

Hazardous Waste Management

Syria

Hazardous Waste Production

- **Industrial Hazardous Waste:** 21,730 tonnes in 1997 for the 5 largest cities. Tanneries and refineries are the main producers.
- 470,000 tonnes of phosphogypsum were produced in 1997.
- **Medical Hazardous Waste:** 3,000 tonnes in 2000, estimated to increase to 4,500 tonnes annually by 2010.

Hazardous Waste Management

- A major hazardous waste management problem in Syria is the absence of information regarding the volume and characterization of the waste produced.
- Syria has a few large state-owned industrial complexes and thousands of small private entrepreneurs are often unaware of the pollution created by their activities.
- Generally, waste from industrial facilities is transported to domestic solid waste dumps in privately rented vehicles. Since there is no segregation between hazardous and non-hazardous materials, it is assumed that most municipal dumps contain large quantities of hazardous materials.
- Some hazardous medical waste is incinerated with obsolete and polluting equipment at hospitals and the rest is mixed and dumped with domestic waste. There is little segregation of hazardous medical waste in hospitals.

Legal Framework

- The government approved Environment Law (Law 50) in August 2002. Applicable regulations to support the law should come out in August 2003.
- There is no specific legal framework concerning hazardous medical waste.

Institutional Framework

Overall responsibility for coordinating all management of environmental activities in Syria lies with the Higher Council for Environmental Safety (HCES). The council is an inter-ministerial body where 12 ministries are represented

The Ministry of State for Environment (MSE) is responsible for:

- Developing environmental policy.
- Monitoring the implementation of environmental legislation.
- Inter-sectoral coordination.

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The General Council for Environmental Affairs (GCEA) is the main operating group within the ministry responsible for providing legislative framework and support including regulations and standards both at the central and local levels.

Disposal Facilities

- Syria has no hazardous waste treatment or disposal facility and none is planned in the short to medium term.
- Some hospitals have incinerators for medical waste. However, they are old polluting single-stage and low temperature models, except for the equipment at the Al-Assad University Hospital.

Overall Assessment and Options for Improvement

- There is a need to establish reporting mechanisms that will allow a better i) estimation of the quantities and characteristics of hazardous wastes produced in the country; ii) understanding of treatment and disposal practices; and iii) identification of the most important issues requiring urgent attention. Considering the scarce human and financial resources available to implement a reporting system, the focus should be on involving polluters in the reporting process. Better data would allow government authorities to concentrate their efforts on critical issues to protect the environment and human health.
- Discussions should be initiated with the World Bank to integrate Syria into the persistent organic pollutant (POP) pesticides program to resolve the potential hazards caused by the storage of outdated pesticides in the country.
- Following evaluation of the quantities and characteristics of Syria's hazardous waste, planning should begin for implementation of a central hazardous waste treatment and disposal facility.
- The cost recovery and polluter pays principles should be integrated into existing and future hazardous waste management policies to ensure the financial viability of projects and stimulate the participation of the private sector. Private sector involvement in hazardous waste management should be encouraged.
- Cooperation with neighboring countries in the field of hazardous waste management, through the METAP program, should be improved. For instance, beneficial cooperation can be achieved through training and awareness program development, and data, experience and knowledge sharing.
- A formal and intensive training program for all GCEA personnel in Damascus and in all regional offices should be developed. More resources should be provided to the MSE in order to confirm its leadership position in all environmental matters in Syria.