



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

JUN 3 2014

### FINDING OF NO SIGNIFICANT IMPACT

#### TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS:

In accordance with the environmental review guidelines of the Council on Environmental Quality found at 40 Code of Federal Regulations (CFR) Part 1500, and with the use of the implementing environmental review procedures of the United States Environmental Protection Agency (EPA) found at 40 CFR Part 6 entitled "Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act" as guidance, the EPA has performed an environmental review of the following proposed action:

Reynosa Wastewater Collection Project  
Proposed by the Comision de Agua Potable y Alcantarillado (COMAPA)  
Located in Reynosa, Tamaulipas, Mexico

Estimated EPA Share: \$ 8,000,000  
Estimated Local Share: \$ 23,700,000

The City of Reynosa is located in the northeast area of the Mexican state of Tamaulipas, bordering Hidalgo County in the State of Texas to the north. The municipal territory of Reynosa, Tamaulipas, comprises 1,218 square miles. Currently, the area does not have adequate wastewater collection or treatment infrastructures, and residents discharge waste into an aging lagoon system. The lack of wastewater collection and treatment infrastructure in the area creates a potential source of surface and ground water contamination. In addition, odors from the lagoon system permeates the area.

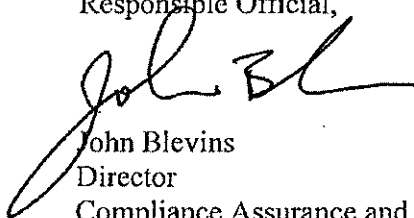
COMAPA proposes to install a wastewater collection system to serve 217,836 people in Reynosa. The preferred alternative consists of additional facilities construction at WWTP No. 2, the construction of a new lift station number 278, rehabilitation of lift station No. 1, installation of new sewer pipes, abandonment of lift station numbers 2, 7, and 8, installation of new pressure mains, and improvements to the pumping station at lift station 30. The project would increase wastewater treatment capacity to a rate of approximately 39.9 million gallons daily (MGD).

EPA Region 6 has performed an environmental review and assessment on the Environmental Information Document, and other supporting data, prepared for the proposed Reynosa Wastewater Infrastructure Project. The environmental review and assessment process did not identify any potentially significant adverse environmental impacts associated with the proposed action. The project individually, cumulatively over time, or in conjunction with other actions will not have a significant adverse effect on the quality of the environment. Accordingly, the EPA Region 6 has made preliminary determination that the proposed project is not a major federal action significantly affecting the quality of the human environment, and that preparation of an Environmental Impact Statement (EIS) is not warranted.

Re: Reynosa Wastewater  
Infrastructure FNSI

Comments regarding this preliminary decision not to prepare an EIS and issue a Finding of No Significant Impact (FNSI) may be submitted to the U.S. Environmental Protection Agency, Office of Planning and Coordination (6EN-XP), 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733. All comments will be taken into consideration. No administrative action will be taken on this decision during the 30-day comment period. This preliminary decision, and the FNSI, will become final after the 30-day comment period expires if no new information is provided to alter this finding.

Responsible Official,

A handwritten signature in black ink, appearing to read "John Blevins", is written over the typed name and title.

John Blevins

Director

Compliance Assurance and  
Enforcement Division

**ENVIRONMENTAL ASSESSMENT**  
**for the**  
**PROPOSED REYNOSA WASTEWATER CONVEYANCE**  
**AND TREATMENT SYSTEM IMPROVEMENTS**  
**TAMAULIPAS, MEXICO**

**1.0 GENERAL PROJECT INFORMATION**

**1.1 Purpose and Need for Proposed Action**

The Fiscal Year 2011 Appropriations Act for the Environmental Protection Agency (EPA) included special Congressional funding for wastewater construction projects. The Comision de Agua Potable y Alcantarillado (COMAPA) of Reynosa, Tamaulipas, Mexico was selected to receive appropriations funding support from the EPA for the rehabilitation of the wastewater treatment infrastructure, and construction of new treatment infrastructure in Reynosa. Currently, the area does not have adequate wastewater collection or treatment infrastructures, and residents discharge waste into an aging lagoon system. The new wastewater treatment infrastructure would provide wastewater treatment capacity for approximately 217,836 people in Reynosa.

