The City of Los Fresnos (CN600241483) operates the Los Fresnos Wastewater Treatment Plant (RN102184207) the plant operates as an extended aeration wastewater treatment process to treat the wastewater before it is discharged. The facility is located at 802 South Nogal Street, Los Fresnos, in Cameron County, Texas 78566.

This application is for a renewal to dispose a daily average flow not to exceed 2 ,000,000 gallons per day of treated domestic wastewater via outfall 001.

Discharges from the facility are expected to contain seven-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an Existing Phase: The plant operates as an activated sludge wastewater treatment process to treat the wastewater prior to release into a drainage ditch. The existing wastewater treatment facility (WWTF) is an extended aeration treatment facility which currently uses two oxidation ditches with a clarifier following each ditch. Raw sewage flows into the WWTF headworks through three force mains from existing offsite lift stations. The existing headworks consist of an automatic bar screen and a grit removal system. The existing bar screen and grit removal facilities will be used for both the existing treatment and proposed treatment facilities. Wastewater flows via gravity from the headworks into the two existing oxidation ditches. The older of the two existing oxidation ditches has a volume of 80,424 cubic feet (cf) with a center wall and curved baffles. The oxidation ditch is aerated by three fixed horizontal rotors. One rotor is rated at 20 horsepower, and the other two are both rated at 15 Horsepower. The newer of the two existing oxidation ditches has a volume of 56,743 cf with a center wall and curved baffles. This oxidation ditch is aerated by three horizontal rotors rated at 25 HP each. The mixed liquor flow from each oxidation ditch then flows by gravity to its following clarifier. Sludge from each clarifier is either pumped back to the oxidation ditches or it is pumped onto the sludge drying beds. The clarified effluent flows, by gravity, into the chlorination disinfection unit, followed by chlorine removal, and finally discharges by gravity into the existing drainage ditch to the southwest of the treatment plant.

The final disposition of the sludge is turned into a solid and hauled off by truck from Denali Water Solutions to Rosales Farm 1 landfill in Starr County.

The plant discharges treated wastewater at a volume not to exceed an annual average flow of 1,000,000 gallons per day. The effluent discharges through a 18” pipe to Cameron County Drainage District (CCDD) No. 1 Ditch No. 1, thence to CCDD No. 1 Ditch No. 2, thence to San martin Lake, thence to Brownsville Ship Channel in Segment No. 2494 of the Bays and Estuaries.