

Year Book 2005

(Pak-EPA)

Pakistan Environmental Protection Agency (Pak-EPA) an attached Department of the Ministry of Environment responsible for enforcement of the Pakistan Environmental Protection Act, 1997 and its enabling rules and regulations. It also deals with public complaints and carries out research and investigation in different fields of environment. Being the technical arm of the Ministry of Environment, it prepares reports on different environmental issues and prepares national environmental policies for approval of the Pakistan Environmental Protection Council.

2. During the year, 2004-2005, this department performed its functions and carried out various activities as elaborated below:

Enforcement of Pakistan Environmental Protection Act, 1997

3. The Pakistan Environmental Protection Act has three regulatory regimes and related functions to control pollution and promote environmental sustainability. These include:

- i) Enforcement of National Environmental Quality Standards (NEQS) applicable to industry, municipal effluent and vehicular emission
- ii) Enforcing Environmental Impact Assessment (EIA) process in the development schemes
- iii) Regulating hazardous substances and Wastes

Enforcement of NEQS

4. During the year 2004-05, the department coordinated with Provincial Environmental Protection Agencies to implement the NEQS. Industrial units were monitored and their emissions were recorded. The Federal Agency carried out extensive study of Hattar Industrial Estate and Hyderabad Water Treatment Plant. It also conducted air and water quality survey of two cities viz. Gujranwala and Faisalabad and interacted with the local authorities to mitigate the pollution problem. A number of cases were registered in the

Environmental Protection Tribunals by the Federal and Provincial EPAs against industrial units which were discharging effluents exceeding the NEQS limits.

5. Rawal and Simli Dams are the major sources of supplying drinking water to the inhabitants of Islamabad/Rawalpindi. The people residing in the catchments area do not have proper facilities of sewerage and sanitation system, thus polluting the water reservoir by violating the PEPA, 1997. Pak-EPA took serious notice and started regular monitoring of the area. Local people were ordered to establish their sewerage and sanitation system. Pak-EPA issued also issued notices for not constructing septic tanks and directed them to comply with the provisions of the Act. Consequently, more than 80% people in the catchments areas of Rawal/Simli Dams have constructed their septic tanks and have complied with environmental laws. The remaining population is also in process to comply with the law.

Environmental Impact Assessment (EIA)

6. Introducing EIA culture in a country like Pakistan was a difficult and challenging task particularly when the environmental institutions were weak and awareness level was extremely low. Now the EIA process has begun in the country in an organized manner after notification of IEE/EIA Regulations, 2000 and availability of IEE /EIA Guidelines (developed through a long consultative process). The Federal and Provincial Environmental Protection Agencies (EPAs) carried out review of various EIAs submitted to them. The petroleum, communication, cement, chemicals, and housing sector were the leading sectors went through the process of EIA.

7. A large number of housing societies are being established in and around Islamabad without complying with the IEE/EIA Regulations, 2000 notified under section 12 of the Pakistan Environmental Protection Act, 1997. The EIA section of Pak-EPA pointed out 28 such illegal housing societies and Legal/Enforcement section of Pak-EPA issued notices to them under section 16(1) of the Act. As per legal procedure, all such housing societies were called for personal hearing before DG Pak-EPA. Consequently, most of them have made commitments that they would comply with the provision of Pakistan Environmental Protection Act, 1997 within 4 to 8 weeks by submitting Initial Environmental

Examination/Environmental Impact Assessments reports of their projects in the concerned environmental protection agencies.

8. The EIA process further augmented after the decision of ECNEC that all future projects for consideration in the ECNEC should have carried out EIA. Press, journalists frequently draw attention of concerned departments towards environmental degradation and emphasis on the legal requirement of submission of EIA of development projects.

Hazardous Substances and Wastes

9. Presently a very weak regulating mechanism exists in the country for import, local production and storage of toxic chemicals. The department has prepared draft Regulations during the year that would ensure safe management of hazardous substances in the country. The draft Regulations are being consulted with the stakeholders.

10. Pakistan Environmental Protection Agency also notified the Hospital Waste Management Rules, 2005 under section 31 of the Pakistan Environmental Protection Act, 1997 making all the hospitals responsible for the proper management of the waste generated by them till its final disposal in accordance with the prescribed rules. Under these rules proper segregation, collection, transportation, storage and disposal of waste would be introduced by every hospital. The waste management teams would be constituted in each hospital assigning them full responsibility for safe handling of hospital waste.

Promulgation of Pakistan Biosafety Rules, 2005

11. Pakistan has made noteworthy achievements in environmental protection and conservation of natural resources for achieving sustainable development during the recent years. Our National Biodiversity Strategy and Action Plan has set the directions towards implementation of the Convention on Biological Diversity (CBD), to which we are a signatory and which requires each contracted party to establish or maintain means to regulate, manage, or control the risks associated with the use and release of Living Modified Organisms (LMOs) resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risk to human health. The Pakistan Environmental

Protection Agency (Pak-EPA) notified Pakistan Biosafety Rules, 2005 to set up a regulatory regime in the country for import, local production, use and export of Genetically Modified Organisms (GMOs). Pak-EPA also notified the National Biosafety guidelines. A project to establish a National Biosafety Center has been approved and the project would be implemented in the next year.

