EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	12/14/2017	
Media:	Water	
Regulatory Program(s)	CWA	
Company Name:	**City of Santa Fe**	
Facility Name:	**Santa Fe Wastewater Treatment Plant**	
Facility Physical Location:	73 Paseo Real	
(city, state, zip code)	Santa Fe, New Mexico 87507	
Mailing address:	73 Paseo Real	
(city, state, zip code)	Santa Fe, NM 87507	
County/Parish:	Santa Fe County	
Facility Contact:	Shannon Jones	Interim Public Utilities Director
	swjones@ci.santa-fe.nm.us	
FRS Number:	110064609044	
Identification/Permit Number:	NM0022292	
Media Number:	N/A	
NAICS:	221320	
SIC:	4952	

Personnel participating in inspection:

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Shannon Jones	City of Santa Fe	Interim Public Utilities Director	505-955-4642
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Kenneth Espinoza	City of Santa Fe	WWTP Assistant Plant Supervisor	505-955-4681

EPA Lead Inspector Signature/Date		
	David A. Esparza	Date
Supervisor Signature/Date		4/3/18
	Carol Peters	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors David Esparza, PE, Amy Andrews, PE, Jenifer Foote New Mexico Environment Department –Point Source Regulation Section (NMED), Industrial and Stormwater Team Supervisor and Daniel Valenta, NMED Point Source Regulation Section, Industrial and Stormwater Team arrived at the City of Santa Fe Wastewater Treatment Plant (WWTP) (hereinafter referred to as Santa Fe) at approximately 1015 AM on December 14, 2017 for an unannounced inspection. We met with Shannon Jones, Interim Public Utilities Director, Kenneth Espinoza, WWTP Assistant Plant Supervisor, and Ms. Patricia Rosacker Laboratory Manager. Mr. Esparza presented his credentials to Mr. Jones and informed him that this was an EPA inspection to determine the WWTP's compliance under the Clean Water Act (CWA). This CEI was conducted under the authority of the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the CWA. The generation of this report is based on information supplied by Santa Fe representatives, observations made by the United States Environmental Protection Agency (US EPA) inspector, and records and reports maintained by the permittee (Santa Fe), and the US EPA. Before leaving the facility, an exit briefing was held with Interim Public Utilities Director Shannon Jones, the above mentioned staff and regulatory representatives to explain areas of concern noted at the time of the inspection.

FACILITY DESCRIPTION

The WWTP a major discharger with a design flow of 13 million gallons per day (MGD), inclusive of an average daily flow of 5.4 MGD, is located at 73 Paseo Real or approximately 3/4-miles west of the Veterans Memorial Highway (also identified as NM-599N), Santa Fe County, New Mexico (depicted in Image #1 below). The WWTP facility serves a population of approximately 84,000 (based on 2016 US Census information) residents, but during the summer months, Santa Fe becomes a tourist destination, which increases the flow to the WWTP. The WWTP is operated by staff within the Wastewater Management Division of the Public Utilities Department and consists of 67 full-time equivalent (FTE) positions on a 24-hour per day, 7 days per week basis.

