statements together with accounting policies and notes to account for the FY 2011-12 will be shared with the Bank before September 30, 2012. The audit for the expenditures incurred by the MoEF for the financial year 2011-12 will be conducted by the CAG. It has been agreed with MoEF that they will approach the Office of the Principal Director of Audit; Scientific Department to obtain the audit report and project financial statements as per the agreed terms of reference (ToR) and submit the same to the Bank on or before September 30, 2012.

Public Disclosure: The mission team has noted that the MoEF and APPCB have not displayed the annual audit report for the financial year 2010-11 in the project website. We request these agencies to display these reports immediately on the project website. In addition, we request MoEF to display the consolidated IUFs in the project website.

ANNEX VI

Andhra Pradesh – Activities Expected & Disbursements Expected for the year 2012-13

Exchange rate : 1\$=45		INR in lakhs								
Component no.	Total Activities of the Project	Total Budget as per procurement plan		Activities implemented / to be implemented from April to June, 2012		Activities to be implemented from July to December, 2012		Activities to be implemented from January to March, 2012		Total disbursement (INR lakhs) in
		US\$ '000	INR lakhs	Actions taken / to be taken	Disbursement / Disbursement expected by June 12 (INR in lakhs)	proposed actions	Disbursement expected (INR in lakhs)	proposed actions	Disbursement expected (INR in lakhs)	
I. Strengthening of Environmental Institutions: Building Capacity for addressing Pollution remediation										
A. Technical Support										
1A1.1	Inventorization and characterization of HW categories	579.73	130.44	called for EoIs (last date for submission) - 19.04.2012 Evaluation of EoIs - 25.05.2012 Issue of RFP - 15.06.2012	0.00	last date for receipt of RFP - 15.07.2012 Evaluation of Technical and financial Proposals - 31.07.2012 Issue of work order - 15.08.2012 10% payment towards advance - 09.2012 10 % payment on preliminary report	30.00		0.00	30.00
	Inventorization of E-waste and GPS works		130.44	called for EoIs (last date for submission) - 19.04.2012 Evaluation of EoIs - 25.05.2012 Issue of RFP - 15.06.2012	0.00	last date for receipt of RFP - 15.07.2012 Evaluation of Technical and financial Proposals - 31.07.2012 Issue of work order - 15.08.2012 10% payment towards advance - 09.2012 10 % payment on preliminary report	30.00		0.00	30.00

1A1.5	Impact of MSW Dumpsites on Environment (15 Corporations) (Domestic)	262.59	118.17	called for EoIs (last date for submission) - 04.05.2012 Evaluation of EoIs - 04.06.2012 Issue of RFP - 15.06.2012	0.00	last date of receipt of RFP - 15.07.2012 Evaluation of Technical and financial Proposals - 31.07.2012 Issue of work order - 15.08.2012 10% payment towards advance - 09.2012 10 % payment on preliminary report	30.00	0.00	30.00
B. ECAC									
1A3.1	Consultancies - Business Strategy for ECAC	360.68	162.31	EoIs evaluated on - 17.01.2012 RFP issued to consultant on - 21.02.2012 signing of contract with consultant - 27.04.2012 Work order issued to M/s. EMC, Mumbai on 27.04.2012 for Rs.64,82,552/- plus service tax @12.36% Advance payment -10 % against Bank guarantee released Rs. 5.5 lakhs on 04.06.2012 (excl. TDS - 0.61 lakhs)	6.18	25 % payment on submission of workshop proceedings and business model - July 2012 25% payment on submission of data structure and market survey report - Sep 12 10 % payment on submission of report on technological bridge - Oct 12 20 % payment on submission of draft business plan - Nov 12	57.30	7.16	70.64
C. Laboratory Equipment									

1A2.13	GC-MS	571.7 4	257.28	Notification of award issued on 25.08.2011 for US\$1,83,095.00. 10% advance US\$18,309 (INR 9.07 Lakhs) was released on 29.09.11, 80% payment of US\$1,46,47700 (INR 77.82 Lakhs) released on 27.12.11 paid in FY 11-12. Balance 10% payment Rs.10.27 Lakhs (actual) released on 29.05.2012	10.27		0.00		0.00	10.27
	Lab equipment - Local accessories / installation charges / gas distribution system (ICP-AES & GC MS)				10.32					10.32
	Ind Tender									
1A2.2	Bomb Calorimeter (Main Equipment)	71.47	32.16	Notification of award issued on 07.03.2012 for US\$31,226.00 (INR 16,38,740.48 approx.)		90% LC will be opened in the month of July 12	14.75		0.00	14.75
						Balance 10% payment will be made in the month of August, 2012	1.64		0.00	1.64
	Bomb Calorimeter (Local Accessories)			Notification of award issued on 07.03.2012 for Rs.2,23,365.00		10% payment will be released in the month of July, 2012	0.22		0.00	0.22
						90% payment will be released in the month of August,2012	2.01		0.00	2.01
1A2.4	Solid Waste extraction assembly	114.3 5	51.46	Notification of award issued on 07.03.2012 for US\$ 1,80,518.00 (INR 94,73,584.64 approx.)		90% LC will be opened in the month of July 12	85.26		0.00	85.26
						Balance 10% will be released in the month of August,2012	9.48		0.00	9.48
	Solid Waste extraction assembly (Local Accessories)			Notification of award issued on 07.03.2012 for Rs.1,73,250.00		10% payment will be released in the month of July, 2012	0.17		0.00	0.17
						90% payment will be released in the month of August,2012	1.56		0.00	1.56
1A2.12	TCLP Apparatus Assembly for POPs and VOCs	11.43	5.14	Notification of award issued on 07.03.2012 for Rs.20,98,414.00 100% payment released Rs. 20.98 lakhs on 07.06.2012	20.98		0.00		0.00	20.98

