

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	01/13/2022	
Media Program:	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	
Facility Phone Number	Shannon Jones	Public Works Director
Facility Contact:	swjones@santafenm.gov	505-955-4267
FRS Number:	110064609044	
Identification/Permit Number:	NM0022292	
Media Identifier Number:	N/A	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Shannon Jones	City of Santa Fe	Public Works Director
Julian Gonzales	City of Santa Fe	Wastewater Supervisor
Jason Martinez	NMED	Point Source Regulation Section- Surface Water Quality Bureau
David Esparza	EPA-R6-ECDWM	Environmental Engineer
EPA Lead Inspector Signature/Date		
	David Esparza	Date
Supervisor Signature/Date		
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA) Region 6 inspector David Esparza, PE, and Mr. Jason Martinez, New Mexico Environment Department, Point Source Regulation Section-Surface Water Quality Bureau (NMED) arrived at the City of Santa Fe (Santa Fe) Wastewater Treatment Plant (WWTP) approximately 9:00 AM on January 13, 2022, for an unannounced inspection. I presented my credentials to Mr. Shannon Jones, Public Works Director and Mr. Julian Gonzales, Wastewater Supervisor and informed them that this was an EPA inspection to determine the facility's compliance under the Clean Water Act (CWA) and the requirements 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 EPA inspector, NMED and records and reports maintained by the permittee (Santa Fe), and the EPA. Before leaving the facility on January 13, 2022, an exit briefing was held with Mr. Jones, Mr. Gonzales, and Mr. Martinez 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 approximately 5.6 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 **Aerial Image #1** below). Additionally, an updated Site Map identifying all WWTP treatment processes and ancillary support facilities, or equipment is depicted in **Aerial Image #2** below. The WWTP facility serves a population of approximately 85,000 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 normally consists of 67 full-time equivalent (FTE) positions on a 24-hour per day, 7 days per week basis. Current staffing is at approximately 80% of the FTE positions.

The city owns the Canyon Road lift station (LS) but cleans all 5 LSs once a month (Identified in **Table 1** below). The Aldea and Monte Sereno Homeowners Associations (HOA), respectively are responsible for all repairs and any issues that arise at these LSs.

Table 1: City of Santa Fe Lift Stations

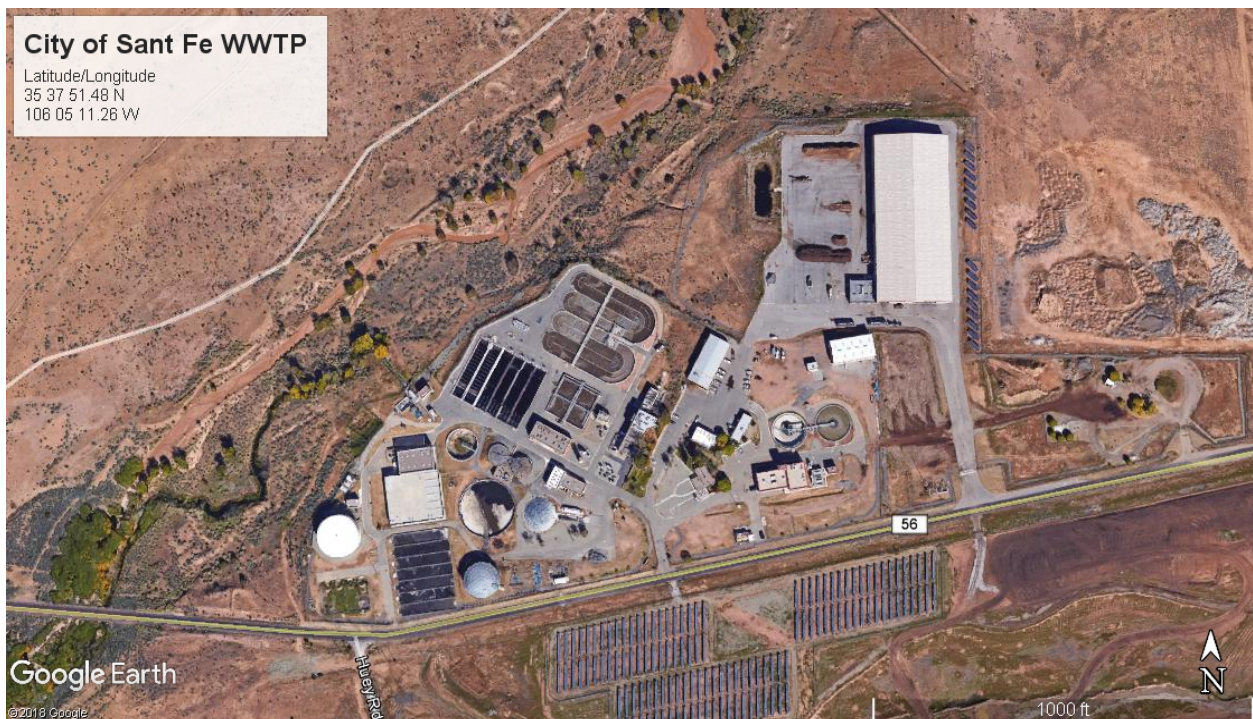
	Lift Station	Address	Capacity (gallons)
1	Canyon Road	1519 Canyon Road	1,391
2	Aldea 1 Station 41	Camino De Vecinos Road	7,517
3	Aldea 2 Station 121	Avenida Frijoles	2,242
4	Monte Sereno 1	Valle Sereno/Tesuque Overlook	3,755
5	Monte Sereno 2	Opera Drive/Village Drive	6,201

