CERTIFICATION PROPOSAL

WASTEWATER COLLECTION SYSTEM EXPANSION IN MIGUEL ALEMAN, TAMAULIPAS

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CONTENTS

INTRODUCTORY NOTE

The El Mirador, Montebello and Los Presidentes subdivisions, located in the southern part of the city of Miguel Aleman, Tamaulipas, do not have access to the municipal wastewater system and use on-site disposal systems such as latrines, cesspools, and sub-standard septic tanks to address their wastewater disposal needs. The Project will include the installation of approximately 21,000 meters (69,000 ft) of wastewater pipes, including 2 sewer mains, collection lines, and residential connections to 500 homes. Wastewater generated from the new service will be treated at an existing wastewater treatment plant, which has more than sufficient capacity to treat the city's average wastewater flow of 50 lps (1.14 mgd) and receive the additional 3 lps (68,473 gpd) in flows that will be collected by the Project.

The Project is necessary to protect public health and the environment because it will eliminate the risk of deficient on-site wastewater disposal systems that can cause raw wastewater to leak into the ground, yards, and local streets and the risk for human contact with untreated wastewater discharges. Because of these conditions, the Project was prioritized for funding through the U.S.-Mexico Border Water Infrastructure Program administered by the U.S. Environmental Protection Agency (EPA).

The total estimated cost of the Project is US$5,800,000, which includes construction, supervision, contingencies, and value-added taxes (VAT). The Sponsor requested a BEIF grant to support implementation of the Project and improve the affordability of the investment. Based on a thorough analysis of both the Project and the Sponsor, NADBank has determined that the Project meets all BEIF program criteria and is recommending that EPA approve a BEIF grant for up to US$2,700,000 for its construction. The additional US$3,100,000 will be provided by federal and state in accordance with the operational guidelines for CONAGUA's programs.

Additionally, to strengthen its institutional capacity, COMAPA shall designate staff to attend the NADBank Utility Management Institute (UMI) and similar ongoing training offered by or in partnership with NADBank. Finally, COMAPA shall commit to report on specific operational improvements achieved during the Project implementation period as required by the sub-grant agreement.

The final designs have been completed and all environmental authorizations have been obtained for all project components. The Sponsor has initiated construction with Mexican funds for one sewer main component and will initiate procurement for the remaining components to be funded by Mexico during the first quarter of 2025. The sponsor is ready to begin project implementation for BEIF-funded components as soon as the financing is in place.

EXECUTIVE SUMMARY

WASTEWATER COLLECTION SYSTEM EXPANSION IN MIGUEL ALEMAN, TAMAULIPAS

Project Summary

Project Name:	Wastewater Collection System Expansion.
Project Type (Sector):	Wastewater.
Objective:	Reduce human health risks associated with waterborne diseases caused by exposure to untreated wastewater and eliminate the potential for surface and groundwater contamination by expanding the wastewater collection infrastructure and eliminating on-site disposal systems.
Expected Outcomes:	▪ Provide first-time wastewater collection services to approximately 500 homes in the El Mirador, Montebello, and Los Presidentes subdivisions located in the southern area of the city. ▪ Reduce the risk of approximately 3 liters per second (lps) or 68,473 gallon per day (gpd) of untreated or inadequately treated wastewater discharges due to sub-standard on-site systems. ▪ Prevent untreated wastewater discharges to the Rio Grande River, a transboundary water body.
Population to Benefit:	1,463 residents.
Sponsor:	The local water utility, *Comisión Municipal de Agua y Saneamiento de Miguel Alemán* (COMAPA).
Project Cost:	US$5,800,000

Financial Summary

Program:	Border Environment Infrastructure Fund (BEIF).
Grant Amount:	US$2,700,000
Percentage of Project Cost:	46.6%.
Recipient:	COMAPA de Miguel Alemán.
Other Funding:	US$3,100,000 from Mexican federal, state, and local sources, representing 53.4% of the total project cost.

CERTIFICATION PROPOSAL

WASTEWATER COLLECTION SYSTEM EXPANSION IN MIGUEL ALEMAN, TAMAULIPAS

1. PROJECT OBJECTIVE AND EXPECTED OUTCOMES

The proposed project consists of constructing a wastewater collection system in the El Mirador, Montebello, and Los Presidentes subdivisions in the southern area of the city of Miguel Aleman, Tamaulipas (the "Project"). The Project sponsor is the local water utility, *Comisión Municipal de Agua Potable y Alcantarillado de Miguel Alemán* (COMAPA), which has developed this Project to eliminate untreated wastewater discharges from on-site disposal systems, such as poorly functioning latrines and septic tanks. The proposed expansion includes the installation of approximately 500 new residential connections, providing first-time wastewater collection and treatment services to an estimated 1,463 residents of Miguel Aleman.[1] The new sewer system is expected to collect an estimated 3 liters per second (lps) or 68,473 gallons per day (gpd) of wastewater for proper treatment, eliminating the potential for surface and groundwater contamination and reducing human health risks associated with waterborne diseases caused by exposure to untreated wastewater.[2]

2. ELIGIBILITY

2.1. Project Type

The Project falls within the eligible category of wastewater.

