NORTH AMERICAN DEVELOPMENT BANK

PROJECT CLOSEOUT FACT SHEET

Project:	Wastewater Collection and Treatment project		
Location:	Miguel Alemán, Tamaulipas	Certification Date:	October 30, 2007
Type:	Wastewater	Operation Startup:	April 2010
Population Benefitted:	24,139	Closeout Date:	July 2024

Pre-project Conditions

In 2007, water service coverage in Miguel Alemán and Los Guerra was at 95%, and sewer coverage was at 78%. Residents not connected to the sewer system used septic tanks, which discharged raw sewage into El Buey Creek and the Rio Grande, the main source of drinking water for Miguel Alemán and communities downstream on both sides of the river. In addition, a substantial portion of the existing wastewater collection system was in poor condition, allowing sewage to leak into the soil and potentially contaminate local groundwater. The wastewater treatment plant (WWTP) built in 1967 had not been properly maintained and was no longer in operation. The untreated effluent from the plant was discharging into an irrigation canal.

Project Objective

Reduce exposure to untreated wastewater discharges and the risk of waterborne diseases by rehabilitating and expanding the wastewater collection system and constructing a new WWTP.

Project Scope

Improvements to the wastewater collection system consisted of the construction of the Pino Suarez Force Main and three sewer mains using 12.2 km (7.58 miles) of high-density polyethylene pipe, along with a new lift station and equipment for three existing lift stations to increase their flow capacity. The project also included the construction of a lagoon-type WWTP with a total design capacity of 112.5 liters per second (lps) or 2.57 million gallons a day (mgd) to be built in two phases: 75 lps (1.71 mgd) in the first phase and 37.5 lps (855,917 gallons per day) in the second phase. The treated effluent from the new plant would be discharged to an irrigation canal for reuse.

Project Results

Outputs	Indicator	Target in 2007 (certification)	Actual (2016)
New wastewater treatment system	number	1	1
New wastewater treatment capacity	liters per second (lps)	112.2	75
New wastewater lift station	number	1	1
Improved wastewater lift stations	number	3	3
New wastewater collection lines installed	km	12.2	12.2
New wastewater connections installed	number	–	1,108

Outputs were confirmed during a site visit on June 2016. Only the first phase of the WWTP with a capacity of 75 lps (1.7 mgd) was built.

Outcomes	Indicator	Target in 2007 (certification)	Actual (2016)
Population benefitted	number	24,020	24,139
Wastewater treated	lps	49.65	49.9
Wastewater discharges eliminated	lps	–	10.27
New and improved access to wastewater collection services	Number of connections	4,988	4,988

* 2016 population estimate, according to 2010 data of the Mexican nacional statistics institute, Instituto Nacional de Estadística y Geografía (INEGI).

At certification Miguel Alemán had a population of 24,020, and as of 2016 it had increased by only about 1% to 24,139 residents, with a corresponding increase in treated wastewater flow, from an estimated 49.65 lps (1.133 mgd) in 2007 to 49.9 lps (1.139 mgd) in 2016.[1] For this reason, the second phase of the WWTP was not built.

Project Financing
(USD)

Sources of Funding	Estimated at certification	Actual Amount
NADBank BEIF construction assistance grant*	$ 1,540,000	$ 1,540,000
Other sources**	4,925,407	4,778,936
Total	**$ 6,465,407**	**$ 6,318,936**

* Border Environment Infrastructure Fund (BEIF) funded by the U.S. Environmental Protection Agency (EPA) and administered by NADBank
** Other sources included the Mexican National Water Commission (CONAGUA) and the local water utility, *Comisión Municpial de Agua Potable y Alcantarillado de Cuidad Miguel Alemán* (COMAPA).

[1] Flows were calculated based on 178.6 liters per capita per day, according to the 2022 Facility Plan for the Wastewater Collection System for El Mirador, Montebello and Los Presidentes Subdivisions, General Lazaro Cardenas Loop in Miguel Aleman, 2022.