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 fine 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 roll-off dumpsters. The remaining influent continues to two (2) 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, the secondary clarifiers flow enters filtration at the disc filters and sand filters wherein, the WWTP utilizes four (4) banks of Ultra-violet light to disinfect the treated effluent prior to discharging to Outfall 001 and into the Santa Fe River.



Aerial Image #1: Overall view of the City of Santa Fe's Wastewater Treatment Plant. Aerial from Google Earth maps

Septage and domestic wastewater (typically greywater) is screened after a wet well before entering the headworks. According to WWTP records approximately 10-15 trucks averaging 1-1.5K gallons of septage

is received on a weekly basis. The facility staff monitors incoming registered septage haulers for pH and grease to determine compatibility with the WWTP for acceptance or rejection.



Aerial Image #2: Updated Site Map identifying all WWTP treatment processes and ancillary support facilities, or equipment. Provided by the City of Santa Fe. Aerial from Google Earth maps

Currently there are three (3) Industrial User's (IU) (Listed in **Table 2** below) contributing to the WWTP and all of which are required to adhere to Santa Fe's Ordinance Chapter XXII – Sewers: §22-9 Industrial Pretreatment Regulations and Procedures, and §22-10 Wastewater Extra-Strength Surcharge Program.

Table 2- City of Santa Fe Significant Industrial Users

Industrial Username	Location
Esoterix (Laboratory Corporation)	2000 Vivigen Way
New Mexico History Museum	113 Lincoln Avenue
Christus St. Vincent Regional Medical Center	455 St. Michaels Drive

A Supervisory Control and Data Acquisition (SCADA) system provides around the clock monitoring of WWTP operations and is manned during normal working hours with alarm notifications in the off hours.

The WWTP maintains a backup diesel generator which can operate the facility and ancillary equipment in

case of a power failure. This on-site generator is typically exercised on a weekly basis.

SOLIDS:

The DAF (dissolved air flotation) 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 handled either by anaerobic sludge digestion or lime stabilization.

After the sludge has been treated, onsite storage is available prior to disposal or surface injection into the adjacent field (located south of the WWTP). The WWTP employs composting to reducing their sludge injection. After mechanically processing and mixing with wood chips/hay the injected sludge is stockpiled for a period up to 60-days prior to the by-product being sold to the public or transported to a regulated landfill.