1A2.7	Isokinetic Stack Sampling assembly with Volatile Organic Sampling Train (VOST)	85.76	38.59	Notification of award issued on 07.03.12 for UK Pounds (£)1,16,097.80 (INR 95,35,112.31 approx)10% advance payment will be released Rs. 9.53 lakhs in the month of June 2012	9.53	Balance 90% payment will be released in the month of August, 2012	85.82	0.00	95.35
1A2.6	High Volume Sampler with PUF Sampler	114.35	51.46	Notification of award issued on 07.03.2012 for UK Pounds (£)£35,053.00 (INR 28,78,902.89)10% advance payment will be released in the month of June,2012	2.87	Balance 90% payment will be released in the month of August, 2012	25.91	0.00	28.78
1A2.9	Energy Dispersive X-ray Fluorescence Spectrometer (Main Equipment)	171.52	77.18	Notification of award issued on 07.03.2012 for Euro2,34,884.00 (INR 164.16 lakhs) 10% advance payment released in the month of June,2012	16.70	Balance 90% payment will be released in the month of August, 2012	147.74	0.00	164.44
	Energy Dispersive X-ray Fluorescence Spectrometer (Local Accessories)			Notification of award issued on 07.03.2012 for Rs.13,85,000.00 10% advance payment was released in the month of 30.05.2012	1.38	Balance 90% payment will be released in the month of August, 2012	12.47	0.00	13.85
1A2.11	Cyanide / Sulphides distillation assembly	5.72	2.57	Notification of award issued on 07.03.2012 for Rs.23,95,601.20 10% advance payment was released in the month of May, 2012	2.39	Balance 90% payment will be released in the month of June, 2012	21.56	0.00	23.95
D. Refurbishing of lab									

	Hiring of consultancy services to refurbish Central Laboratory by providing infrastructure		22.50	RFP issued on 12.04.2012. Technical evaluation and opening financial bid was done on 25.05.2012. Proposal to award of contract is being sent to the World Bank. Signing of contract is expected by 11.06.2012 25% of payment contract value will be released in the month of June, 2012 against submission of inception report. - Rs. 5.6 lakhs	5.60	25% of payment contract value will be released after completion of layout drawings	11.25	0.00	16.85
						25% of payment contract value will be released after completion final designs			
	Refurbish Central Laboratory by providing infrastructure viz., ACs, Ventilation systems, gas systems etc		500.00	-	0.00	Preparation of RFP by September, 2012 last date for receipt of bids by 15.11.2012 evaluation of bids by 15.12.2012.	150.00	150.00	300.00
Sub Total (I)					86.22		717.14	157.16	960.52
2. Investments in Priority Remediation and Environmental Improvements: Rehabilitation of abandoned contaminated sites									
A. Remediation of Hazardous Waste site									

2A1.1	Detailed re-assessment/ engr. Study, bid document prep., and supervision - Noor mohammad Kunta	774.78	348.65	Contract awarded on 25.08.2011 for Euro 571582 plus service tax @12.36% Commenced the work since Sept. 2011 Advance payment 10 % against Bank guarantee released Euro : 51442 on 29.12.2011 Consultant submitted the Final reports of the preliminary site investigation and sampling protocol reports. 5% payment against site assessment and developing of sampling protocol to be released in June 2012	21.90	5% payment against sample analysis and assessment of site contamination levels - July 2012 20% payment against development of draft remediation plans and engineering drawings including a separate environmental and social assessment report -August 2012 5% payment against submission of final remediation plan including a separate environmental and social management plan - Oct 12	131.40		0.00	153.30
3A3.3	NMK - NGO work for community communication, identification of PAPs	138.04	62.12		0.00		0.00	Hiring of consultants/NGOs 10% payment towards advance	6.00	6.00
2A1.2	Remediation works for NMK	27938.97	12572.54	Fencing of NMK Bid documents being prepared by consultant		Bidders to be finalized and work to commence	475.00		500.00	975.00
B. Remediation of Municipal Solid Waste site										

2A2.1	Detailed reassessment / engr. Study, bid document prep. And supervision in Kadapa site	222.71	100.22	<p>Contract awarded on 17.10.2011 for Euro 375000 plus service tax @12.36%</p> <p>Commenced the work since October 2011</p> <p>Advance payment 10 % against Bank guarantee released Euro : 33750 on 29.12.2011</p> <p>consultant submitted the Final reports of the preliminary site investigation and sampling protocol reports.</p> <p>5% payment against site assessment and development of sampling protocol to be released in June 2012</p>	14.38	<p>5% payment against sample analysis and assessment of site pollution levels - July 2012</p> <p>20% payment against development of draft containment and closure plans including a separate environmental and social assessment report - August 2012</p> <p>5% payment against submission of final containment and closure plan (CCP) including a separate environmental and social management plan - October 2012</p>	86.26		0.00	100.64
2A2.4	Social monitoring and social audit - Kadapa	37.54	16.89	Hiring of consultants/ NGOs 10% payment towards advance		work commenced by NGOs	0.00		1.60	1.60
3A3.1	Kadapa dump sites - NGO works for community communication, identification of PAPs	153.38	69.02	Hiring of consultants/NGOs 10% payment towards advance		work commenced by NGOs	0.00		7.00	7.00