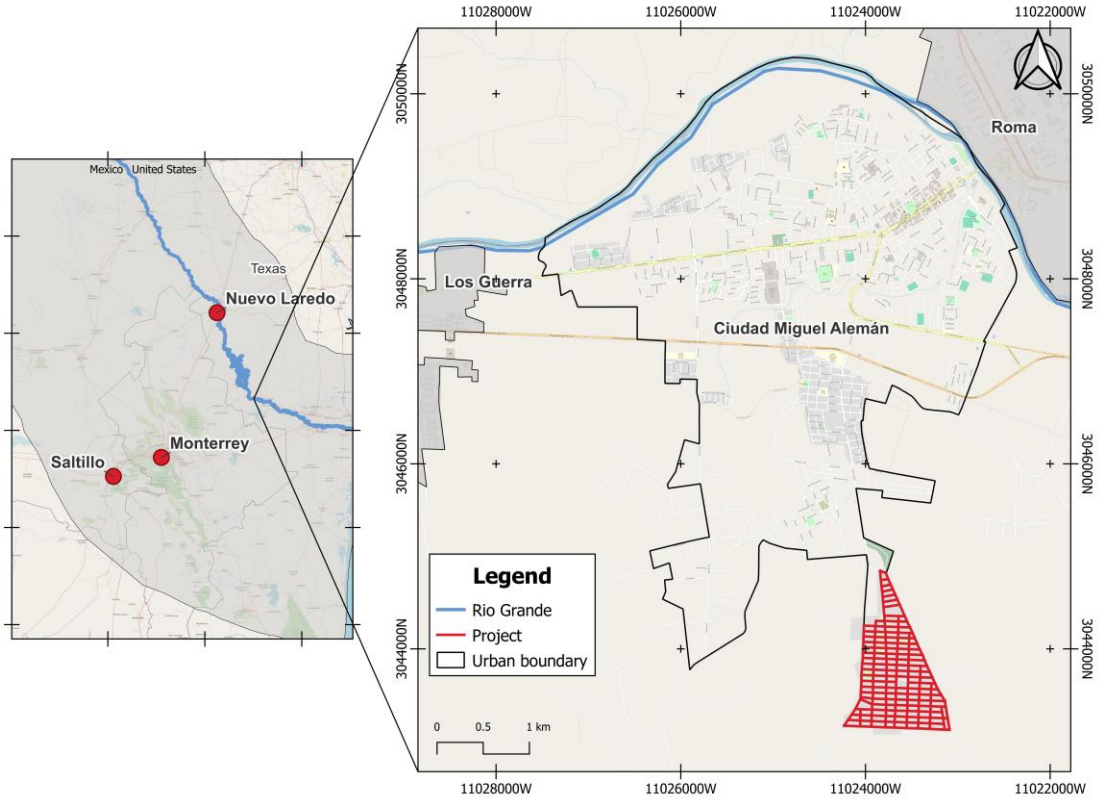
2.2. Project Location

Miguel Aleman is located in the northwest region of the state of Tamaulipas, adjacent to the Rio Grande River and across the border from the city of Roma, Texas. The Project will be constructed in the southern area of the city at the following geographical coordinates: latitude 26°21'38.4" N and longitude -99°1'39.3" W, and at an approximate average altitude

[1] The population to benefit is estimated based on 2.93 residents per household, as reported by the Mexican national institute of statistics (INEGI).
[2] Source: COMAPA, Facility Plan for the Wastewater Collection System for El Mirador, Montebello and Los Presidentes Subdivisions, General Lazaro Cardenas Loop, in Miguel Aleman [*Anteproyecto de Alcantarillado en las Colonias: El Mirador, Montebello y los presidentes, Libramiento General Lázaro Cárdenas, en la ciudad de Miguel Alemán*], 2022. The estimate is based on a population density of 2.93 residents per household, the generation of 178.6 liters per capita of wastewater per day and a total of 500 connections.

of 85 m (279 ft) above sea level. Figure 1 shows the approximate location of the community and the Project.

Figure 1
PROJECT LOCATION MAP



2.3. Project Sponsor and Legal Authority

The Project sponsor is the local water utility, *Comisión Municipal de Agua Potable y Alcantarillado del Municipio de Miguel Alemán* (COMAPA), a decentralized public entity of the municipal government, which provides water and wastewater collection, treatment, and disposal services in the municipality of Miguel Aleman, Tamaulipas. It was created pursuant to Decree No. 733, published in the Official Gazette of the State of Tamaulipas on June 2, 2004 (Volume CXXIX, No. 66).

3. CERTIFICATION CRITERIA

3.1. Technical Criteria

3.1.1. General Community Profile

As reported by the Mexican National Institute of Geography and Statistics (INEGI), in 2020, the total population of the municipality of Miguel Alemán was 26,237, which represented around 0.7% of the state population. Based on INEGI data, the average annual growth rate of the municipality between 2010 and 2020 was -0.29%. INEGI also reported that, in 2020, 58% of the population of Miguel Aleman was economically active.

