



CHEMONICS EGYPT



SOLID WASTE MANAGEMENT

CORPORATE **E**XPERIENCE

PROJECTS FACT SHEETS



PROJECT NAME	Kom Ombo/Daraw Solid Waste Management Project
PROJECT LOCATION	Aswan Governorate
ULTIMATE BENEFICIARY	Kom Ombo and Daraw City Councils
CONTRACTED BY	DANIDA
PROJECT DURATION	July 1995 - December 1996
REQUIRED EXPERTISE	<p>Municipal Engineering: solid waste management</p> <p>Institutional Development: strengthening of institutional systems, community participation, sustainability analysis</p> <p>Technical Assistance: contracting assistance</p>
PROJECT DESCRIPTION	<p>Through this project Kom Ombo and Daraw obtained functional and safe systems for the collection and disposal of solid waste, including the disposal of segregated infectious hospital wastes. A sustainable and functional maintenance system for these waste collection and disposal activities was also provided.</p> <p>Specific activities performed by Chemonics Egypt included:</p> <ul style="list-style-type: none"> • Surveys, equipment and site reviews for current methods of solid waste handling • Assessment of hospital waste generation and disposal requirements • Identification of technical solutions and analysis of options • Assessment of community participation and training requirements • Landfill site selection and design • Equipment specifications • Technical assistance in contracting • Implementation supervision <p>These activities were provided in four phases: (1) data collection, analysis and design; (2) tendering and contracting; (3) implementation; and (4) project operation and evaluation.</p>

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PROJECT NAME	Solid Waste Management in Fayoum City: Needs Assessment and Project Identification Study
PROJECT LOCATION	Fayoum City
CONTRACTED BY	Royal Netherlands Embassy, Cairo
PROJECT DURATION	February - April 1994
REQUIRED EXPERTISE	Municipal Engineering: solid waste collection and disposal Institutional Development: interventions to improve solid waste management systems
PROJECT DESCRIPTION	The purpose of this study was to assess the effectiveness and efficiency of the current solid waste collection and disposal systems used by the Fayoum City Council and to develop a package of infrastructure and institutional interventions to improve solid waste management.

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PROJECT NAME	Pilot/Demonstration Project for Hospital Waste Management of Cairo University Hospitals Phase I
PROJECT LOCATION	Cairo University Hospitals
CLIENT	EEAA and DANIDA
CONTRACTED BY	Carl Bro International (lead)
ASSOCIATED FIRMS	Hospicon, Rigshospitalet
PROJECT DURATION	May 1995 - March 1996
REQUIRED EXPERTISE	Environmental Management: hospital waste management
PROJECT DESCRIPTION	<p>This was a pilot project to design and implement a functional, environmentally sound, occupationally safe, and economically feasible and sustainable hospital waste management (HWM) system at the Cairo University Hospitals. Phase II of the project is expected to use and build on the lessons learned during Phase I and adapt the program for use at the national level.</p> <p>The project involved seven basic activities:</p> <ul style="list-style-type: none"> • Project management and coordination • Evaluation and development of hospital waste management and Cairo University Hospitals—to include waste characterization and quantities, assessment of existing HWM systems, possible locations for incinerators and landfills, design of system • Environmental assessments of the incinerator, the external transport of wastes and the landfill • Detailed design, tendering, and tender evaluation • Human resources development • Support to TCOE/EEAA for a national workshop about the program • Preparation for Phase II—how to expand the program beyond the Cairo University Hospitals to the national level

PROJECTS FACT SHEETS



PROJECT NAME	Rapid Appraisal of El-Fashn Solid Waste Dump Site
PROJECT LOCATION	El-Fashn, Beni Suef
CLIENT	Regional Water Supply & Sanitation Project in Beni Suef
PRIME CONSULTANT	Plancenter Ltd.
PROJECT DURATION	September 2000, 2 months
REQUIRED EXPERTISE	Municipal Solid Waste Management
PROJECT DESCRIPTION	<p>Upgrading the Sanitary Landfill in Mohamed Saleh Village, El Fashn</p> <ul style="list-style-type: none">• Checking the land ownership of the landfill area.• Checking the applicable standards and approved procedure for the landfill designs.• Site survey and soil investigations.• Preparing engineering design of the landfill.• Obtain necessary permits for the works.• Preparing tender documents for the works.• Tendering process.• Participation in tender evaluation.• Contract management.• Supervision of the implementation of the upgrading works.