The City of Reynosa is located in the northeast area of the Mexican state of Tamaulipas, bordering Hidalgo County in the State of Texas to the north. The municipal territory of Reynosa, Tamaulipas, comprises 1,218 square miles.

**1.2 Proposed Action**

The proposed action will consist of rehabilitating existing infrastructure, abandoning outdated or non-functioning infrastructure, and construction of new infrastructure.

The construction of additional facilities at wastewater treatment plant (WWTP) No.2 consists of an expansion of existing facilities, and development of two trickling filters. The pumping system for lift station 30, which conveys wastewater to WWTP No.2, would be improved as well. The improvements to lift station 30 will not involve any ground disturbance. Proposed improvements to WWTP No.2 and lift station 30 would increase the treatment capacity from 5.7 million gallons daily (mgd) to as much as 17.1 mgd. These improvements would accommodate the current overflow conditions at lift station 1 and would prevent the future discharge of untreated wastewater into the Rio Grande from WWTP No.1.

The proposed lift station 278 would replace the existing Lift Stations 2, 7, and 8, and would assist in conveyance of wastewater flows to lift station 1, and ultimately to WWTP No. 1. Approximately 0.83 miles of sewer pipe would be installed along existing road right of way (ROW) to connect wastewater flows from the locations of lift station 2, 7, and 8 to the new lift station 278. Two pressure main pipelines, approximately 3.6 miles in length, would be installed to connect lift station 278 to lift station 1, and lift station 1 to WWTP No. 1. Lift station 1 would be rehabilitated to replace outdated existing lift station mechanics. Lift stations 2, 7, and 8 would be abandoned in place upon operation of lift station 278.

Re: Reynosa Wastewater  
Environmental Assessment

A second potential alternative included expanding WWTP No. 1 and pumping wastewater there rather than to WWTP No. 2. Given the elevation gradient of the proposed project area and current locations of lift stations, pumping to WWTP No. 1 would be a greater expense than pumping to WWTP No. 2. In addition, this alternative would result in additional discharges of treated effluent from WWTP No. 1 into the Rio Grande; therefore, this alternative was eliminated from further study.

### 3.0 ENVIRONMENTAL SETTING

The City of Reynosa is located in the northeast area of the Mexican state of Tamaulipas, bordering Hidalgo County in the State of Texas to the north. The municipal territory of Reynosa, Tamaulipas, comprises 1,218 square miles and sits at an elevation of 108 feet above sea level. The project area lies within the Tamaulipan ecoregion and in the deserts and xeric shrublands biome, which extends from southwestern Texas to the Sierra Madre Oriental in Coahuila, Mexico. This ecoregion is characterized by mesquite grasslands.

### 4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

#### 4.1 Air Quality

Air quality in a given location is determined by the concentration of various pollutants in the atmosphere. The EPA establishes national ambient air quality standards (NAAQS) for criteria pollutants in the United States (US). NAAQS represent maximum levels of background pollution limits necessary to protect human health. In Mexico, the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) establishes normas ambientales para aire, which are Mexico's equivalent to US air quality standards. The area of concern within the US is under the jurisdiction of the Brownsville-Laredo Intrastate Air Quality Control Region, which is in attainment and is located far from all non-attainment areas for the criteria pollutants CO, lead, ozone, PM10, and SO<sub>2</sub>. There are no non-attainment areas for PM<sub>2.5</sub> in Texas. The local air quality at the project area is typical of high density residential areas. Given that latrines and cesspools currently treat a portion of the wastewater generated in the project area, odors may be periodically emitted into the local environment. The primary emissions of concern for construction activities are CO, NO<sub>2</sub>, PM10, and PM<sub>2.5</sub>. The CO, NO<sub>2</sub>, and PM<sub>2.5</sub> emissions are from engine combustion, and PM10 and PM<sub>2.5</sub> emissions from fugitive dust during ground disturbing activities.

Under the No Action Alternative, no new wastewater treatment infrastructure or improvements to the existing wastewater conveyance system would be constructed in the project area, and no construction or operations related to wastewater improvements would occur. If this alternative were selected, there would be no expected direct impacts with regard to air quality; however, odors from untreated wastewater would continue in the project area.