According to data from the Annual Report on the Status of Poverty and Unmet Social Needs issued by the National Council for the Evaluation of Social Development Policy (CONEVAL), 39.1% of the population in Miguel Aleman was living below the poverty level in 2023, in comparison with the state average of 34.7%.[3]

The Project is expected to benefit the estimated 1,463 residents living in the El Mirador, Montebello, and Los Presidentes subdivisions, who do not currently have access to wastewater collection and treatment services.

The following table summarizes the status of basic public services and infrastructure in Miguel Aleman.

Table 1
BASIC PUBLIC SERVICES AND INFRASTRUCTURE*

Water System	
Coverage:	97%
Water supply source:	Rio Grande River
Number of hookups:	9,355
Wastewater Collection	
Coverage:	87%
Number of connections:	8,366
Wastewater Treatment	
Coverage:	100% of wastewater collected
Treatment facilities:	Lagoon-based system with a total capacity of 75 lps (1.71 million gallons per day)**

* Source: COMAPA, April 2023.
** The current treatment capacity is sufficient to address the current average flow of 50 lps (1.14 mgd).

[3] Source: Consejo Nacional de Evaluación de la Política de Desarrollo Social [National Council for the Evaluation of Social Development Policy] (CONEVAL), 2023. A person is considered to be in poverty when they are deprived of at least one social right and do not have sufficient income to meet their needs.
https://www.gob.mx/cms/uploads/attachment/file/795547/28025-MiguelAleman23.pdf

Wastewater Collection and Treatment System

COMAPA operates the water and wastewater systems that serve Miguel Aleman. According to the information provided by COMAPA, approximately 87% of the homes in its service area are connected to the wastewater collection system, which has approximately 85.8 km (53.3 miles) of sewer lines and 1.8 km (1.1 mile) of force mains. Part of the wastewater collection system operates by gravity; however, to provide the necessary hydraulic load for wastewater treatment, the city relies on 10 lift stations to convey wastewater flows to the wastewater treatment plant (WWTP), a lagoon-based treatment plant with a total capacity of 75 lps (1.71 mgd). The plant effluent currently complies with the quality standards established in Mexican regulation NOM-001-SEMARNAT-1996 and is discharged to the Guardados Canal to be reused in agriculture.[4]

The El Mirador, Montebello and Los Presidentes subdivisions located in the southern part of the city do not have wastewater collection lines, so their residents use on-site disposal systems such as latrines, cesspools, and septic tanks to dispose of their wastewater. Figure 2 shows the typical septic tanks and latrines used in the area.

Figure 2
EXISTING SEPTIC TANKS AND LATRINES IN THE PROJECT AREA

COMAPA is proposing a project to extend wastewater services to the three subdivisions. In general, the proposed Project consists of the construction of two sewer mains and a sewer system, including the installation of the residential connections. The WWTP is more than sufficient to treat the city's average wastewater flow of 50 lps (1.14 mgd) and receive the additional 3 lps (68,473 gpd) in flows that will be collected by the Project.

The Project is necessary to protect public health and the environment because it will eliminate the risk of deficient on-site wastewater disposal systems that can cause raw wastewater to leak into the ground, yards, and local streets and the risk for human contact with untreated wastewater discharges. Because of these conditions, the Project was

[4] On March 3, 2022, an amendment to NOM-001-SEMARNAT-1996 was published establishing new maximum levels of contaminants. The new standard became effective on April 3, 2023. In accordance with the guidelines established by the Mexican National Water Commission (CONAGUA), COMAPA will submit a plan to achieve and maintain its treatment plant in compliance with the new quality standards in NOM-001-SEMARNAT-2021.

prioritized for funding through the U.S.-Mexico Border Water Infrastructure Program administered by the U.S. Environmental Protection Agency (EPA).