PROJECTS FACT SHEETS



PROJECT NAME	Landfill Development and Operations Plan for the Abu Zabaal Quarry in the Governorate of Qalubiya
PROJECT LOCATION	Governorate of Qalubiya
CLIENT	Cairo Air Improvement - CAIP
PRIME CONSULTANT	Phill Brown, Leo Larochelle and Amgad Elansary
PROJECT DURATION	Five months
REQUIRED EXPERTISE	<p>Chemonics Egypt was required to cover the following:</p> <ul style="list-style-type: none"> • Site visit and interviews with site managers and Governorate official • Site characterization: (topography, surface characteristics) • Surveying the site and prepare the site maps. • Conduct water quality and sampling analysis.
PROJECT DESCRIPTION	<p>To develop a Landfill Development and Operations Plan. This Plan seeks to accomplish the following objectives:</p> <ul style="list-style-type: none"> • Eliminate all fires and manage disposal activities to minimize fire potential in the future. • Develop a sustainable landfill design on the base of the quarry and operational procedures that minimizes environmental damage particularly to groundwater resources. • Develop a landfill design and operational procedures that safeguard the health and safety of operators and others visiting the site for any purpose. • Establish a sustainable landfill configuration that allows the quarry to be used as a cost effective, environmentally sound and safe solid waste disposal location for as many years as possible.

PROJECTS FACT SHEETS



Project Name	Hazard Waste Management Project in Alexandria Engineering Services
Project Location	Nasreya Site, Alexandria, Egypt
Client	Alexandria Governorate.
Funded By	Finish International Development Agency - FINIDA
Contracted By	PLANCENTER Ltd. – Finland.
Project Duration	March – June 2002
Required Expertise	Detailed Design and Tender Documents
Project Description	<p>The project comprises the construction of a hazardous waste sanitary landfill of 14,000 m² and four evaporation ponds with a total net area of 1,300 m². In addition to, an administration building, a water distribution and drainage system; a fire fighting system; a workshop and store; a weighting bridge; an electric distribution and lighting system; a fence and surrounding ditch for flood protection.</p> <p>The Scope of Services included detailed design, construction drawings and preparation of tender documents for all above-mentioned components.</p>

PROJECTS FACT SHEETS



Project Name	Beba and El-Fashn Solid Waste Sanitary Landfill Engineering Services
Project Location	Beba and El-Fashn Cities, Governorate of Beni Suef, Egypt
Client	Governorate of Beni Suef.
Funded By	Finish International Development Agency (FINIDA)
Contracted By	PLANCENTER Ltd., Finland.
Project Duration	March – June 2002
Required Expertise	Detailed Design and Tender Documents
Project Description	<p>The project comprised the construction of a solid waste sanitary landfill to serve the cities of Beba and El-Fashn in Beni Suef Governorate, with two cells each of 31,000 m². In addition to: an administration building, a storage tank, a water distribution network, a fire fighting system, a drainage system, a workshop/store, a weighting bridge, an electrical distribution/lighting system, a washing station, a fence, and a surrounding ditch for flood protection.</p> <p>The Scope of Services included, detailed design, construction drawings and preparation of tender documents for all above-mentioned components.</p>

PROJECTS FACT SHEETS



PROJECT NAME	Waste Recycling for Food Industries
CLIENT	Unsolicited Research and Development Activity
ASSOCIATED FIRMS	Technical and Technological Consulting and Research Fund
PROJECT DURATION	Six months
REQUIRED EXPERTISE	Environmental Management: waste recycling
PROJECT DESCRIPTION	<p>This was an original research and development project initiated and funded by Chemonics Egypt. The goal of the research was to assess the types and quantities of wastes generated by food industries and to determine potentials for recycling or minimizing wastes.</p> <p>Wastes targeted for recycling included single-cell proteins such as yeast, animal fodder, alcohols, acetone, organic acids, biogas, and furfural. Industries that produce these wastes included the sugar, canning, juice, dairy, starch/glucose, edible oils, and beverage industries.</p> <p>The project's activities included literature reviews, field studies, surveys, and the design of biotechnological methods for recycling and for increasing the proportion of reusable wastes to total wastes.</p>