

## TECHNICAL SUPPORT TO THE HAZARDOUS WASTE MANAGEMENT PROJECT IN ALEXANDRIA, 2000-2006

The Hazardous Waste Management Project in Alexandria (HWMPA) was a project implemented under the cooperation of the governments of Egypt and Finland. The project's main objective was to develop, plan and implement a safe waste management system for the collection, storage, treatment, and disposal of industrial hazardous waste in Alexandria. One of the project's achievements was the establishment of the integrated system for HW management in Alexandria that included a landfill in al-Nasiriya area. Environics was commissioned to provide technical and institutional support to the project through several activities and studies, mainly addressing institutional development, capacity building, training, and financial and economic aspects.

Environics prepared an institutional study that investigated and assessed the existing administrative bodies involved in the management of hazardous waste. The study presented the legal framework governing hazardous waste management at the time, and provided a detailed discussion of its required system components, as well as an overview of the implementation status of the legal requirements. The study also covered the Egyptian context of the system; its management components; operational modes; supervision; ownership, and operation. Particular emphasis was made on the role and responsibilities of a Hazardous Waste Management Unit (HWMU) at the local level, its institutional set-up in Alexandria, and the possible set-ups for the components of a hazardous waste management system.

The tasks also included a financial and economic study to analyze and determine the requirements and provide a cost estimate of the construction and operation of the treatment and landfill facilities for the HW management system. This study entailed investigating and recommending the possible pricing schemes for the offered services, together with the supporting economic tools.

Environics additionally provided training programs and workshops for the HWMU and al-Nasiriya personnel on the components of a Hazardous Waste Management System (HWMS), such as identification, classification, and management of hazardous waste, as well as the operation of a HW facility. One of such activities was a training workshop for the HW transporters at al-Nasiriya. The workshop included lectures and practical, field training. Innovative training methods were employed to facilitate the information for the transporters, who had limited reading and writing skills.

Within the context of this assignment, Environics prepared the Operational Manual for Alexandria Hazardous Waste Treatment and Disposal Facility (al-Nasiriya), which included a HW transportation manifest for handling and delivering the waste to the landfill.