2A2.2	Closure & containment works (Excavation & related works, stabilization & closure) - Kadapa	3441.29	1548.58				200.00		200.00	400.00
Sub total (II)					36.28		892.66		714.60	1643.54
3. Project Management										0.00
	A. Establishment /consultancy services			Salaries (as per actuals)	11.54		17.85		6.02	35.41
	B. Incremental Operating costs				5.63		18.5		9.25	33.38
Sub total (III)					17.17		36.35		15.27	68.79
Total (sub total I + II + III)					139.67		1646.15		887.03	2672.8

ANNEX VII

West Bengal : Detailed Action Plan (Quarter-wise) 2012-13

S . N	Components		Total Activities of the Project	Outlay		Current Status and Proposed Actions for Apr. 2012 – Mar 2013	Cumulative Expenses upto 31.03.12	Actual Apr-Jun (INR in Lakhs)	Actual Jul-Sep (INR in Lakhs)	Est. Oct-Dec (INR in Lakhs)	Est. Jan-Mar (INR in Lakhs)	Est. for 2012-13 (INR in Lakhs)
				US\$ in '000	INR in Lakhs							
1	Strengthening of Environmental Institution : Building Capacity for addressing Pollution remediation											
	A	Technical Support		0								
		i Goods										
		ii Services	Inventorization and Characterization of HW Categories and Sampling and analysis of HW	264.5	118.87	Short listing & RFP sent 5/12/11. Queries recd on 04/01/12, reply sent on 20/01/12. NOC recd on 15/02/12. RPF issued on 28.02.2012. Technical proposal opened on 10.04.2012 (Recd 4 nos). TER sent on 23.04.12. Queries on TER received on 04/05/12. Reply sent 25/05/2012. LOA to be issued & Contract signing by 30.06.12. 10%(adv), 20%(3M) & 30%(8M) payment have been considered in FY 12-13		0.00	11.90	23.75	35.60	71.25

			Assessment and preparation of priority contaminated sites at Khardah, Durqapur, Belda and Dankuni (~2 contracts)	956.46	429.83	Opening of Technical Proposal on 02.02.12. Technical Evaluation Report sent to WB 22.03.2012. Queries on TER received on 27/03/12 and replies sent on 10.04.12. NOC received on 25/04/12 .Fin Proposal opened on 30/04/12. Negotiation meeting held on 11/05/12, Minutes of Negotiation meeting and draft contract document sent on 23/05/12. NOC recd on 11.06.12. LOA issued on 14.06.12 for Rs.335.39 lakhs & Contract signing by 30.06.12. 10%(adv),20%(3M) &30%(8M) payment have been considered in FY 12-13		0.00	37.68	75.37	113.05	226.10
			Impact of MSW Dumpsites on Environment	169.84	76.33	Dropped		0.00	0.00	0.00	0.00	0.00
			Identifying Illegal Dumpsites – Firm	137.22	61.67	Postponed. To be decided by the Bank & MoEF.						0.00
			Sub total 1A(ii)	1528.02	686.69		0.00	0.00	49.58	99.12	148.65	297.35
		ii i	Incremental Operating Cost	0	0.00							0.00
			Sub total 1A	1528.02	686.69		0.00	0.00	49.58	99.12	148.65	297.35
	B	Laboratory Equipment										

		i	G Laboratory Equipment (Package 1) (1 no.) (Flash Point Analyzer)	35.67	16.03	LOA issued on 25.10.2011 Contract signed by 22.11 2011 Supply and installation has been completed 80%Payment has already been made in FY 2011-12 and balance 20% payment has already been made at the beginning of April 12	10.03	3.20	0.00	0.00	0.00	3.20
			Laboratory Equipment (Package 2) (4 no.) [i) Bomb Colorimeter, ii) Solid Waste Extraction Assembly, iii) X-ray Fluorescent Spectrometer, iv) ICP-AES (instead of ICP-MS)]	278.44	125.13	LOA issued on 20.02.2012 . LC for all 4 instrument already opened Item nos i) , ii) & iv) already supplied and 90 % payment already made. Item no iii) has also been dispatched and payment will be made shortly by June 12 .However all supply and installation of equipment to be completed by June 2012 (Payment will be made by June. 2012 as per estimated LOA value of Rs. 315.00)	0.30	255.00	60.00	0.00	0.00	315.00
			Laboratory Equipment (Package 3): (A) Sampling Apparatus Assembly for POPs and VOCs, , B) TCLP Apparatus Assembly for POPs and VOCs, C) Infra Red Spectrometer, D) Reactive Cyanide Distillation Unit, E) Soil sampler and sludge sampler) (5 contract)	280	125.83	Bid invited on 24.02.2012. Bid opened on 09.04.2012. Bid evaluation sent on 25.04.2012. NOC received on 13.06.12 except ICP LOA to be issued by 15.06.12 & Contract signing by 30.06.2012. Partial supply and installation to be completed by August. 2012 (payment will be made accordingly in Sept & Dec 12 as per estimated LOA value of Rs. 180.00) N.B: No bids received for item no B) and E) and reports in prescribed format sent to WB for NOC for re-bidding under proposed Package-4.		0.00	60.00	120.00	0.00	180.00
			Laboratory Equipment (Package 4: B) GC-MSMS (Triple Quadruple), with processing accessories) Hand Held X-Ray Fluorescence Apparatus,	230	103.36	Bid invitation to be made by 30.06.2012 and contract signing to be made by Oct 12 (This is re-bidding process for which no bids were received in Pack-3) Estimated LOA value is Rs.250 lakhs		0.00	0.00	100.00	150.00	250.00