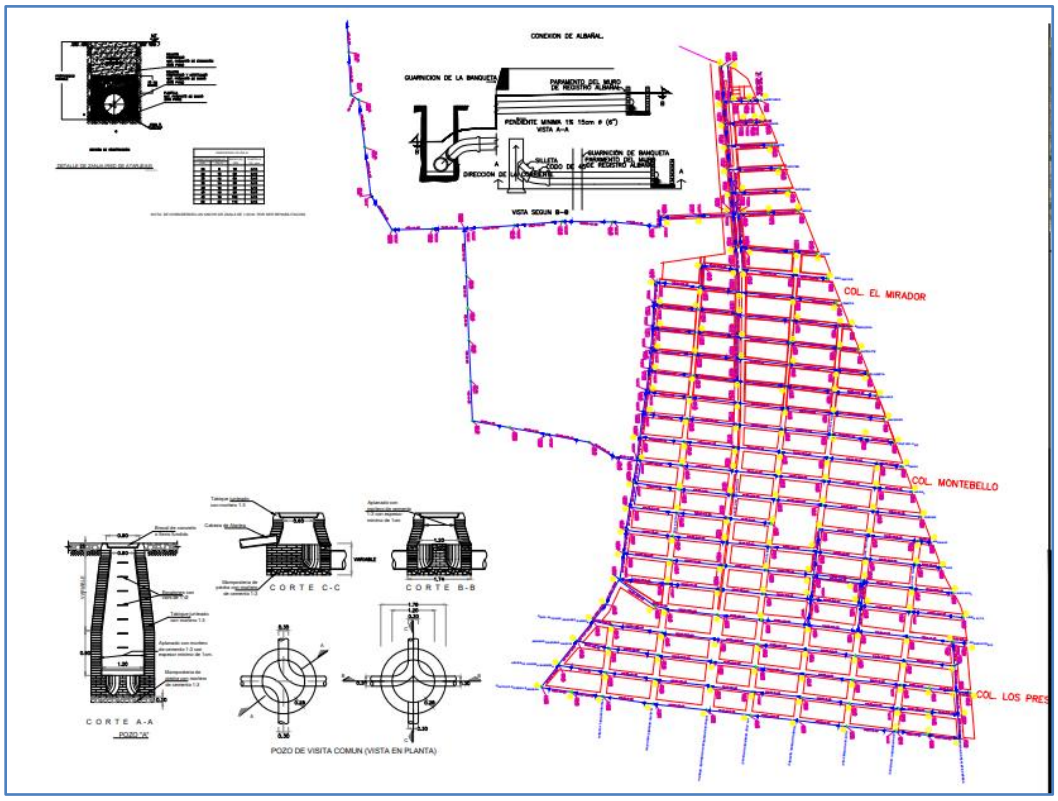
3.1.2. Project Scope

The proposed Project consists of constructing a wastewater collection system in the El Mirador, Montebello, and Los Presidentes subdivisions in the southern area of the city of Miguel Aleman, Tamaulipas, and includes the following components:

- *Sewer Main 1*: Installation of approximately 3,875 meters (12,713 ft) of polyvinyl chloride (PVC) pipeline with diameters ranging between 25 cm (10") and 45 cm (18"), and construction of two sedimentation boxes.
- *Sewer Main 2*: Installation of approximately 693 meters (2,274 ft) of 20 cm (8") PVC pipeline.
- *Sewer lines*: Installation of approximately 16,500 m. (54,134 ft) of 20 cm (8") PVC pipeline and 274 m. (899 ft) of 25 cm (10") PVC pipeline.
- *Residential connections*: Installation of approximately 500 residential wastewater connections, including the decommissioning of the corresponding on-site wastewater disposal systems.

Figure 3 presents a schematic layout of the Project.

Figure 3
WASTEWATER COLLECTION SYSTEM IMPROVEMENTS LAYOUT



BEIF funding is expected to be used for the construction of sewer main No. 1 and the residential connections, while Mexican funds will be used to build the wastewater collection system, sewer main No. 2, and a canal crossing that is necessary for the operation of the system. The construction of sewer main No. 2 began in August 2023 using state and federal funding.

3.1.3. Technical Feasibility

As part of the development of the Project, various planning activities were conducted, including an analysis of alternatives to select the most appropriate materials for implementing the Project and determine the feasibility of the new wastewater system. In developing the designs for the new sewer system, efforts were made to use existing rights of way to the extent possible. To ensure optimal operation of the system, topographic and geotechnical studies were carried out, and a hydraulic model was prepared. In addition, existing flows and estimated growth in the area were considered.

Sewer pipe diameters were calculated based on the appropriate slopes and velocities to prevent silting in the lines, septic conditions, and over-excavation to ensure that the new wastewater lines can operate as a gravity-based system. Pipe material options reviewed included high-density polyethylene (HDPE) and PVC. Both were considered suitable materials for the construction of the wastewater collection system; however, since COMAPA has more experience in handling and maintaining PVC pipe, the latter was selected as the preferred option.

The final design for the construction of the new wastewater collection system was originally prepared by COMAPA and was updated in 2022 pursuant to the technical specifications established in the Water and Wastewater Manuals developed by the Mexican National Water commission (CONAGUA). The Project update included green building practices as part of the technical specifications. The updated design was reviewed by CONAGUA, the Tamaulipas state water agency (CEAT) and NADBank. CONAGUA's Regional Office in Monterrey, Nuevo Leon, validated the technical documents through official letter BOO.811.06-718(22) issued on December 8, 2022.

3.1.4. Land Acquisition and Right-of-Way Requirements

Most of the sewer lines included in the Project will be installed within existing municipal easements and rights-of-way. Additional rights of way required for the installation of sewer mains No. 1 and No. 2 have been secured by COMAPA from three property owners and are in the process of being registered.

3.1.5. Project Milestones

Procurement for the construction of Sewer Main No. 2, which is being financed with Mexican funding, was completed during the third quarter of 2023, and the infrastructure is currently under construction. Procurement of the components to be funded with the BEIF grant is expected to begin in the fourth quarter of 2024, and construction of the entire Project is expected to be completed by December 2026, and no longer than 36 months after project certification. Table 2 provides a summary of the Project milestones and their respective status.

