



Conestoga-Rovers & Associates Project Summary

KEY PROJECT ELEMENTS

- Landfill Cell Design
- Waste Relocation/
Landfill Closure
- Landfill Cell
Construction
- Leachate
Treatment System
- Landfill Operations
- Landfill Monitoring
Systems

BARANGAY MAMELTAC SANITARY LANDFILL LA UNION, PHILIPPINES



CLIENT: THE WORLD BANK
DURATION: 2005 - 2009
COST: \$5 MILLION (US\$)

In 2005, CRA, in association with a local construction company, won a contract from the World Bank for the design, construction, and initial year of operation of a sanitary landfill in La Union, Philippines. The contract also included the closure of an existing dump located adjacent to the new landfill cell.

Construction of the first cell was completed and waste from the existing dump adjacent to the cell site was transferred and capped. A second cell was constructed in the location from which the waste was removed and it is currently accepting waste.

CRA provided a resident team member during the construction phase to act as a mentor to the partnership with a local construction company.

The following tasks were performed:

- Design and construction of new cell including liner and leachate collection/transfer system with full-time construction supervision
- Construction and commissioning of on-site leachate treatment system
- Transfer of existing waste to newly constructed landfill cell to maximize available waste capacity
- Construction of diversion swales to isolate clean surface water from the waste
- Installation of passive landfill gas vents
- Installation of monitoring system (i.e., water, landfill gas, and air quality)
- Construction of waste picker area
- Construction of administrative building, hazardous waste holding area, weigh bridge, and wheel-wash facility
- Receiving and processing of incoming waste and outgoing materials recovery products

Contractual obligations included technology transfer in a variety of waste-related activities and items. A comprehensive training course was prepared for presentation to the local government unit and monitoring agencies to meet the specific needs of Solid Waste Management.

A cost recovery, or tipping fee, schedule is in preparation for the site to identify this and other cost recovery mechanisms (such as sale of certified emission reductions) as well as a waste management/diversion plan.

The project represented the first fully engineered landfill constructed and commissioned in the Philippines. The project met and exceeded expectations. CRA was able to provide the City of San Fernando with a design that gave them more than double the required site life of 10 years and the asset value of the new facility provides the City with effective management control for its waste disposal needs for the foreseeable future.

GENERAL INQUIRIES:
info@CRAworld.com

WEB SITE:
www.CRAworld.com