			(7 contract)											
			Laboratory Infrastructure : Air Conditioning etc. (around 3 contract)	107.6	48.36	Bid will be invited in July and contract to signed by Oct 12. Estimated LOA Value is Rs. 70 lakhs plus taxes		0.00	0.00	75.00	0.00	75.00		
			Spares and consumables for related instruments (around 40 contracts)	492.20	221.19	8 Letter of Awards have already been issued in July 2011 and completed. Another around 10 letter of Awards will be issued by July12	44.79	0.00	12.00	20.00	0.00	32.00		
			Operation & maintenance and warranty cost (around 16 contracts)	341.74	153.58			0.00	0.00	0.00	0.00	0.00		
			Sub total 1B	1765.65	793.48		55.12	258.20	132.00	315.00	150.00	855.20		
C	Environmental Compliance Assistance Centre												0.00	
	i	Works	Centre's Interior Design & Development – ECAC	13.36	6.00	Partially completed	0.07	0.00	0.00	0.00	0.00	0.00		
	ii	Goods	Office Furniture – ECAC	3.80	1.71	Completed	1.70	0.00	0.00	0.00	0.00	0.00		
			Office Equipment- ECAC											0.00
			Desktops & Laptops	10.46	4.70	Completed	3.42	0.00	0.00	0.00	0.00	0.00		
			LCD Projector - 1 no.	3.57	1.60			0.00	0.00	0.00	0.00	0.00		
			Heavy duty scanner - 1 no.	1.19	0.53	Do	0.50	0.00	0.00	0.00	0.00	0.00		
			Heavy duty printer - 1 no.	1.43	0.64	Do	0.52	0.00	0.00	0.00	0.00	0.00		
			Servers - 2 (Internet connectivity &	28.53	12.82	Purchase of Server and installation completed . LAN connectivity will be	4.81	0.00	0.30	0.00	0.00	0.30		

			data collection / storage)			done by July						
			OS Software for servers	14.27	6.41	Award to be made by August 2012.		0.00	5.00	0.00	0.00	5.00
			OS MS-Office x 6 computers	3.42	1.54	completed	2.35	0.00	0.00	0.00	0.00	0.00
			Database Software for ECAC	55.80	25.08	Award to be made by August 2012. (Estimated LOA is Rs. 15.00 lakhs)		0.00	0.00	15.00	0.00	15.00
			Firewall	9.30	4.18			0.00	0.00	0.00	0.00	0.00
			Sub total 1C(ii)	131.77	59.22		13.30	0.00	5.30	15.00	0.00	20.30
		iii	S Preparation of a detailed business strategy and plan ECAC r v i c e s	180.34	81.04	Opening of Technical Proposal on 02.02.2012. Technical Evaluation Report was sent to WB on 23.03.2012, Queries recd on 27/03/12 and replies sent on 04/04/12. NOC recd from Bank on 04/04/12 and Fin Proposal opened on 12.04.2012 (for 2 consultants).NOC on combined Evaluation report received from WB on 23.04.12.Negotiation meeting held on 27.04.12 and 10.05.12.Minutes sent to Bank and Queries received on 05.06.12 .Reply to be sent by 20.06.12. However LOA to be issued and contract signing by 30.06.12. Estd LOA value is Rs. 24.00 lakhs. 10%(Adv), 30%(4M),40%(5M) payment considered in F.Y 12-13		0.00	2.70	8.09	10.79	21.58
			Technology Assimilation/Sector studies done by International experts-ECAC (for chemical & Petrochemical sector)	1298.43	583.51	0		0.00	0.00	0.00	16.00	16.00