Table 2
PROJECT MILESTONES

Key Milestones	Status
Environmental clearance – U.S.	Completed November 10, 2022
Environmental clearance – Mexico	Completed May 26, 2023
Final designs	Completed March 2022
Components financed with Mexican funds	
Procurement for sewer main No. 2	Completed in the 3rd quarter of 2023
Construction of sewer main No. 2	In process. Completion expected in the 2nd quarter of 2024
Procurement for remaining components	Expected to begin in the 1st quarter of 2025
Construction of remaining components	Expected to begin in the 2nd quarter of 2025
Components funded with BEIF grant	
Procurement	Expected to begin in the 4th quarter of 2024
Construction	Expected to begin in the 1st quarter of 2025
Estimated construction completion	**December 2026**

3.1.6. Management and Operations

The management and operation of the proposed Project will be the responsibility of COMAPA, which currently serves a total of 9,355 water hookups and 8,366 wastewater connections within the city of Miguel Aleman. In 2022, the utility treated an average of 50 lps (1.14 mgd) of wastewater from the city.

The utility is governed by a board of directors made up of key municipal officials, including the mayor, members of the City Council and the director of Public Works, as well as representatives from the State Ministry of Water Resources and Social Development and the State Health Department.

The utility has 50 employees, 10 of which are assigned to the technical infrastructure and facility operations. This group of technical personnel is highly educated, including staff with bachelor's degrees in civil and electrical engineering, architecture and business management. COMAPA also has qualified personnel to supervise construction work and carry out procurement activities. It works closely with the municipal public works staff to implement infrastructure improvements throughout the system.

COMAPA has an Operation and Maintenance Manual that includes routine tasks to ensure proper operation of the system, as well as procedures to address unexpected conditions. Utility personnel receive training annually and have the necessary experience to operate the wastewater collection system.

The WWTP has sufficient capacity to handle all existing and potential flows collected after implementation of the Project. In addition, COMAPA has successfully maintained the quality of non-residential wastewater discharges to the sewer system in compliance with the parameters established in Official Mexican Standard NOM-002-SEMARNAT-1996, allowing for the regular and consistent operation of its WWTP. Additionally, the utility has a pretreatment program that complies with BEIF program requirements, and the covenants established in BEIF grant agreements for projects previously funded for Miguel Aleman.

While COMAPA has a master meter to account for the full volume of water extracted from its supply source, only about 45% of customer accounts are metered, so its user fees are assessed based on actual consumption for less than half of the system. User fees for wastewater collection services are based on metered water consumption, where available, and at a fixed rate based on similar service for those areas without meters. The utility also charges for wastewater treatment services in areas with a wastewater collection system. Once the expanded system has been completed and is operating satisfactorily, this will become a new service charge for residents in the Project area.

COMAPA reports that it operates at about 50% commercial efficiency, which is lower than the indicative national average of 70%, and at 63% physical efficiency, which is slightly higher than the indicative national average of 60%.[5] Both of these factors hinder the utility's ability

[5] Source: Instituto Mexicano de Tecnología del Agua [Mexican Water Technology Institute] (IMTA), "*Indicadores de Gestion Prioritarios en Organismos Operadores*" [Priority Utility Management Indicators], December 2016. The term "indicative" is used because this average does not reflect 100% of water utilities in Mexico but rather a universe of at least 140.

to generate revenue. Additional cash flows are needed to support adequate operation and maintenance practices, as well as to build necessary reserves. In parallel with the implementation of this Project, NADBank will work with the utility to strengthen its institutional capacity and improve these operational performance indicators. Technical assistance may be provided to carry out studies, such as a water audit and a rate study, for example. Additionally, to strengthen its institutional capacity, COMAPA shall designate staff to attend the NADBank Utility Management Institute (UMI) and similar ongoing training offered by or in partnership with NADBank. Finally, COMAPA shall commit to report on specific operational improvements achieved during the Project implementation period as required by the sub-grant agreement.

