

**City of Santa Fe  
Wastewater Management Division  
Wastewater Treatment Plant**



**Site Description**

*Activities at Facility*

The City of Santa Fe Paseo Real Wastewater Treatment Plant (WWTP) is located at 73 Paseo Real, Santa Fe, New Mexico 87507. The WWTP practices a conventional treatment process and has a design flow of 13 MGD. Santa Fe, the capitol of the State of New Mexico, is a high desert community located at the foothills of the Sangre de Cristo Mountains in north central New Mexico. The WWTP serves a population of over 65,000 residents, but the City of Santa Fe is also a tourist destination point and the wastewater treatment plant is called upon to handle the increased flows generated by the numerous tourists.



**Wastewater Management Division Administration Building.**

The WWTP is composed of several units all of which work together to produce an effluent which meets and exceeds all federal and state discharge requirements.



## ***PRELIMINARY TREATMENT***



Headwork's

The headwork's is comprised of various components used to remove larger debris from raw sewage entering the plant.



The bar screen is a fine screen type, that can be flow actuated or ran by a timer. Rocks fall into a rock collector ahead of the barscreen. The purpose of the barscreen is removal of cans, plastic products, paper, rags, and other things too large to pass through the screen.

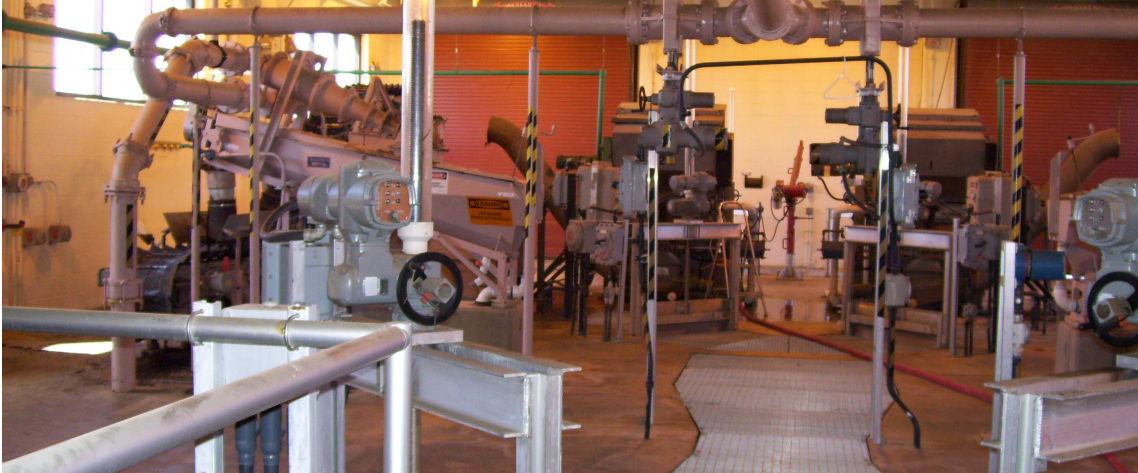


These items fall into the rag press, where dewatering occurs by compression.





After dewatering they are discharged to the hoppers or dumpsters placed under the chutes.



The influent that passes through the barscreen is allowed to continue in the wastewater flow passing through the parshall flume where the flow is metered and the flow of wastewater goes into two wet wells.



The wastewater from the wet wells is pumped by one or two of four influent pumps to the grit tanks.



The wastewater flows through one of two grit tanks and is aerated.

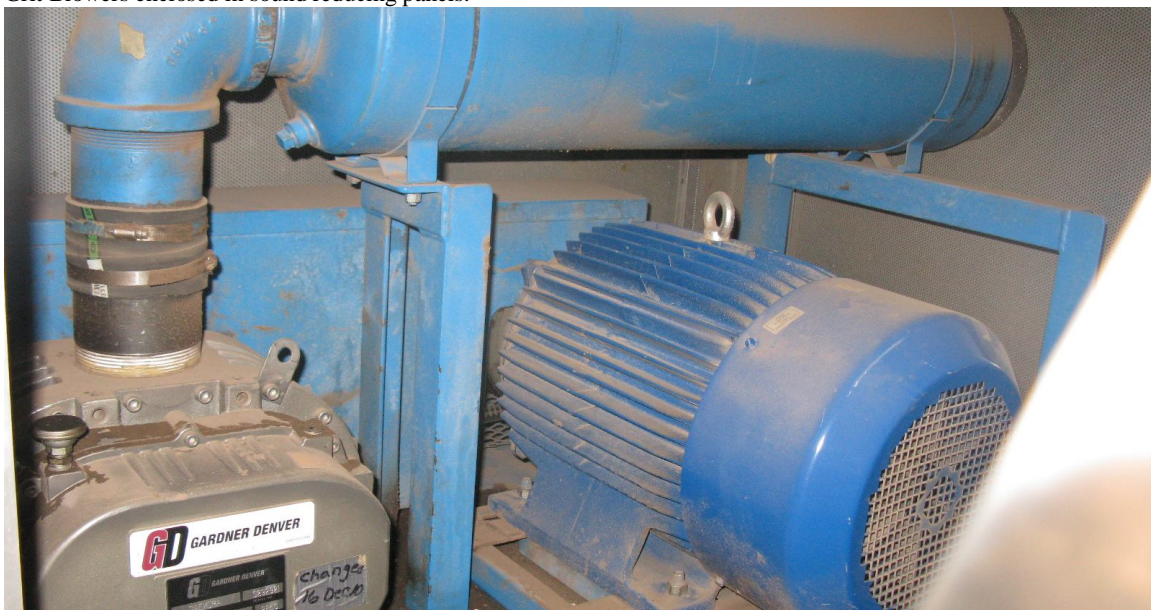




Grit Tanks and Grit Blower Building.



Grit Blowers enclosed in sound reducing panels.



The flow of wastewater is aerated in the grit tanks by one of two Gardner Denver Blowers just enough to allow inorganic waste (sand, glass, egg shell, etc.) to settle while allowing organics (corn, lettuce leaves, etc.) to float and go over the weirs and flows to the primary splitter box.





The heavier particles that settle to the bottom of the tank are pumped by the Grit Centrifugal Pumps back to the Grit Cyclone Separator and washed to remove the organic matter that was attached to the grit.



The grit with the help of an auger is dropped onto a conveyor belt. The conveyor carries and drops the grit into a portable dumpster then disposed off in a special area of the Landfill after passing a paint filter test conducted by the Laboratory.

### **PRIMARY TREATMENT**





### Primary Clarifiers

The wastewater treatment plant has two 580,600 gallon clarifiers and is fed from the splitter box wet well. The primary clarifiers are used as sedimentation tanks which allows the wastewater velocity to be reduced enough so that the heavy material (organic) settle to the bottom of the clarifier and be removed via a scrapper to a hopper at the bottom clarifier and pumped to the digesters. The lighter material float to the top and be removed via a skimmer into the primary scum pit.



The settled sludge is pumped from the bottom of the primary clarifiers and is pumped by one or two of the three positive displacement progressive cavity pumps.