			Periodic sector studies done by domestic / national experts – ECAC – Individuals (2 studies per year)- around 8 studies	1659.32	745.70	Tannery Sector during 2011-12. Tannery: Tech. Evaluation Report sent on 15.03.12. NOC on TER recd, Fin. proposal (only CLRI) opened 03.04.12 (Rs.37.50 lakhs). Negotiation meeting held on 11.04.12 and Minutes along with contract doc. sent to WB on 16.04.12. WB made queries on CLRI 04.05.12 & asked CLRI to clarify the points on 10.05.12 . Reply recd from CLRI on 22.05.12 & sent to WB on 22/05/12. Again queries recd on 05.06.12 and reply 07.06.12. Again query on 13.06.12 and reply on 13.06.12. Estd LOA value is Rs.37.5 lakhs. 10%(Adv), 40%(2M & 4 M)& 50%(5M &6M) payment considered for 2nd,3rd& 4th Qrt respectively Hope LOA to be issued & Contract signing by 30.06.12.	0.00	4.21	16.80	21.40	42.41
						For Sponge Iron Sector- Short listing against re-advertisement & Draft RFP sent to WB on 09/03/12 for approval. Queries recd on 27/03/12 and replies sent on 04/04/12. NOC recd on RFP and short listing on 04.04.12. RFP issued on 11.04.12. Technical Props opened on 11.05.12(4 nos.). TER sent on 31.05.12. Queries on TER recd on 05.06.12 and reply to be sent by 20.06.12. LOA to be issued & Contract signing by 15.07.2012. 20%(2M), 30%(4M) & 30%(5M) payment considered in Qrt- 2nd,3rd & 4th respectively	0.00	18.00	27.00	27.00	72.00
						Lead Acid Battery Sector during 2011-12. TOR sent to WB for approval. No response recd from WB till date.					
						Further 6 to 8 TOR along with EOI notice on different sector studies will be sent to WB for approval by June 12 after discussion in forthcoming mission					

			*	WBPCB Staff-Full time-ECAC	107.18	48.17		0.00	0.00	0.00	0.00	0.00	
				Centre Dedicated Staff-ECAC	315.24	141.67	Office Assistant already appointed and Env./ Industry Specialist, IT Specialist, Asst. IT Specialist will be appointed by Aug 12.	10.20	2.51	3.20	4.50	4.50	14.71
				Sub total 1C(iii)	3560.51	1600.09		10.20	2.51	28.11	56.39	79.69	166.70
		iv	I O C	Office Infrastructure									0.00
				Office Rent-ECAC	278.24	125.04	Monthly rent is being paid	14.59	2.70	2.70	2.75	2.75	10.90
				Newsletter/publication									0.00
				Quarterly newsletters (4 per year)-ECAC	26.16	11.76	1st newsletters will be released by June 12		0.00	0.50	0.00	0.50	1.00
				Annual report-ECAC	37.66	16.92	Ist report will be published by Oct 12		0.00	0.00	2.00	0.00	2.00
				Sector Specific reports (3 per year)-ECAC	77.98	35.04			0.00	0.00	0.00	0.00	0.00
				Sub total 1C(iv)	420.04	188.77		14.59	2.70	3.20	4.75	3.25	13.90
		v		Information dissemination workshops and training									0.00
				Technology Fair	129.03	57.99	Ist Year's Technology Fair Completed on 2/3.03.2012. Full payment of Rs.17.50 lakhs has already been disbursed in FY11-12. 2nd Year's Tech Fair will be arranged by Jan 13	19.54		0.00	0.00	18.00	18.00
				Information dissemination workshops with strategic partners Cross-sectoral/large(2 per year)	143.74	64.60				0.00	0.00	0.00	0.00
				Information dissemination workshops with strategic partners – sector specific (4 per year)	143.74	64.60				0.00	0.00	0.00	0.00

			Specialized technical training (4 per year)	143.74	64.60	Ist Training has already been completed at ASCI, Hyderabad on Remediation on Hazardous waste for 3 persons. Another two trainings will be arranged by Dec 12 and Mar 13		0	0.00	1.00	1.00	2.00
			Professional Exchange visit for stakeholders	114.99	51.68	Two prof. exchange visit will be arranged by Dec 12 and Mar 13		0.00	0.00	2.00	2.00	4.00
			Sub total 1C(v)	675.24	303.45		19.54	0.00	0.00	3.00	21.00	24.00
			Sub total 1C	4800.92	2157.53		57.70	5.21	36.61	79.14	103.94	224.90
D	Training		7) Quantification and categorization of process specific hazardous waste, WB: FY14									0.00
			9) Monitoring of landfill gases and leachate analysis for municipality, WB: FY 13									0.00
			10) Monitoring and environmental impact of legacy sites for various classified hazardous wastes, WB: FY 15									0.00
			11) ECAC – Professional exchange based on industrial sector specific (South East Asia, US & EU), WB: FY 12 *									0.00
			Sub total 1D	379.04	170.34		0.00	0.00	0.00	0.00	25.00	25.00
E	Upgrading Information Management System											0.00

		i	Upgradation of existing server; procurement of server & networking devices, GPS to incorporate GIS mapping of HW units coupled with existing environmental management information system	105.68	47.49	Installation of server have already been completed. Other portion "GPS to incorporate GIS mapping of HW units coupled with existing environmental management information system" to be completed by Mar 13	26.56	0	0.00	0.00	1.00	1.00
		ii	Technical Manpower (consultant- Information Management System)	21.4	9.62	To be completed by 15 Jan 13		0.00	0.00	0.00	1.00	1.00
			Sub total 1E	127.08	57.11		26.56	0.00	0.00	0.00	2.00	2.00
			Sub total 1	8600.71	3865.16		139.38	263.41	218.19	493.26	429.59	1404.45
2	Investments in Priority Remediation and Environmental Improvements : Rehabilitation of abandoned contaminated sites											0.00
	A	Remediation of Hazardous Waste Site										0.00
		i	Works Remediation works (Excavation and related Works) - Hooghly HW Sites (1203.64+6375.05)	7578.69	3405.86			0.00	0.00	0.00	0.00	0.00
			Remediation & upgradation of Chakundi Site (design, engineering,	1711.4	769.10			0.00	0.00	0.00	0.00	0.00