3.2. Environmental Criteria

3.2.1. Environmental and Health Effects/Impacts

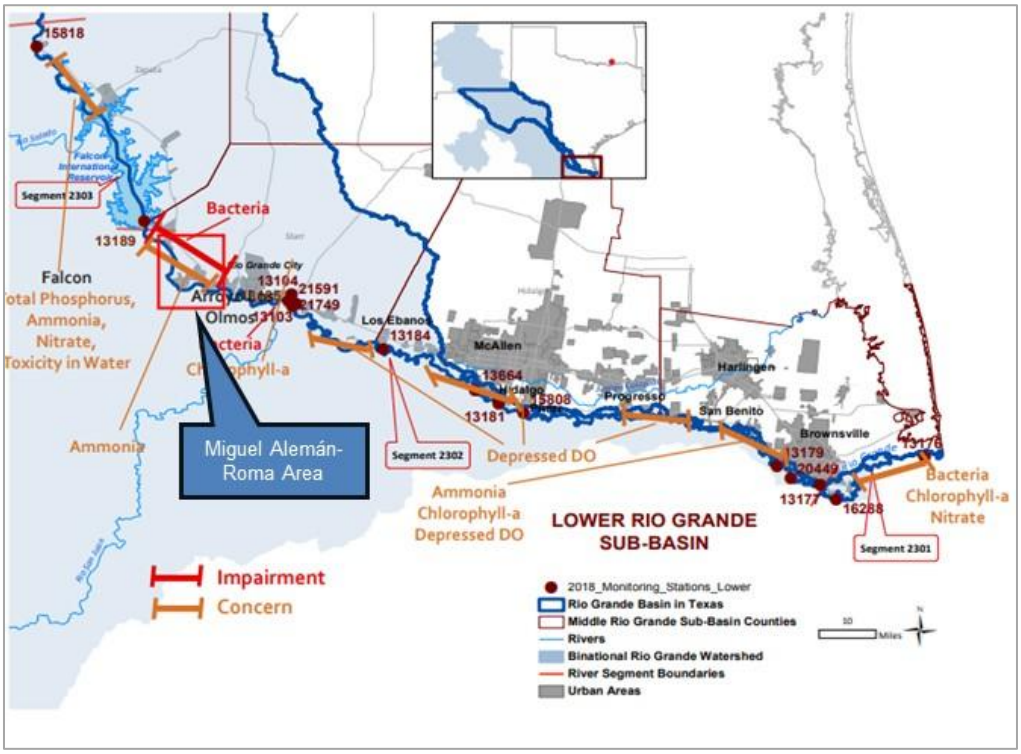
A. Existing Conditions

Residents in the El Mirador, Montebello, and Los Presidentes subdivisions currently use on-site systems, such latrines and septic tanks, to dispose of their wastewater. The systems are substandard and do not function properly, posing a potential risk for soil and groundwater contamination that could ultimately affect the water quality of the Rio Grande River. Continuous leaks and seepage of untreated or inadequately treated wastewater also generates significant risks to human health and public safety by creating a pathway for the transmission of waterborne diseases associated with the pathogenic microorganisms and fecal matter contained in wastewater. Currently, the untreated wastewater discharges from the Project area are 68,473 gallons per day (3 liters per second), which are equivalent to an organic load of 62,572 pounds per year (28,382 kilograms per year).

According to the Texas surface water quality standards for the Rio Grande Basin, segment 2302-07 of the river, between the cities of Roma, Texas, and Miguel Aleman, Tamaulipas consistently shows high concentrations of bacteria, indicating the potential inflow of raw wastewater that may adversely impact this drinking water source and render the segment unfit for recreational use.[6] While not associated with wastewater discharges, there are also high levels of chlorides in this segment from upstream sources, and near maximum permissible levels for ammonia. Communities without wastewater treatment infrastructure, as well as runoff from urban areas, may contribute to the issues of high bacteria content and low dissolved oxygen. Figure 4 shows the quality of the Rio Grande River in segment 2302.

[6] Source: International Boundary and Water Commission (IBWC), U.S. Section, 2020 Basin Summary Report for the Rio Grande Basin in Texas.

Figure 4
RIO GRANDE WATER QUALITY IN SEGMENT 2302



B. Project Impacts

The Project will improve the quality of life of residents in the three subdivisions by installing wastewater collection infrastructure and eliminating poorly functioning on-site sanitary systems. The new wastewater collection system will help prevent groundwater and surface water contamination, as well as human contact with untreated wastewater. Wastewater will be collected and conveyed to the WWTP for treatment.

Specifically, the Project is expected to generate environmental and human health benefits related to the following outcomes:

- Provide first-time wastewater collection services to approximately 500 existing homes in the El Mirador, Montebello, and Los Presidentes subdivisions located in the southern area of the city.
- Reduce the risk of approximately 3 lps (68,473 gpd) of untreated or inadequately treated wastewater discharges into the ground and groundwater due to sub-standard on-site systems.
- Prevent untreated wastewater discharges to the Rio Grande River, a transboundary water body.

Additionally, with the implementation of the project, 46,929 pounds per year (21,287 kilograms per year) of organic load will be removed from the environment.

To enhance the benefits of the Project, all reasonable applications of green building practices, as defined by the EPA Border Water Infrastructure Program, were considered during the planning and final design phases. The sewer mains have been designed to convey wastewater by gravity, eliminating the need for external energy sources.

C. Transboundary Impacts

Implementation of the proposed Project will reduce the potential for contamination of shared water bodies, including the Rio Grande River. Moreover, because of the proximity of Miguel Aleman to Roma, Texas, there are frequent border crossings between the two communities. The construction of wastewater collection infrastructure will positively impact the health of residents in this neighboring city and surrounding communities, since these actions will help reduce the risk for waterborne diseases resulting from exposure to untreated wastewater.

