Hazardous Waste Management

Morocco

Hazardous Waste Production

- **Industrial Hazardous Waste**: 118,900 tonnes in 2000, expected to increase to 164,870 tonnes annually by 2010. The petrochemical sector accounts for 75 percent.
- **Medical Hazardous Waste**: 11,910 tonnes in 2000, expected to increase to 14,500 tonnes annually by 2010.

Hazardous Waste Management

- Most industrial hazardous waste is stored at the production site, dumped into landfills, and discharged into the sea. A weak regulatory framework, obsolete production technologies, a lack of treatment and disposal facilities, and a concentration of industrial activities along Atlantic littoral are the main problems.
- Until 2002, medical hazardous waste was burned in obsolete incinerators and disposed of in municipal landfills.
- Morocco is one of 12 African countries participating in the First Phase of the Africa Stockpiles Program (World Bank/FAO) striving for the safe disposal of obsolete pesticides over a 12-25 year period.

Legal Framework

- Development of the legal and regulatory framework has been delayed due to the:
  - Complexity of the Moroccan legal system.
  - Limited resources assigned to its development.
  - Multi-sector consultation approach.
- A draft Law on Waste Management and Disposal has been prepared by the Ministry of Environment and submitted to other ministries, hazardous waste generators and other stakeholders. Through a long consultation process general agreement and commitment was obtained from all parties. As a result, the draft law (June 2002) is quite general and many decrees will be required to define the scope and application rules. These decrees are under preparation, but most are at a preliminary stage.

Institutional Framework

- The Environment Department, created in 1995 under Morocco’s Ministry of Territory Planning, Water and Environment (in French: MATEE), is the main agency responsible for environmental management, including hazardous waste management matters.
- The National Environment Council (in French: CNE) was implemented to integrate environmental issues into economic and social development processes, as supported by the sustainable development principles. The CNE is the coordination channel between the Environmental Department (president of the CNE), other ministries and authorities.
- The Regional Environment Councils (in French CRE) were created to provide support and environmental information to the CNE. They also promote and implement at a regional level the recommendation of CNE. They are not yet fully operational.
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• Education and awareness activities are limited to isolated actions due to a lack of resources and the absence of an integrated communication strategy.

Disposal Facilities
• There is no proper hazardous waste treatment and disposal facility in Morocco. However, a central treatment and disposal facility project is preparation with German financing (estimated cost US$10 million). Its capacity is expected to be the following:
  o Industrial hazardous waste: 100,000 tonnes annually
  o Medical hazardous waste: 7,500 tonnes annually (incineration)
• The project is at the feasibility study and environmental impact study stage.
• In addition to the medical hazardous waste incinerator project at the central, three new medical waste sterilization facilities were installed in major hospitals in 2002.

Overall Assessment and Options for Improvement
• A reporting and auditing mechanism should be established to improve estimates of the quantities and types of hazardous waste produced, identify the critical problems, and provide better input for planning operation of the hazardous waste treatment facility.
• Capacity building and additional resources are needed at the MATEE level to support development of the regulatory framework that should guide the development of hazardous waste treatment facilities. CNE’s multi-sector consultation process on environmental regulations should be made more efficient. Such a consultative approach needs to be strengthened by a stronger government commitment to give MATEE the leadership to accelerate the consultation process and ensure effective regulations.
• A global communication strategy targeting hazardous waste generators and those involved in hazardous waste management should be developed to provide a coherent framework for hazardous waste management education activities. Strategy implementation must be coordinated along with regulation enforcement and the implementation of hazardous waste collection and treatment facilities through a national hazardous waste management plan. The plan should be in line with the National Action Plan on the Environment and provide a global framework, targets and schedules for:
  o Elaboration and enforcement of the regulations
  o Planning of facilities and intermediate storage installations
  o Development of the hazardous waste transport sector
  o Communication, education, and awareness activities
  o Financing, cost recovery, and incentive measures.
• Capacity building at MATE and related agencies is needed to support the implementation of the regulatory framework and the national management plan for special waste.
• Cooperation with neighboring countries, through METAP, for hazardous waste management should be improved. Cooperation can be achieved through training and awareness program development and data, experience and knowledge sharing.