			remediation and transport work - Chakundi site										
			Sub total 2A(i)	9290.09	4174.97		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ii	Goods		0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	iii	Services	Detailed feasibility / engineering study, bid document preparation and supervision - Hooghly HW Sites	467.54	210.11	LOA issued on 21.11.2012.Contract signed on 06.01.2012. 10% on final price of Rs. 386 lakhs released in FY 11-12. Site assessment report submitted and released 5% payment On 31.05.12. However another 5%(8M),20%(9M),5%(10M) payment considered in FY12-13	38.58	19.30	0.00	19.65	98.25	137.20	
			Independent Supervision Consultant-Hooghly HW Sites	98.48	44.26	EOI to be published by Aug .2012		0.00	0.00	0.00	0.00	0.00	0.00
			Supervision Consultant-Chakundi Site	40.01	17.98	EOI to be published by Aug .2012		0.00	0.00	0.00	0.00	0.00	0.00
			Community communication - Hooghly HW Sites-NGO/Firm	6.57	2.95	EOI to be published by Aug .2012		0.00	0.00	0.00	0.00	0.00	0.00
			Independent third-party soil & water monitoring - Hooghly HW Sites	139.62	62.75	EOI to be published by Aug .2012		0.00	0.00	0.00	0.00	0.00	0.00
			Sub total 2A(i)	752.22	338.05		38.58	19.30	0.00	19.65	98.25	137.20	
			Sub total 2A 1	10042.31	4513.02		38.58	19.30	0.00	19.65	98.25	137.20	

	B	Remediation of Dhapa MSW sites										0.00	
		i	Works	Closure and Containment works - Dhapa MSW Site	7704.04	3462.20			0.00	0.00	0.00	0.00	0.00
		ii	Goods		0.00	0.00							0.00
		iii	Services	Detailed design, engineering, bid document preparation and supervision - Dhapa MSW Site	106.87	48.03	LOA issued on 30.01.2012. Contract signed 06.03.2012. On 02.04.12 COWI, Denmark requested for assigning the established contract to COWI India Private Ltd. and seek NOC from WB. The same was forwarded to World Bank & MoEF for guidance on these issues. World Bank has not accepted it. No payment has been made till date. Site assessment report has been submitted by COWI and the same is under scrutiny & acceptance. 15% (adv& 2M), 5%(6M) & 20%(8M) payment has been considered in FY 12-13		0.00	42.30	14.10	56.40	112.80
				Supervision Consultant- Technical Audit-Dhapa	129.84	58.35	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00
				Community communication - Dhapa MSW Site	43.28	19.45	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00
				Sub total 2B(iii)	279.99	125.83		0.00	0.00	42.30	14.10	56.40	112.80
				Sub total 2B	7984.03	3588.03		0.00	0.00	42.30	14.10	56.40	112.80
				Sub total 2	18026.34	8101.05		38.58	19.30	42.30	33.75	154.65	250.00
3	Project Management												0.00
	A	Establishment / Consultancy Services	Procurement Assistant - 1 Nos. (Full time)	26.95	12.11	One Procurement Asst. already appointed @ Rs.17000/- p.m. Others will be appointed by Aug 12 (as per last aide memoire)	2.19	0.51	0.51	1.02	1.02	3.06	

			Procurement Specialist (Full time)	38.61	17.35	Procurement consultant already appointed @ Rs. 50000/- p.m.	6.00	1.50	1.50	1.50	1.50	6.00
			Environment & Social Safeguards Specialist	46.09	20.71	NOC on TER received on 07.04.12. Fin. proposal (2nos) opened on 13.04.2012. Minutes of Negotiation Meeting along with Contract document sent on 11.05.2012		0.00	7.12	7.12	0.00	14.24
			Communication Specialist-Consultant	46.09	20.71	. Queries on payment terms and period recd from bank on 22/05/12 & reply sent to Bank on 23/05/2012. Noc recd from Bank on 23.05.2012. LOA issued on 24.05.2012 & Contract signed on 05.06.2012. LOA value is Rs.142.28 lakhs. 10% (adv), 10% (4M) payment considered in F.Y 2012-13		0.00	7.11	7.11	0.00	14.22
			Project Training Specialist (Full time)	55.38	24.89	0		0.00	0.00	0.00	0.00	0.00
			Project Officers - 3 Nos.	196.1	88.13	1 Proj. Eng. and 1 Proj. IT Officer appointed @ Rs. 40000/- p.m. Appointment letter for other issued and expected to join in July 12. Recently IT Officer resigned and further recruitment to be made by Aug 12	9.71	1.20	2.40	2.40	3.60	9.60
			Project Assistants - 5 Nos. (Full time)	336.87	151.39	1 Scientific Asst. @ Rs.17000/- p.m. already appointed. No suitable candidates were found by 2nd attempt. However further attempt will be taken by Aug 12	1.59	0.51	1.26	2.01	2.01	5.79
			Project Coordinator (Full time - 4 Nos.)	33.79	15.19	Joined w.e.f. 11.04.2012 (2nd time)	2.61	1.60	1.80	1.80	1.80	7.00
			Account Assistants - 2 Nos. (Full time)	40.44	18.17	Both Acc. Asst. @ Rs.17000/- p.m. already appointed.	3.66	1.02	1.02	1.02	1.02	4.08
			Sub total 3A	820.32	368.65		25.76	6.34	22.72	23.98	10.95	63.99

