Project: Solid Waste Project: Equipment

Cost: US$2,825,295

Sponsor: The City of Nogales, Sonora

Location: The city of Nogales is located in the northern part of the state of Sonora, Mexico, directly across the U.S.-Mexico border from Nogales, Arizona.

Background: Nogales collects approximately 130,858 tons of solid waste annually, which is mainly disposed of in the municipal landfill constructed in 1995. Collection equipment consists of 39 collection and transportation trucks, 29 of which are more than ten years old, with some more than 20 years old. Moreover, 15 uncovered dump trucks unsuitable for garbage collection remain in service due to a lack of sufficient equipment.

Current equipment conditions pose numerous problems, including high operation and maintenance costs, service interruptions, low collection capacities and air pollution. Estimates of garbage collection efficiency vary from 90% downtown to 70% in the “uphill” neighborhoods. Due to the age of the equipment and the natural topography of Nogales, parts of the city are frequently left out without collection service.

Street cleaning currently consists of manual sweeping of the main downtown streets only. The city sweeps an estimated 80 km. of streets a week. The purchase of truck sweepers will allow the city to expand sweeping coverage to a larger portion of the city.

The collected garbage is carried to a transfer station that consists of an office and security buildings, a 60-ton scale, five containers with pistons (only two of which are in good working condition), and five trailers. All this equipment has already exceeded its useful life and requires constant repairs and maintenance. In addition, most of the landfill equipment needs to be repaired or renovated, in particular a dozer and a compactor.

In order to improve its solid waste services the City is purchasing new collection, transfer and landfill equipment.

Description: The project consists of the purchase of the following equipment:
• Garbage collection trucks
• Automated street sweepers
• Tractor trailers and other transfer station equipment
• Landfill operation equipment, such as a compactor and a dozer

**BECC Certification:** December 11, 2007

**NADB Funding:**
- **Loan and Guaranty Program:**
  - Market-rate loan: US$2,361,515
  - The loan was made in pesos and will finance 85 percent of project costs.

**Other Funding Sources:**
Nogales will cover the remaining costs with its own funds.

**Benefits:**
With this project consistent and reliable garbage collection and disposal services will be provided to 100% of the urban population of the city of Nogales, including the neighboring communities of Cicuta and Mascareñas. As a result, most of the illegal garbage dumpsites in the urban area will be eliminated, and air pollution from garbage trucks and littering will be reduced. Moreover, proper waste compacting will reduce the risk of fires in the old dump site and the current landfill, as well as extend the useful life of the landfill.

For more information, contact Juan Antonio Flores,
North American Development Bank, 210-231-8000