RE-USE:

Some treated and disinfected domestic wastewater is used (sold) periodically at the Santa Fe Country Club, the Santa Fe Municipal Recreation Complex, and the Marty Sanchez Golf Club for landscape irrigation.

Section II – OBSERVATIONS

I observed the following on January 13, 2022.

- The facility is currently in the process of finalizing their operating agreements to bring their co-generation technology (solar and methane gas) on-line. When complete the WWTP, projects in excess of a 90-percent contribution utilizing this technology; thus, decreasing typical electrical dependence and costs.
- The #2-disc filter previously offline, has been assessed, and remanufactured replacement parts have been installed.
- Re-placement of the roof atop the blower building was currently in process. Performance testing on the instrumentation within the blower building is scheduled to be completed by the end of the month. Temporary blowers have been installed for the aeration basins and the programming of the associated Supervisory Control and Data Acquisition (SCADA) is scheduled to be completed in approximately 3-4 months.
- The final Disinfection and Compliance Optimization Assistance-Technical Memorandum Recommendations prepared by Carollo Engineers (July 2018) identified operational issues in the treatment processes: Section 1 **Introduction and Conclusions**: §1.1.2- **Disc Filtration Evaluation**, §1.1.3- **UV Disinfection Evaluation** and §1.1.4- **Post Aeration Basin Evaluation** (Appendix 2 City of Santa Fe WWTP Disinfection Recommendation Excerpts).

- The three (3) Industrial User's (IU) (Listed in **Table 2**) contributing to the WWTP and all of which are required to adhere to Santa Fe's Ordinance Chapter XXII – Sewers: §22-9 Industrial Pretreatment Regulations and Procedures, and §22-10 Wastewater Extra-Strength Surcharge Program. The individual service agreements were requested, but not provided.
- The onsite laboratory was clean and organized. The pH buffers were labeled in accordance with good laboratory practice. However, there was no visible evidence of proper and timely calibration of temperature recording devices (thermometers) within the sample storage refrigerator. The affixed label on the door was approximately 2-years old (Appendix 1 Photograph #3). Therefore, the integrity or stability of the collected samples cannot be guaranteed; thus, the results could be inaccurate or in error.
- An Administrative Order (AO) (Docket #CWA-06-2019-1773) was issued on March 29, 2019, regarding the WWTP's NPDES permit excursions. The city submitted a written response to the AO on May 31, 2019.
- An Administrative Order (AO) (Docket #CWA-06-2019-1818) was issued on August 26, 2019, regarding the WWTP's NPDES permit excursions. The city submitted a written response to the AO on October 23, 2019.
- An Administrative Order (AO) (Docket #CWA-06-2021-1725) was issued on June 1, 2021, regarding the WWTP's NPDES permit excursions. The city submitted a written response to the AO on June 11, 2021. The city's response is summarized and addressed numerically and clarified during the on-site inspection.

A summary of corrective measures implemented to date-

1. ***Maintain optimal sludge volumes in useable aeration basin and new digester units.***
WWTP personnel stated the feed rate is monitored.
2. ***Working on maintaining fat, oil, and grease levels to eliminate filamentous bacteria.***
The city is working on updating their written Fats, Oils and Grease (FOG) ordinance. Currently "grease balls" that accumulate in the wet wells are removed by skimming the surface with a net (Appendix 1 Photograph #1 and Photograph #2). Additionally, there is currently no mechanism to take either of the two(2) wet wells off-line for cleaning or repair.
3. ***Completion of rehabilitation/construction improvements in aeration basins.***
This phase is complete.
4. ***Careful monitoring of solids in all clarification units.***
This task item is monitored manually daily.
5. ***Careful monitoring of ultraviolet system.***
This task item is addressed in detail in the completed Disinfection and Compliance Optimization Assistance-Technical Memorandum Recommendations prepared by Carollo Engineers (July

2018) (Appendix 2 City of Santa Fe WWTP Disinfection Recommendation Excerpts).