3.2.2. Compliance with Applicable Environmental Laws and Regulations

The National Water Law is the primary law regulating water usage and public utilities. Official Mexican standards regulate wastewater systems. The Project will comply with the following official Mexican standards and regulations:

- *Official Mexican Standard NOM-002-SEMARNAT-2021*, which establishes the maximum permissible levels of contaminants in wastewater discharges to urban or municipal wastewater collection systems.
- *Official Mexican Standard NOM-001-CONAGUA-2011*, which establishes the specifications for hermeticity in water distribution systems, residential water connections and wastewater collection systems, and methods for testing hermeticity.
- *Official Mexican Standard NOM-001-SEMARNAT-1996*, which establishes the maximum permissible levels of contaminants for wastewater discharges to urban or municipal wastewater collection systems.

NOM-001-SEMARNAT-2021 entered into effect on April 3, 2023, tightening the permissible levels of contaminants in treated wastewater discharges. Under the compliance program and guidelines established by CONAGUA, utilities will have until March 2027 to bring their treatment facilities into compliance with the new parameters. NADBank is supporting the sponsor to coordinate with the state to develop and submit the action plan required to comply with the new regulation by the 2027 deadline.

A. Environmental Clearance

Pursuant to the provisions of the Tamaulipas State Law of Ecological Balance and Environmental Protection, COMAPA consulted the Tamaulipas State Ministry of Urban Development and Environment (SEDUMA) through official letter No. 613/MA/2020 dated December 11, 2020, regarding the environmental authorization required for the proposed Project. SEDUMA determined a General Environmental Impact Statement (*in Spanish,*

Manifestacion de Impacto Ambiental, MIA) was required.[7] The MIA document was prepared in accordance with SEDUMA guidelines and submitted to SEDUMA on September 14, 2022. SEDUMA issued a resolution on May 26, 2023, through official letter No. SEDUMA/SP/22-28/2023/001124.

To be eligible for a BEIF grant supported by federal appropriations to EPA's U.S.-Mexico Border Water Infrastructure Program, the Project's transboundary impacts must be assessed in compliance with the U.S. National Environmental Policy Act (NEPA). To meet this requirement, a Technical Memorandum was developed and submitted to EPA for consideration and review. The Technical Memorandum addresses the potential environmental impacts resulting from the implementation of the Project, including:

- Air quality;
- Biological resources;
- Socioeconomic, environmental justice, health, and safety risks;
- Hazardous materials, solid waste, and pollution prevention;
- Historical, architectural, archeological, and cultural resources;
- Land use;
- Noise and noise-compatible land use;
- Rio Grande River water quality information; and
- Cumulative impacts.

Based on the findings and conclusions of the Technical Memorandum and planning documents, EPA Region 6 prepared a Categorical Exclusion notice. After a 14-day public comment period, EPA issued the Categorical Exclusion on November 10, 2022, establishing that the Project will not result in any significant negative impacts to the environment in the U.S.-Mexico border region.

B. Mitigation Measures

The agencies that evaluated the Project determined that its implementation will not generate significant adverse impacts to the environment; however, the MIA resolution establishes mitigation measures to address minor environmental impacts that may occur during the Project construction and operation phases, including:

- The local air basin may be temporarily impacted by carbon monoxide, nitrogen oxides and sulfur dioxide emissions due to vehicles and equipment used during construction.
- A temporary increase in dust emissions may be caused by construction activities.
- Hazardous waste—such as used oil—may be generated during the construction phase.
- The quality of surface water resources could be temporarily impacted by stormwater runoff during the construction phase.

[7] Official Letter No. SEDUMA/SP/2021/000173, issued by SEDUMA on February 5, 2021.

- Noise levels may be elevated during construction activities; however, this impact is short term and will be concentrated in the work area. Potential impacts also include temporary roadway blockages and the presence of workers in the area.

Required mitigation measures include:

- Application of water to reduce the emission of dust particles and soil erosion.
- Construction is to be scheduled between 8 a.m. and 5 p.m. to prevent extended disturbance from noise.
- Vehicle tune-ups to reduce emissions.
- Placement of warning signs to prevent potentially hazardous situations.
- Hay bales or other sediment control barriers may be placed along rights-of-way to prevent surface water contamination.
- All construction personnel will receive training to familiarize workers with potential construction impacts and mitigation measures.

To monitor the implementation of these measures during construction, external supervision will be contracted with BEIF funds. In addition, COMAPA will be responsible for maintaining ongoing coordination with the applicable environmental protection agencies and must comply with any water quality requirements, authorization procedures or recommendations made by those agencies during the life of the project.

By following these best management practices, temporary construction impacts will be minimized. Consequently, the long-term results from the implementation of the proposed Project will be positive overall.

C. Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

3.3. Financial Criteria

The total estimated cost of the Project is US$5,800,000, which includes construction, supervision, contingencies, and value-added taxes (VAT). The Sponsor requested a BEIF grant to support implementation of the Project and improve the affordability of the investment. Based on a thorough analysis of both the Project and the Sponsor, NADBank has determined that the Project meets all BEIF program criteria and is recommending that EPA approve a BEIF grant for up to US$2,700,000 for its construction. Table 4 presents the Project costs and the proposed sources of funding.