The preferred alternatives carbon monoxide emissions from construction equipment would occur intermittently during the two-year term of construction activities associated with improvements to the wastewater collection system. Construction activity is not expected to result in significant increases in the emissions of carbon monoxide and other primary pollutants.

Re: Reynosa Wastewater  
Environmental Assessment

installation during a one- to two-year period. The northernmost extent of the proposed wastewater conveyance system improvements are approximately 1,200 feet south of the international border. Noise generated by construction equipment would be temporary and would be reduced through best management practices; such as the use of equipment sound mufflers and restriction of construction activity to normal working hours. No construction would occur in the US and construction noise generated by the Preferred Alternative would be short-term in nature. No direct or indirect construction noise impacts are anticipated to occur in the US.

Impacts in Reynosa related to construction noise generated under the implementation of the Preferred Alternative would be short-term in nature. Lift Station No. 278 would be located in the median of a busy roadway and surrounded by a wall; therefore, operation of this lift station would not generate noticeable noise emissions. Lift Station No. 1 would continue to generate noise in a location currently accustomed to such noise levels. The Preferred Alternative may generate lower noise emissions due to improved mechanics. WWTP No. 2 would continue to operate in an area accustomed to wastewater treatment operations and expanded operations would not generate a significant increase in noise emissions. Therefore, no long-term direct or indirect operational noise would occur in the US or Mexico related to implementation of the Preferred Alternative.

#### **4.3 Floodplains**

Under the Proposed Action, COMAPA would construct infrastructure to accommodate wastewater flows, as well as rehabilitate existing infrastructure in the proposed project area. The proposed project area is entirely within Mexico, and no construction would occur within the US. Construction would be limited to installation of collection and conveyance networks and support infrastructure along existing roadways and previously disturbed areas within Mexico. No construction activity would occur in the US; therefore, no direct or indirect impacts to floodplains in the US would occur under implementation of the Preferred Alternative. No portions of the proposed project are within an identified floodplain; therefore, no impacts to floodplains would occur in Mexico.

If the No Action Alternative were selected, no construction or long-term operation of a wastewater collection system would occur in the proposed project area. No activities would result in direct or indirect impacts on floodplains.

#### **4.4 Wetlands**

No natural wetlands exist in or near the proposed project area. Under the Preferred Alternative, no construction would occur in the US. Construction activities would be limited to previously developed or disturbed areas and would not result in discharge of stormwater flow, or result in increased sedimentation in US waters or wetlands. Since no wetlands are near the proposed project area; no direct or indirect effects on wetlands in the US or Mexico would occur under implementation of the Preferred Alternative.

Under the No Action Alternative, no new infrastructure for wastewater collection would be constructed or improved. Therefore, no impacts would occur under the No Action Alternative.

Re: Reynosa Wastewater  
Environmental Assessment

WWTP No. 2 discharges effluent into the open *Rodhe Canal*, which initially discharges directly into irrigation systems and eventually discharges into Laguna Madre along the eastern coast of Tamaulipas. Currently, no surface water of significance flows from the proposed project area into the US; drainage in the area is directed through surface drains. Implementation of the Preferred Alternative is intended to eliminate the direct discharge of untreated wastewater into the Rio Grande, thereby reducing the potential for surface water contamination.

Section 10 of the Rivers and Harbors Act of 1899 tasks the U.S. Army Corps of Engineers (USACE) with overseeing any action that may affect navigable waters of the United States. USACE reviewed the project for potential impacts to navigable waters of the US, and concluded the project would not impact these resources. The National Park Service (NPS) administers the National Wild and Scenic River Program, and in a 2013 letter, the NPS determined that the project did not require review for impacts to Wild and Scenic Rivers. The International Boundary and Water Commission (IBWC) assess impacts to the shared water resources of Mexico and the United States. The funding recipient is responsible for continued coordination with IBWC, and must adhere to any water quality requirements, permitting processes, or recommendations put forth by the agency for the duration of the project.

#### 4.7 Biological Resources

In Mexico, the SEMARNAT administers laws affecting the environment, including threatened and endangered species (T&E). Norm NOM-059-ECOL-2001 identifies four categories for status classification: endangered species, threatened species, special protection species, and species possibly extinct from wildlife communities. Comparable to the USFWS, the SEMARNAT prohibits the taking, possession, transportation, or sale of any of the plant or animal species designated by state law as T&E without the issuance of a permit.