6. *Careful monitoring of disc filter system.*

This task item is addressed in detail in the completed Disinfection and Compliance Optimization Assistance-Technical Memorandum Recommendations prepared by Carollo Engineers (July 2018) (Appendix 2 City of Santa Fe WWTP Disinfection Recommendation Excerpts).

7. *Currently constructing a belt press liquid waste equalization basin to assist with nutrient removal.*

The belt press has been constructed and tested and is currently awaiting new Supervisory Control and Data Acquisition (SCADA) build out/tie-in.

Future Related and Continued Improvements (Under Planning and Development)-

1. *Begin planning for the design of upgrades to the headworks, secondary clarification, filtration, and UV disinfection processes to assure long-term compliance performance and optimization of process.*

The existing headworks have been evaluated and an updated design has been rendered via a task order. The filtration and UV disinfection processes are being evaluated through a “life cycle” analysis which is almost complete (approximately 3-months out). The secondary clarification evaluation was let under a Request for Proposal (RFP) with an “end of year” (EOY) design schedule.

2. *Develop and maintain an improved capital asset management program to better respond to equipment failures, emergency repairs, and process downtime events.*

An initial asset management plan has been completed and is currently under review for finalization.

3. *Expand the plant operating procedure program to all processes, to include training and continuing education.*

An initial Standard Operating Procedure (SOP) protocol has been prepared to address operational aspects of the facility (i.e., staff training, continuing education, etc.) and is currently under review for finalization.

4. *Expand and upgrade the facility's Supervisory Control and Data Acquisition (SCADA) system to incorporate additional controls and monitoring capability for each process, upon each scheduled process improvement (aeration Basin blowers, filtration, UV disinfection, sludge return, sludge wasting, etc.).*

A new SCADA system has been designed and is currently in the process of being tested, including, and upgraded build out/tie-in to better monitor existing and rehabilitated system processes. This required replacing or upgrading electrical panels and wiring.

Section III – AREAS OF CONCERN (AOC)

A review of the Integrated Compliance Information System (ICIS) database for the period from March 3, 2020, to January 13, 2022 (Appendix 3 ICIS Database Report) indicates the following:

- NPDES permit excursions (numerous)- varying from Total Suspended Solids (TSS), E coli, 5-day Biological Oxygen Demand (BOD₅), total Phosphorus (as P), total Nitrogen (as N), total Cyanide (as CN), total Copper (as Cu) – for the period from November 2020 to November 2021.
- **Note: most of the permit excursions identified above have been resolved.**
- NPDES permit excursion- total Copper (as Cu)- November 2021 and December 2021.
- NPDES permit excursion- total Nitrogen (as N)- December 2021
- NPDES permit excursion- E coli- December 2021

Additional Areas of Concern

- An ICIS database entry states with respect to one (1) of the three (3) Industrial User's (IU) (Listed in **Table 2**) that contribute to the WWTP, "Review of the City of Santa Fe New Mexico 2019-2020 Annual Pretreatment Report with comment. One SIU not sampled or inspected- inoperable groundwater remediation site". Clarification of this entry was requested during the on-site inspection and the individual service agreements were requested, but not provided.
- The onsite laboratory was clean and organized. The pH buffers were labeled in accordance with good laboratory practice. However, there was no visible evidence of proper and timely calibration of temperature recording devices (thermometers) within the sample storage refrigerator. The affixed label on the door was approximately 2-years old (Appendix 1 Photograph #3). Therefore, the integrity or stability of the collected samples (sample preservation) cannot be guaranteed; thus, the results could be inaccurate or in error.
- The city of Santa Fe experienced Sanitary Sewer Overflow (SSO) events during the months of January, February, March, April, May, June, August, September, November, and December 2021.

Section IV – RECOMMENDATIONS

- Evaluation of a procedure to alternate existing wet wells for preventative maintenance (PM), (i.e., cleaning, repair, or rehabilitation).

- Implementation of the recommendation identified in the 2018 Carollo Engineers Report of Findings (ROF). Preparation and implementation of a written Fats, Oils and Grease (FOG) program.
- Finalization and implementation of the Asset Management Plan and Standard Operating Procedures (SOP).