	B	Goods and Equipment	Office Furniture/AC	24.08	10.82	Major Furniture has been procured. Rest procurement will be completed by Dec 12 Payment will be made accordingly.	8.59	0.00	0.00	0.50	0.00	0.50
			Office equipment									0.00
			Desk Top Computers(10 Nos.)	10.70	4.81	completed	5.96	0.00	0.00	0.00	0.00	0.00
			Laptop Computers(10 Nos.)	12.84	5.77	Do	4.38	0.00	0.00	0.00	0.00	0.00
			Printers (2 Nos.)	2.68	1.20	Do	0.47	0.00	0.00	0.00	0.00	0.00
			LCD Projector	5.35	2.40	Do	1.12	0.00	0.00	0.00	0.00	0.00
			Photocopy Machines(Multi functional device)	2.68	1.20	Award has already been made . Rental charges will be made quarterly basis.		0.00	0.30	0.30	0.30	0.90
			Dhapa (NGO Work)									0.00
			Dhapa: Safety equipment (boots, gloves, masks) for rag pickers	92.16	41.42			0.00	0.00	0.00	0.00	0.00
			Identity cards for rag pickers	8.02	3.60			0.00	0.00	0.00	0.00	0.00
			Sub total 3B	158.51	71.23		20.52	0.00	0.30	0.80	0.30	1.40
	C	Domestic/Abroad Training / Study Tour		0.00	0.00		3.60					0.00
	D	Incremental Operating Cost										
			Stationery, supplies & miscellaneous	47.19	21.21		0.82	0.15	0.15	0.15	0.15	0.60
			Books, Journals & Publications	20.51	9.22		0.04	0.05	0.05	0.05	0.05	0.20

			Steering Committee Meeting costs	30.73	13.81		0.20	0.00	0.25	0.00	0.25	0.50
			Vehicles & Transport including maintenance (Rent)	170.12	76.45	Monthly bills are being paid.	10.29	3.00	3.00	3.00	3.00	12.00
			TA & DA for PIU	126.13	56.68	As and when required.	7.89	1.00	1.00	1.00	1.00	4.00
			Training of PIU Staff	61.53	27.65			0.50	0.50	0.50	0.50	2.00
			Website	17.54	7.88	Webpage has been created. Further development will be taken in Dec 2012.		0.00	0.00	1.00	0.00	1.00
			Telephones & Internet (capital cost)	5.94	2.67		0.03	0.05	0.05	0.05	0.05	0.20
			Telephones & Internet (recurring cost)	87.27	39.22		0.14	0.10	0.50	0.15	0.20	0.95
			Advertisements / Tender notifications	124.36	55.89		57.07	10.00	10.00	6.00	5.00	31.00
			Procurement Committee & costs	55.06	24.74		2.73	0.25	0.25	0.25	0.25	1.00
			Grievance Redressal Committee Meeting & Costs	30.77	13.83			0.00	0.00	0.50	0.50	1.00
			Audit Fees	23.54	10.58	Advertisement by 01.06.2012. Appointment by 25.07.2012. Payment will be made accordingly.	0.17	0.00	1.00	1.00	0.00	2.00
			Bank Charges				0.10	0.10	0.10	0.10	0.10	0.40
			Sub total 3D	800.69	359.83		79.48	15.20	16.85	13.75	11.05	56.85
E	Monitoring and Evaluation		Dhapa (NGO Work)	235.05	105.63	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00

			Hooghly sites (NGO Work)	46.09	20.71	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00
			Environmental Monitoring Initiative - Dhapa	24.68	11.09	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00
			Environmental Monitoring Initiative - Hooghly	78.14	35.12	EOI to be published by August 2012		0.00	0.00	0.00	0.00	0.00
			Dhapa (Income restoration / Compensation / Grievance)	191.46	86.04			0.00	0.00	0.00	0.00	0.00
			Hooghly sites (Income Restoration & Grievance)	40.7	18.29			0.00	0.00	0.00	0.00	0.00
			Sub total 3E	616.12	276.88		0.00	0.00	0.00	0.00	0.00	0.00
F	Project Preparation Cost		IBRD Front End Fee	30.00	13.48			0.00	0.00	0.00	0.00	0.00
			Sub total 3	2425.64	1090.08		129.36	21.54	39.87	38.53	22.30	122.24
			GRAND TOTAL	29052.69	13056.28		307.32	304.25	300.36	565.54	606.54	1751.69