Natural Resource Damage Assessment (NRDA) Study

12. In August 2003, M.T. Tasman Spirit was carrying approximately 67,535 metric tons Light Crude Oil was grounded near Karachi coast. About 31,000 tons of oil spilled onto the shallow marine waters of the Karachi coast. In year 2003, Pak-EPA carried out an extensive study “Natural Resource Damage Assessment (NRDA)” in year 2004 with the support of the United Nations Development Programme to determine the precise extent and severity of sociological injury caused by the Tasman Spirit Oil Spill in phases. Two foreign experts/consultants, Dr. Stefan Micallef (UNEP) and Professor Richard Steiner, (University of Alaska), were engaged for the preparation of NRDA work plan, selection of the local Principal Investigators and institutions, to guide selected local principal investigators of the studies, and make recommendations for the logical process of the NRDA programme. Later on, one expert (Professor Richard Steiner, University of Alaska, USA) was appointed as Chief Technical Advisor to advise the early phase of the 10 sub-studies of the NRDA programme in different areas to assess damage caused to marine fisheries, mammals, birds, etc. and impact on socio-economy of the affected areas. Finally a report was published and presented in a national symposium.

Research/Studies Conducted by Central Laboratory for Environmental Analysis (CLEAN)

13. Central Laboratory for Environmental Analysis (CLEAN) of Pak-EPA was established for research and investigation of the environmental issues regarding water, wastewater, air and soil. CLEAN has made the following activities during the year 2004-June 2005.

Water Quality Monitoring of the Three Lakes; Rawal, Simli and Khanpur (April 2004-June 2005)

13. Central laboratory for environmental analysis in coordination with JICA senior volunteer completed a project on regular water quality monitoring of three lakes i.e. Rawal, Simli and Khanpur Lake. For this purpose the sample from different locations of reservoirs and treatment plant for 1st, 2nd, 3rd, 4th and 5th phase were collected and their analysis was carried out in the central laboratory. The final results were published and forwarded to concerned organizations.

Measurement of NO₂ in Ambient Air

14. Pak-EPA with the assistance of JICA, carried out a study to determine concentration of NO₂ in Islamabad, Lahore, Karachi and Peshawar was carried out by the central laboratory with Diffusion Samplers. The purpose of this investigation was to observe the present status of the NO₂ in air and to assess the contamination due to vehicular emission. The area under investigation was surveyed and a number of diffusion samplers were placed at different locations in the cities. The diffusers have been analyzed and results were compiled.

Green Library and Documentation Centre

15. The Government of Pakistan gives high priority to institutional strengthening. A Green Library & Documentation Center has been established in the premises of Pak-EPA to provide technical support to its staff and information to general public. Green Library has technical material on air, water and soil pollution. Latest books/journals and articles are available. Green Library is also working as a source center for dissemination of information on different environmental issues. General public and students in particular are getting benefits from this facility.

Monitoring Activities/Screening of Development Projects

a. General Monitoring

16. Pak-EPA carried out environmental monitoring of various sectors, which included poultry farms, different industrial units, housing schemes, oil and gas fields, road

construction and pre & post EIA monitoring of projects. During this period 28 Housing societies coming up in and around Islamabad were monitored and advice was issued them to obtain Environmental approval before execution of the project. In case of non-compliance, legal action has been initiated against the violators.

b. Screening of PC-I/PC-II of Development projects

17. This section received 487 PC-I/PC-II of the development projects from Planning & Development Division through M/o Environment for screening from EIA/ Environmental point of view during the year 2004-2005. This agency has recommended 243 projects for conducting IEE/EIA study and seeking their approval from concerned provincial/Federal Environmental Protection Agencies (EPAs). P&D Division was also requested to forward the comments of this agency to the proponents of the project and ensure that environmental consents are obtained at the planning stage.

Project Activities

i) PEP-EPA Project

World Environment Day

18. Declamation contest was organized in connection with the World Environment Day (WED) on 2nd June 2005. Beside, Green Journalist Awards were distributed to those who reported the highest numbers of news items and written articles on the environment issues.

Vehicular Emission Testing Activity

19. This agency launched a campaign against smoke emitting vehicles in Islamabad with collaboration of Islamabad Traffic Police. The Federal Minister for Environment inaugurated the Vehicular Emission Testing Unit (VETU). Since April, 2005 till December, 2005, 1365 vehicles have been examined by the VETS team which included private, Government, semi Government and commercial vehicles.

Establishment of Environmental Monitoring System in Pakistan.

20. A sum of Rs. 10.00 Million was allocated for the financial year 2004-05 and after its 5.00 million was also re-appropriated from other project to met the expenditure of the Project. A land for Establishment of Environmental Research Training Center at H-8/2 has been purchased from CDA and a boundary wall is also made as well. Furthermore, a building for office accommodation hired for project staff on share basis with other projects.

Clean Drinking Water Initiative Project

21. The development objective of the "Clean Drinking Water Initiative" project is to provide water purification plants of 2000 gallons/ hour capacity one in each district and tehsil of Pakistan including AJK/NA and FATA consisting of various stages including pre-filtration works, filtration, purification and ultra-violet disinfection. This project is a part of the commitment of the President and Prime Minister of Pakistan for providing clean drinking water to citizen of this country. Safe drinking water through water purification plants will provide safeguard to human health, including reduction in the mortality rate (associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene) by improving the quality of drinking water. The project office has been established and preparatory work has been completed. The work orders for construction of plants have been released and now 103 plants are being installed at the first instance.

Environmental Public Complaints.

22. During the year, a number of public complaints o environmental issues were received in the department from all over the country. Investigation was done either directly or through the provincial EPAs and appropriate steps were taken o give relief to the public.