Table 4
USES AND SOURCES OF FUNDS
(USD)

Uses		Amount	%
Construction*		$ 5,800,000	100.0
TOTAL		**$ 5,800,000**	**100.0**
Sources		**Amount**	**%**
Mexican funds**	Grant	$ 3,100,000	53.4
NADBank-BEIF	Grant (EPA)	2,700,000	46.6
TOTAL		**$ 5,800,000**	**100.0**

* Estimated construction costs, supervision and contingencies include 16% value-added tax.
** Federal, state, and local participation will conform to the current operational guidelines of the programs that will fund the Project.

When determining BEIF assistance for projects, BEIF program guidelines require a loan component, when feasible, to finance part of the Project. The loan component amount is subject to the sponsor's ability to support the Project through user fees, other specific project revenue and/or funds available from state or local sources. In addition, the analysis considers the overall capital investment plan for the utility and the demand it will place on the financial capacity of the project sponsor. In this case, NADBank requested that EPA waive the loan component requirement in order to allow the Sponsor to maintain its current borrowing capacity so that in the near future it can use debt to finance critical investments that that will advance more wastewater improvements.

In addition, for projects located in Mexico, EPA requires that every grant dollar be matched with grant funding from Mexican federal sources. As indicated in the table above, total funding from Mexican federal sources for this Project will cover approximately 53.4% of the Project cost.

4. PUBLIC ACCESS TO INFORMATION

4.1. Public Consultation

On April 10, 2024, NADBank published the draft certification proposal for a 30-day public comment period. The following Project documentation is available upon request:

- Validation of the final design by CONAGUA through Official Letter BOO.811.06-718(22) issued on December 8, 2022.
- Technical Memorandum submitted to EPA on, July 2022.
- General Environmental Impact Statement (MIA) for the Wastewater Collection Project in the El Mirador, Montebello and Los Presidentes subdivisions, Miguel Aleman, Tamaulipas, August 2022.
- Categorical Exclusion for the Sewer System Installation in the Southern Area of Miguel Aleman, Tamaulipas, Mexico, issued by EPA on December 10, 2022; and
- Official Letter SEDUMA/SP/22-28/2023/001124 issued by the Tamaulipas Ministry of Urban Development and Environment on May 26, 2023.

4.2. Outreach Activities

COMAPA conducted outreach activities to gain the support of residents within the Project area by providing information regarding its scope, construction costs and expected benefits. Activities to provide access to Project information were conducted in accordance with the public outreach requirements of the BEIF program.

Due to pandemic restrictions during the planning phases of the Project, no public meetings were held. Instead, a flyer about the Project was included with resident water bills. In addition, COMAPA posted information about the Project on its website, including the service areas impacted, estimated construction costs and funding sources, potential issues, and service connection information. Information about the Project was also published in the offices of COMAPA.

NADBank also conducted a media search to gauge public awareness of the Project, as well as to detect any possible opposition from the community. Below are the articles found, along with the corresponding links:

- *El Pueblerino* (April 25, 2023) "*Obra de alcantarillado beneficiará a las colonias Mirador, Presidentes y Montebello*" [Sewer system project to benefit the Mirador, Presidentes, and Montebello subdivisions]. Residents of Miguel Aleman are receiving timely information about plans for a sewer system in the El Mirador, Montebello, and Los Presidentes subdivisions, which will benefit families in those three major sectors by introducing the convenience of modern wastewater collection services and subsequent arrangements for providing paved streets.

https://elpueblerino.wordpress.com/2023/04/25/obra-de-alcantarillado-beneficiara-a-las-colonias-mirador-presidentes-y-montebello/

- *RepuestaEnLinea.info* (April 25, 2023) *"Informan a la población sobre anteproyecto de alcantarillado de las colonias El Mirador, Montebello y Los Presidentes"* [Local residents informed about plans for a sewer system in the El Mirador, Montebello, and Los Presidentes subdivisions].
  https://respuestaenlinea.info/informan-a-la-poblacion-sobre-ante-proyecto-de-alcantarillado-de-las-colonias-el-mirador-montebello-y-los-presidentes/

- *Agenciatamnoticias.info* (25 abril, 2023) *"Informan a la población sobre anteproyecto de alcantarillado de las colonias El Mirador, Montebello y Los Presidentes"* [Local residents informed about plans for a sewer system in the El Mirador, Montebello, and Los Presidentes subdivisions].
  https://agenciatamnoticias.info/informan-a-la-poblacion-sobre-ante-proyecto-de-alcantarillado-de-las-colonias-el-mirador-montebello-y-los-presidentes/

The activities conducted by COMAPA, and the media coverage described above demonstrate that the public has received regular updates regarding the Project, including technical and financial information, expected environmental impacts, construction-related disruptions, and economic impacts. The Project Sponsor informed NADBank that no comments expressing concern about the Project were received during the public outreach process. To date, no opposition to the Project has been identified.