ANNEX VIII**Status of Progress Report: MoEF**

S. No.	Activities	Status as on 31.03.2012
1.	The Status of three NPRPS consultancies, namely:	
(a)	Inventory and Mapping of Probably Contaminated Sites in India;	<ul style="list-style-type: none"> • Consultancy awarded on 23.03.2012. • The first installment has been released of Rs. 30.24 lakh
(b)	Development of Methodologies for National Programme for Rehabilitation of Polluted Sites; and	<ul style="list-style-type: none"> • Consultancy awarded on 26.03.2012 and the consultant has submitted the inception report. • The first installment has been released of Rs.28.00 lakh
(c)	Development of National Programme for Rehabilitation of Polluted Sites.	<ul style="list-style-type: none"> • Consultancy awarded on 23.03.2012. • The first installment has been released on Rs. 14.40 lakh
2.	Training	
(a)	Domestic training on "Implementation of remediation process based on cost benefit analysis" and;	The total amount of Rs. 12.14 lakh has been released and the domestic training has already been accomplished.
(b)	International Study Tour "Innovative Remediation Technologies and Methodologies focusing on International best practices"	The first installment has been released of Rs. 45.77 lakh and the study tour has already been accomplished.
3.	Consultants / Project Staff	<ul style="list-style-type: none"> • The hiring of Financial Specialist and Technical Assistant / Data Entry Operator is completed in December 2011. • The process for hiring of Technical Consultants for HWM & SWM is in process likely to be completed by August 2012.
4.	CBIPMP Website	<ul style="list-style-type: none"> • CBIPMP Website has been launched at MoEF Web Server
5.	Audit Certificate	<ul style="list-style-type: none"> • The Audit report for the year 2010-11 has already been submitted to World Bank.

Action Plan Proposal of MoEF (Physical)
Period : 1.4.2012 to 31.3.2013

A) Physical

SL. No.	Components		Physical
1.	Strengthening of Environmental Institutions: Building Capacity for addressing Pollution remediation		
	A.	Technical Support	
		i.	Consultancies
			<ul style="list-style-type: none"> i. Inventory and Mapping of Probably Contaminated Sites in India, <ul style="list-style-type: none"> • Consultancy awarded on 23.03.2012 and first installment of Rs.30.24 lakhs made. The payment of Rs.234.0 lakhs is likely to be made during the year. • All deliverable except the final report is expected to be received during the year.
		ii.	<ul style="list-style-type: none"> Development of Methodologies for the National Programme for Rehabilitation of Polluted Sites <ul style="list-style-type: none"> • Consultancy awarded on 23.03.2012 and first installment of Rs.28.00 lakhs made. The payment of Rs.279.55 lakhs is likely to be made during the year. • The inception report has already been received and all deliverable except the final report is expected to be received during the year.
		iii.	<ul style="list-style-type: none"> Development of the National Programme for Rehabilitation of Polluted Sites <ul style="list-style-type: none"> • Consultancy awarded on 26.03.2012 and first installment of Rs.14.40 lakhs made. The payment of Rs.111.0 lakhs is likely to be made during the year. • All deliverable except the final report is expected to be received during the year.
	B.	Training	
		i.	<ul style="list-style-type: none"> Training Operation, maintenance, and closure of MSW landfills focusing on International best practices <ul style="list-style-type: none"> • The training is likely to be accomplished during the year upto March 2013 and the expenditure of Rs.83.00 lakhs is likely to be incurred.
		ii.	<ul style="list-style-type: none"> Training program on implementation of NPRPS <ul style="list-style-type: none"> • The Training is likely to be accompanied during the year upto March 2013 and the expenditure of Rs.39.24 lakhs is likely to be incurred.
2.	Project Management		
	i.	Consultant / Project Staff	
		<ul style="list-style-type: none"> • The process of hiring of technical consultants for HWM & SWM is in process and likely to be completed by August 2012. 	
	ii.	Goods and Equipments	
		<ul style="list-style-type: none"> • Some office equipments of above Rs.5 lakhs are likely to be procured by September 2012 by Shopping method. 	
	iii.	Audit Certificate	
		<ul style="list-style-type: none"> • The Audit report for the year 2010-2011 has already been submitted to the World Bank. • The audit report for the year 2011-12 is likely to be submitted by September 2012. 	

Action Plan Proposal of MoEF (Financial)
Period : 1.4.2012 to 31.3.2013

B) Financial

(Amount in Rs./Lakhs)

SL. No.	Components		Financial		Remarks
			Outlay	Total	
1.	Strengthening of Environmental Institutions: Building Capacity for addressing Pollution remediation				
	A.	Technical Support			
		i. Goods			
		ii. Services	625.0		
		iii. Incremental Operating Cost			
	B.	Laboratory equipment			
		i. Goods			
	C.	Environmental Compliance Assistance Centre			
		i. Works			
		ii. Goods			
		iii. Services			
		iv. Incremental Operating Cost			
		v. Training and Workshop			
	D.	Training			
		i. Training and Workshop	134.0		
	E.	Upgrading Information Management Systems			
		i. Goods			
		ii. Services			
		iii. Incremental Operating Cost			
		Sub-Total	759.0	759.0	
2.	Project Management				
	A.	Establishment / Consultancy Services	25.0		
	B.	Goods and Equipments	5.0		
	C.	Domestic / Abroad Training / Study Tour			
	D.	Incremental Operating Costs	11.0		
	E.	Monitoring and Evaluation			
	F.	Project Preparation Cost			
		Sub-Total	41.0	41.0	
		Total (1+2+3)	800.0	800.0	
		World Bank Share (85%)	680.0	680.0	
		Central and State Share (15%)	120.0	120.0	