Section V – FOLLOW UP

The following information was received by EPA on January 20, 2022, after exiting the Facility on January 13, 2022:

- A copy of the current protocol related to Fats, Oils and Grease (FOG) policy/ordinance and Standard Operating Procedures (SOP).
- A summary of the quantity and locations of any lift station(s).
- A summary of your sanitary sewer overflow (SSO) protocol or Best Management Practices (BMP), inclusive of a spreadsheet type document delineating any/all SSO events specifically with respect to the previous 2-year period.
- A summary of any Industrial Users (IUs), inclusive of applicable service agreements.
- A copy of the current/updated Site Map/Plan, delineating rehabilitated/upgraded building footprints and treatment schemes.
- A copy of the ultra-violet (UV) evaluation report.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 3 photos taken 01/13/2022

Appendix 2 – City of Santa Fe WWTP Disinfection Recommendation Excerpts

Appendix 3 – A Review of the Integrated Compliance Information System (ICIS) Database for the period from March 3, 2020, to January 13, 2022

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: City of Santa Fe Wastewater Treatment Plant		
City: Santa Fe	County/Parish: Santa Fe	State: New Mexico



Photograph of the accumulated "grease balls" within the northside wet well. Note: these grease balls are removed by skimming the surface with a net. January 13, 2022. 10:15 AM (DSCN 2071). Photographed by D. Esparza.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: City of Santa Fe Wastewater Treatment Plant		
City: Santa Fe	County/Parish: Santa Fe	State: New Mexico



Another photograph of the accumulated "grease balls" within the northside wet well. Note: these grease balls are removed by skimming the surface with a net. January 13, 2022. 10:15 AM (DSCN 2072). Photographed by D. Esparza.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: City of Santa Fe Wastewater Treatment Plant		
City: Santa Fe	County/Parish: Santa Fe	State: New Mexico



View of "calibration tag" affixed to the outside of the WWTP sample storage refrigerator inside the laboratory. Note: the date of the tag and there was no visible evidence of temperature recording devices (thermometers) inside the refrigerator. January 13, 2022. 11:18 AM (DSCN 20280). Photographed by D. Esparza.

Appendix 2

City of Santa Fe WWTP Disinfection Recommendation Excerpts



City of Santa Fe
Disinfection and Compliance Optimization Assistance

TECHNICAL MEMORANDUM
DISINFECTION COMPLIANCE RECOMMENDATIONS
FINAL



Section 1

INTRODUCTION AND BACKGROUND

1.1 Introduction and Conclusions

The City of Santa Fe (City) Paseo Real Water Reclamation Facility (WRF) provides wastewater treatment for the entire City service area, producing water quality suitable for discharge to the Santa Fe River (under the terms of National Pollutant Discharge Elimination System [NPDES] permit NM0022292) and for existing approved non-potable water reuse applications.

Recently the City has had problems with excursions in bacterial compliance. The purpose of this project was to evaluate the filtration, disinfection, and reaeration processes to determine the cause of the excursions and to recommend methods to increase disinfection reliability.

This report is divided into 5 Sections. The key Conclusions and Recommendations are:

- **Section 1 – Introduction and Background**
 - For the provided data set, the City was below the fecal coliform permit limit of 100 colony forming units per 100 milliliters (CFU/100 mL) more than 70 percent of the time and below the E. coli permit limit of 126 CFU/100 mL more than 50 percent of the time.
 - Improving disinfection performance by ~1-log (90 percent) would reduce bacterial numbers to below the targets for 90 to 95 percent of the time, a large improvement in overall reliability.
- **Section 2 – Disc Filtration Evaluation**
 - The existing disc filters that are in good repair provide reliable turbidity removal to Class 1A standards and allow for more efficient UV disinfection.
 - Some maintenance and wear problems with the disc filters has been experienced, which is likely the cause of the high turbidity spikes documented in this report.
 - The existing filtration system is not run or maintained in optimal conditions.
 - Minimizing the amount of backwashing will reduce the long-term wear and tear on the disc filters.
 - The City should send a few panels to Kruger for mineral analysis and media fouling diagnostics.
 - Once the Kruger diagnostics are complete, detailed filter cleaning standard operating procedures (SOP) for filter cleaning should be developed so that the chemical cleaning is consistent over time and so that it is no longer required to operate the filters in a continuous backwash mode.
 - Stress testing of the retrofitted disc filters is necessary to understand the flux increase and turbidity reduction that can be maintained, and to compare the performance to the filters with the retrofitted media screen panels to the existing (older) media screen panels.