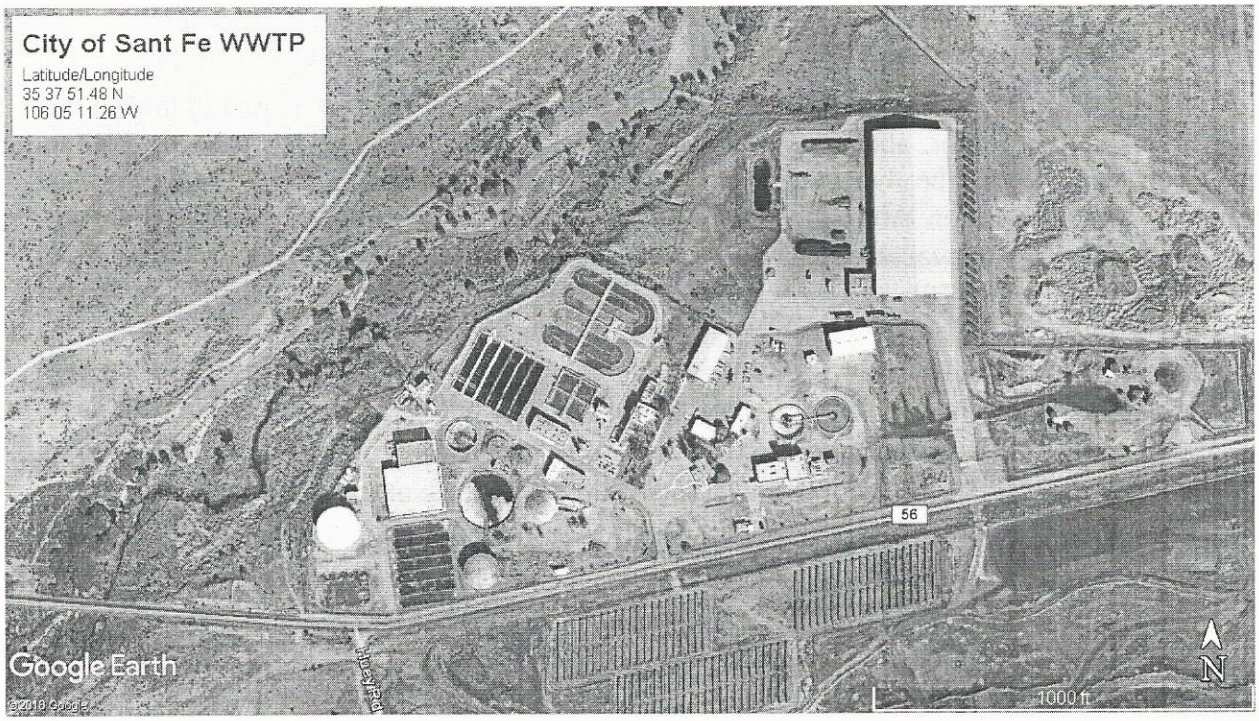

Image #1- City of Santa Fe Wastewater Treatment Plant

Various components are utilized in the removal of larger debris collected in the influent prior to entry at the headworks. The fine screen type bar screen can be operated by either a flow actuated device or by timer, wherein the significant purpose is the removal of cans, plastic products, paper, rags and other things too large to pass through the finer screen. Vagrant rocks are collected ahead of the bar screen. These larger items are fed into the rag press, where most of the moisture is reduced by compression, and discharged to the dumpsters. The remaining influent continues to two wet wells.

The grit removal system consists of a grit tank, where flows are aerated to allow inorganic waste to settle while allowing organics to float and pass through to a wet well. The contents of this tank are pumped back to the grit separator, washed to remove the organic matter, and with the help of an auger is fed onto a conveyor belt, thence dropped into a dumpster for disposal.

Flows from the grit chamber enter two (2) approximate 600,000-gallon primary clarifiers via a splitter box. The velocity is reduced in the clarifiers to allow heavier organics to settle and be removed by a scraper. The lighter material floating on the top is removed by a skimmer arm and the solids at of the clarifier are pumped to the digester.

After the aeration basins, flow from the secondary clarifiers enter filtration at the disc filters and sand filters wherein the WWTP utilizes Ultra-violet light to disinfect the treated effluent prior to discharging to Outfall 001 and into the receiving waters; Santa Fe River in Water Segment Code 20.6.4.113, NMAC *NEW MEXICO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS.*

SOLIDS:

Sludge from the clarifiers flow to the DAF (dissolved air flotation) unit. The DAF is used to thicken the sludge by pressurizing water, above atmospheric pressure, inclusive of an added polymer prior to introduction to a header. The thickened solids are then treated further by either anaerobic sludge digestion or lime stabilization. After the sludge has been treated by either of the two methods above, onsite storage is available prior to disposal or surface injection into the adjacent field (located south of the WWTP).

The WWTP employs composting as a means to reducing their sludge injection. After mechanically processing and mixing with wood chips/hay the injected sludge is stockpiled for a period of time up to 60-days prior to the by-product being sold to the public. The sludge cake is approximately 12% mixed with wood chips/hay and is formed into a windrow. The temperature of the windrow is maintained at 131 degrees or higher for fifteen days. The windrow is turned a minimum of five times while maintaining the temperature. It is then stockpiled for approximately 30-60 days prior to being sold to the public.

RE-USE:

Some treated and disinfected domestic wastewater is periodically reclaimed at the Santa Fe Country Club, the Santa Fe Municipal Recreation Complex, and/or the Marty Sanchez Golf Club for landscape irrigation.

Section II - OBSERVATIONS

I observed the following on December 14, 2017.

- Operations and Maintenance (O&M) - overall maintenance appeared to be acceptable. However, one clarifier is non-operational and has been offline for at least 11/2-years (as was noted in the May 2017 NMED Inspection Report. I was informed the torque box needs to be replaced prior to it being placed back into service (as rehabilitation/renovation monies are available) (Appendix 1 Photograph #4).
- It was difficult to ascertain if system piping was leaking as the facility had been "washed down" earlier in the morning (Appendix 1 Photograph #1, #2 and #3).
- The #2-disc filter was currently offline and was currently undergoing repair (Appendix 1 Photograph #5 and #6).
- The facility has implemented and did provide copies of the Developmental Training Outline, Training Budgets, Training Schedule, Safety Meeting Schedules, Summary of O&M Procedures, and a Summary of Capital Improvement Projects (CIP) (Appendix 2).

Section III – AREAS OF CONCERN

A review of the documents Santa Fe provided

- *The Discharge Monitoring Reports (DMR's) for the months of September and October 2017 indicate Santa Fe exceeded their NPDES permit requirements for e.Coli and total Nitrogen (as N) respectively.*

- *The repair of the #2-disc filter currently offline is addressed in the Conclusion paragraph in the Summary of CIP (Appendix 2).*

Section IV – FOLLOW UP

The following information was received by EPA on January 19, 2018.

- Budget Training Schedule
- Collection System Sanitary System Overflow (SSO) procedures
- Blue Book data used in the preparation of DMR submittals- September, October and November 2017
- Santa Fe WWTP Laboratory Bench Sheets- one (1) week September 2017
- Schedule of Analyses, Operator's Sampling and sampler Monitoring
- Summary of Santa Fe Capital Improvement Projects
- Santa Fe Plan sheet (01C01) of Current and Planned WWTP Improvement Plan *(Appendix 3).*

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 32 photos taken 2/12/13

Appendix 2 – Summary of Capital Improvement Projects

Appendix 3 – Santa Fe Plan sheet (01C01) of Current and Planned WWTP Improvement Plan