The project area is typical of high density residential areas and has undergone extensive development resulting in a highly modified environment; therefore, this area does not provide suitable habitat for sensitive plants or wildlife. Remaining vegetation and wildlife in, and near, the project area are typical of species encountered in urban environments.

Under the Preferred Alternative, no construction would occur within the US; therefore there would be no direct impacts to habitat within the US. Long-term adverse impacts to aquatic habitat are not anticipated to occur. Based on the distance from habitat areas within the US, short-term noise impacts associated with this alternative are not anticipated to be perceptible by sensitive species within the US. Therefore, no adverse direct or indirect impacts to biological resources in the US would result from implementation of the Preferred Alternative.

Construction activities in Mexico under the Preferred Alternative would be short term and limited to existing roadways and previously disturbed areas. No direct or indirect impacts to biological resources in Mexico would result, and implementation of the Preferred Alternative would result in negligible impacts.

Re: Reynosa Wastewater  
Environmental Assessment

#### 4.10 Energy

To comply with Executive Order (EO) 13514, the project has been evaluated for its potential to impact the US federal government's goal to reduce greenhouse gas emissions and energy consumption. Reynosa may be considered a large energy consumer given the population size. Sustainable energy is not a prevalent technology, although solar-powered technology would be considered a viable resource due to the climate in the area.

Implementation of the Preferred Alternative is not anticipated to result in adverse impacts to energy usage by federal or other facilities. The Preferred Alternative would require increased energy use and associated emissions for intermittent operation of lift stations that would assist in wastewater conveyance to WWTP No. 2, as well as the operations of the expanded facilities at WWTP No. 2. Although the expanded WWTP No. 2 and associated lift stations would use energy to operate, these facilities would tie into existing electrical distribution lines and would require no new energy infrastructure. Lift Station 1 would be rehabilitated and would likely result in more efficient operation and energy use than the existing aging lift station. Lift Station 278 would replace three separate aging lift stations; therefore, operation of Lift Station 278 is also expected to be more efficient than operation of the current three lift stations. By treating wastewater at WWTP No. 2, less sewage volume would be pumped up-gradient to the WWTP No. 1 basin, contributing to energy savings. The pressure valve included in the pressure main between Lift Station 1 and WWTP No. 1 would result in beneficial impacts to energy use by further reducing the amount of energy required for wastewater pumping within the service area. Furthermore, trickling filter technology is a low energy consumption process. In addition, under the Preferred Alternative, building practices would seek materials from nearby sources to the extent feasible to limit energy consumption from transportation.

Under the No Action Alternative, no infrastructure for wastewater conveyance and treatment would be constructed and there would be no changes in energy resources in the US or Mexico.

#### 4.11 Cumulative Impacts

The No-Action Alternative would not contribute to a general improvement in municipal and sanitation services compared to what is currently taking place in the area of concern and also downstream throughout the Rio Grande and its associated habitat.

The cumulative effects of the preferred alternative are to increase the quality of municipal services. The preferred alternative would provide positive transboundary impacts. This would occur due to improved water quality conditions in combination with other wastewater treatment infrastructure projects along the US/Mexico border. Upgrades to the wastewater collection infrastructure would reduce the contamination of potable water and local water bodies from leaky pipelines. The proposed enhancements will indirectly improve the water quality in the Rio Grande even as the contiguous population and the amount of wastewater discharged continues to grow. The implementation of the preferred alternative will increase water quality within the region.

Re: Reynosa Wastewater  
Environmental Assessment

## **6.0 RECOMMENDATION**

Based upon completion of this Environmental Assessment, and a detailed review of the Environmental Information Document for the project, it has been determined that construction activities are considered to be environmentally sound. Therefore, it is recommended a Finding of No Significant Impact be issued.

## **7.0 LIST OF AGENCIES CONTACTED BY BECC**

U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service  
U.S. Environmental Protection Agency  
U.S. National Park Service  
Federal Emergency Management Agency  
International Boundary and Water Commission  
Natural Resource Conservation Service  
North American Development Bank  
Texas Commission on Environmental Quality  
Texas Parks and Wildlife Department  
Texas State Soil and Water Conservation Board  
Texas Historical Commission  
Comisión Internacional de Límites y Aguas