- Run sheets are recommended to proactively monitor the filters, providing for daily (or several times daily) inspection and operation of filter performance (turbidity) and fouling (head in the feed tank).
- **Section 3 – UV Disinfection Evaluation**
 - The ultraviolet (UV) system has sufficient capacity:
 - 20.25 million gallons per day (mgd) with three UV channels in operation or 27.0 mgd with all four UV channels in operation at the lower 10th percentile UV transmittance (UVT) of 60 percent.
 - 21.30 mgd with three UV channels in operation or 28.40 mgd with all four UV channels in operation at the average UVT condition of 62 percent.
 - **UV sleeve fouling will impact disinfection performance:**
 - External fouling of the sleeves was reasonable, losing ~20 percent of UV transmittance through the sleeves over a one month period. All operational UV banks should have sleeves chemically cleaned monthly to maintain a sleeve fouling factor of 0.80 (80 percent).
 - Of the four sleeves tested, two (50 percent of sleeves sampled) demonstrated extensive **internal sleeve fouling** over a large part of each of those two sleeves. Such internal fouling could result in ~25 percent reduction in dose delivery assuming that the sampled sleeves are representative of the larger group of sleeves. It is recommend that ALL sleeves be visually inspected and cleaned on the inside and outside. If cleaning is not effective, replace permanently fouled sleeves with new quartz sleeves.
 - **On a yearly basis, after all internal fouling has been rectified, inspect sleeves for internal fouling. .**
 - Recommending alarming and response for the existing UV3000 is included within this report
- **Section 4 – Post Aeration Basin Evaluation**
 - **The particle counts and bacteria counts jointly increase as sampling moves further downstream from the effluent of the UV system, suggesting biological growth**
 - Compliance is at risk due to regrowth. For the tested dates, regrowth caused an exceedance of the E. coli target (126 cfu/100mL) at the NPDES permit compliance location, but did not result in exceedance of the fecal coliform target (100 cfu/100mL) at the Class 1B permit compliance location
 - **For more reliable Class 1B permit compliance, the City should negotiate a sampling location for fecal coliform as close to the UV system as possible.** Examples include:
 - Immediately downstream of the last UV bank in an operating channel, with multiple samples taken if multiple channels are in operation.
 - At the UV channel effluent weir, assuming the weir is periodically cleaned. Multiple samples would need to be taken to account for each operating channel.
 - At the common UV effluent channel outlet. Periodic cleaning of the UV channels, the UV effluent weirs, and the common UV effluent channel are recommended to reduce the impact of regrowth.
 - **For more reliable NPDES permit compliance, the City should negotiate a sampling location for E. coli at the same location as for fecal coliform,** well upstream of the current compliance point (location 8, after the aeration basin).

- Periodic particle size distribution (PSD) sampling may be a useful monitoring tool along with fecal coliform and *E. coli* monitoring across the system (as done in this report) for determining when the aeration basin should be cleaned
- **Section 5 – Stress Testing Recommendations**
 - Stress testing of the filters will determine the peak flows that can be effectively filtered while maintaining adequate water quality with the minimum number of filters in operation.
 - Stress testing of the UV system will determine what peak flows can be effectively disinfected per channel while still complying with the permit limit.
 - Step by step approaches to stress testing is provided.

1.2 Water Reclamation Facility

The Paseo Real WRF process train includes preliminary, primary, secondary, and tertiary treatment steps. The Paseo Real WRF has a design capacity of 13 mgd.

Preliminary treatment includes a rock collector and fine-screened bar screen prior to two wet wells for flow equalization, followed by two aerated grit tanks which overflow into a primary splitter box. Two primary clarifiers are fed from this location.

Primary effluent is combined with various return flows and the return activated sludge (RAS) in a rapid mix tank, which feeds four 325,000 gallon bioselectors that can be aerobic, anaerobic, or a combination thereof. These serve to denitrify, and help control the growth of filamentous organisms in conjunction with optional chlorine gas feed to the RAS wet well. From here, water flows to aeration basins for biological oxygen demand (BOD) removal and nitrification. Anoxic zones support denitrification. The mixed liquor is separated in six 460,000 gallon secondary clarifiers.

Biosolids are collected in the RAS/Waste Activated Sludge (WAS) wet well, thickened using dissolved air flotation (DAF), and stabilized through anaerobic digestion, producing Class B biosolids and biogas, which is used to provide supplemental heat to the digesters.

Secondary effluent is then treated by up to three 10-micron (μm) disc filters (6.75 mgd peak flow, each). A bypass valve allows the filters to be bypassed in an emergency. Filtered effluent is then disinfected with UV light (using up to 4 parallel channels) and is then re-aerated in the post-aeration basin to meet a 5 milligrams per liter (mg/L) minimum dissolved oxygen (DO) concentration for discharge.

The effluent meets New Mexico Environment Department (NMED) requirements for Class 1B non-potable water reuse. Water reuse customers pump tertiary effluent from a channel located between the UV disinfection facility and the effluent reaeration basin.

1.3 Compliance Requirements and History

The City is regulated by NMED Class 1B requirements for water reuse and under the NPDES permit for discharge requirements to the Santa Fe River. The City has successfully used Class 1B recycled water for landscape irrigation for several decades and discharges the remaining water through Outfall 001 under the NPDES permit to the lower Santa Fe River (Segment Number 20.6.4.113). Table 1 contains a summary of NMED requirements by Class, including the fecal coliforms. Table 2 contains the NPDES requirements for *E. coli*. Table 3 contains the NMED approved uses for reclaimed water by Class.

Appendix 3

A Review of the Integrated Compliance Information System (ICIS) Database for the period from March 3, 2020, to January 13, 2022

FE&C

NPDES

AIR

Admin

Reports

Help

DESPARZA

Logout



Search Permits

Related NPDES Violations

ADD SINGLE EVENT VIOLATION

List of Violations Related to the Permit

Record Numbers 1 to 101

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	11/22/2020			Delete
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 Q1	E90	03/31/2020	T-03/31/2020	2-07/31/2020	
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C2	E90	03/31/2020	T-03/31/2020	2-07/31/2020	
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C3	E90	03/31/2020	R-08/31/2020	2-08/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	03/31/2020	T-03/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	03/31/2020	T-03/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	03/31/2020	T-04/30/2020	2-08/31/2020	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	03/31/2020	T-04/30/2020	2-08/31/2020	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C2	E90	03/31/2020			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	03/31/2020			
Effluent Violation	001 A 80082 BOD, carbonaceous [5 day, 20 C] Effluent Gross Season ID:0 Q1	E90	03/31/2020	V-03/31/2020	2-06/30/2020	
Effluent Violation	001 A 80082 BOD, carbonaceous [5 day, 20 C] Effluent Gross Season ID:0 C2	E90	03/31/2020	T-03/31/2020	2-06/30/2020	
Effluent Violation	001 A 80082 BOD, carbonaceous [5 day, 20 C] Effluent Gross Season ID:0 C3	E90	03/31/2020			
Effluent Violation	001 A 81011 Solids, suspended percent removal Effluent Gross Season ID:0 C1	E90	03/31/2020			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C2	E90	04/30/2020	V-04/30/2020	2-07/31/2020	
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C3	E90	04/30/2020	R-08/31/2020	2-08/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	04/30/2020	T-04/30/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	04/30/2020	T-04/30/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	04/30/2020	T-04/30/2020	2-08/31/2020	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	04/30/2020	T-04/30/2020	2-08/31/2020	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C2	E90	04/30/2020			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	04/30/2020			
Effluent Violation	001 A 80082 BOD, carbonaceous [5 day, 20 C] Effluent Gross Season ID:0 C3	E90	04/30/2020			
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C3	E90	05/31/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	05/31/2020	V-05/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	05/31/2020	T-05/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	05/31/2020	T-05/31/2020	2-08/31/2020	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C2	E90	05/31/2020			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	05/31/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	06/30/2020	C-11/30/2020	3-06/01/2021	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	06/30/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	07/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	07/31/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	08/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	08/31/2020	T-08/31/2020	3-06/01/2021	

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	09/30/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	10/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	10/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	10/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	10/31/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2020	V-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	11/30/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	11/30/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	12/31/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	12/31/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	12/31/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	12/31/2020	T-12/31/2020	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	01/31/2021	T-01/31/2021	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	01/31/2021	T-01/31/2021	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	01/31/2021	T-01/31/2021	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	01/31/2021	T-01/31/2021	3-06/01/2021	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	01/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	02/28/2021	T-02/28/2021	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	02/28/2021	T-02/28/2021	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	02/28/2021	T-02/28/2021	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	02/28/2021	T-02/28/2021	3-06/01/2021	

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C2	E90	02/28/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	02/28/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	03/31/2021	T-03/31/2021	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	03/31/2021	T-03/31/2021	3-06/01/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	03/31/2021	V-03/31/2021	3-06/01/2021	
Effluent Violation	001 A 00400 pH Effluent Gross Season ID:0 C1	E90	04/30/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	04/30/2021	T-04/30/2021	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	04/30/2021	T-04/30/2021	3-06/01/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	05/31/2021	T-05/31/2021	3-06/01/2021	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	05/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	06/30/2021	V-06/30/2021	3-06/30/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	07/31/2021	T-07/31/2021	3-07/31/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	07/31/2021	T-07/31/2021	3-07/31/2021	
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C3	E90	08/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	08/31/2021	T-08/31/2021	3-08/31/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	08/31/2021	T-08/31/2021	3-08/31/2021	
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	08/31/2021			
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C2	E90	09/30/2021			
Effluent Violation	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C3	E90	09/30/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	09/30/2021	T-09/30/2021	3-09/30/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	09/30/2021	T-09/30/2021	3-09/30/2021	

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	09/30/2021			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	09/30/2021			
Effluent Violation	001 A 00720 Cyanide, total [as CN] Effluent Gross Season ID:0 Q1	E90	09/30/2021			
Effluent Violation	001 A 00720 Cyanide, total [as CN] Effluent Gross Season ID:0 Q2	E90	09/30/2021			
Effluent Violation	001 A 00720 Cyanide, total [as CN] Effluent Gross Season ID:0 C3	E90	09/30/2021			
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 Q1	E90	09/30/2021	T-10/31/2021	1-10/31/2021	
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 Q2	E90	09/30/2021			
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C3	E90	09/30/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	09/30/2021			
Effluent Violation	001 A 00400 pH Effluent Gross Season ID:0 C3	E90	10/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	10/31/2021	V-10/31/2021	3-10/31/2021	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	10/31/2021			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	10/31/2021			
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C2	E90	10/31/2021	T-10/31/2021	1-10/31/2021	
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C3	E90	10/31/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	10/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	11/30/2021	T-11/30/2021	3-11/30/2021	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2021	T-11/30/2021	3-11/30/2021	
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C2	E90	11/30/2021	T-11/30/2021	1-11/30/2021	
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C3	E90	11/30/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	12/31/2021			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	12/31/2021			
Effluent Violation	001 A 01042 Copper, total [as Cu] Effluent Gross Season ID:0 C3	E90	12/31/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	12/31/2021			

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