NPDES PERMIT NO. NM0022292
FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

City of Santa Fe Paseo Real WWTP
P.O. Box 909
Santa Fe, NM 87504-0909

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, Texas 75270

PREPARED BY

Quang Nguyen
Environmental Engineer
NPDES Permits & Technical Branch (6WQ-P)
Water Division
PHONE: 214-665-7238
FAX: 214-665-2191
EMAIL: Nguyen.Quang@epa.gov

DATE PREPARED

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PERMIT ACTION

Proposed reissuance of the current NPDES permit that was issued on July 29, 2021, with an effective date of September 1, 2021, and an expiration date of August 31, 2026.

RECEIVING WATER – BASIN

Santa Fe River – Rio Grande Basin

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
$CaCO_3$	Calcium carbonate
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CFU	Colony forming units
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DAF	Dissolved air flotation
DMR	Discharge monitoring report
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
ug/l	Micrograms per litter (one part per billion)
mg/L	Milligrams per liter (one part per million)
MGD	Million gallons per day
MPN	Most probable number
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
PFAS	Per- and Polyfluoroalkyl Substances
POTW	Publically owned treatment works
RAS	Return activated sludge
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TBELs	Technology-based effluent limitations
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
UV	Ultraviolet Light
WET	Whole effluent toxicity
WLA	Waste-load Allocation
WQBELs	Water quality-based effluent limitations
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

As used in this document, references to State water quality standards and/or rules, regulations and/or management plans may mean the State of New Mexico and/or Tribal or both.

I. PROPOSED CHANGES FROM THE PREVIOUS PERMIT

The proposed changes from the current permit issued on July 29, 2021, with an effective date of September 1, 2021, and an expiration date of August 31, 2026, and currently administratively continued under 5 U.S.C. 558(c) are:

- Adding monitoring requirements for PFAS;
- Adding influent monitoring requirements for TSS and BOD_5;
- Removing Heptachlor effluent limits;
- Reducing Heptachlor monitoring frequency to 3 per month.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the Paseo Real Wastewater Reclamation Facility (PRWRF) is located on 73 Paseo Real, Santa Fe, in Santa Fe County, New Mexico, Under the Standard Industrial Classification Code 4952, the facility is a WWTP treating sanitary wastewater. It has a design flow of 13 MGD. The average flow currently is 5.5 MGD. The treatment plant serves a population of approximately 90,000 residents, but during the summer months, the City of Santa Fe becomes a tourist destination, and this increases the flow to the treatment plant.

The PRWRF is composed of headworks, clarifiers, rapid mix, bio-selectors, dissolved air flotation (sludge thickeners), anaerobic digesters, lime stabilization and storage units, aeration basins, secondary clarification, bacteria control, post aeration and discharge.

The headworks include a bar screen to remove larger debris/trash (i.e., cans, plastic products, paper and rags) entering the plant. These items are fed into the rag press where most of the moisture is removed, and the solids are disposed to the hoppers or dumpster placed under the chutes. The bar screen is followed by a grit trap that supplies enough aeration to remove sand, silts and inorganic wastes while allowing organic material to continue to a wet well for further treatment. The grit is removed by an auger and conveyor belt system and sent to a dumpster for disposal to a land fill. The wastewater continues to the wet well at the start of the primary wastewater treatment.

Primary treatment consists of two 580,600-gallon primary clarifiers. The clarifiers are used as sedimentation tanks which allow the wastewater velocity to be reduced enough so that the heavy organic material settles to the bottom of the clarifier while the lighter material floats to the top and is removed via a skimmer. The solids are scraped from the bottom of the clarifier and pumped to the digester. The rapid mix tank receives flow from the clarifiers and returns from several other process areas and is mixed before entering the bio-selector for secondary treatment. The rapid mix tank collects flow from the various recycled flows, RAS, DAF flow, mixed liquor line and the primary effluent. The aeration basins use nitrification and then denitrification to remove ammonia and nitrogen. The nitrification process utilizes dissolved oxygen, fed through fine bubble diffusers, to change ammonium to nitrite. Ammonia is stripped off with either increased air or converted to ammonia to nitrites by *Nitrobacter* microorganisms. The nitrite continues through the basin to the anoxic zone and is broken down from nitrite to nitrate by *Nitrosomonas* microorganisms and then to nitrous oxide, carbon dioxide and water.

Secondary treatment continues as the wastewater moves from the clarifiers into one of four bio-selector basins. These basins can be either aerobic, anaerobic, or a combination of each. At present the WWTP uses a low DO system in combination with mixed liquor pumps to recycle mixed liquor back through the system to reduce the nitrates, utilize soluble COD, and inhibit the growth of filamentous bacteria. Mixed liquor from the aeration basins flows into one of six 460,000-gallon secondary clarifiers to allow solids to settle to the bottom of the tank. The clear effluent flows over the weirs and out of the tanks, while the settable solids are pulled from the bottom of the clarifier, via suction pick up tubes. These solids enter two common channels and flow into the wet well then into the DAF. The overflow from the secondary clarifiers enters the influent channel into three disk filters and two sand filters. The UV system disinfects the effluent prior to discharge. Two air blowers continuously aerate the effluent water in the post aeration basin to ensure adequate DO in the effluent. The non-potable water system draws filtered water from the effluent channel to supply water for reused and is also sold at the standpipe to contractors for use in construction, dust control, watering of golf courses and sports playing fields.

Solids are initially treated using DAF to thicken sludge. The DAF operates by pressurizing water in a tank and is introduced via a header along with pumped sludge and a polymer thickening agent. The sludge, pressurized water and polymer enter the DAF tanks which are at atmosphere pressure. The difference in pressures causes air to come out of solution as fine bubbles which rise to the surface of the DAF tank. The sludge attaches to the fine bubbles and floats to the surface where it is thickened and is further treated either by anaerobic digestion or lime stabilization. The anaerobic digesters are composed of a 462,000-gallon fixed-cover primary digester and a 453,000-gallon floating-cover secondary digester. The digester is heated by two hot water boilers using either natural gas or digester gas. The digester contents are also mixed using digester gas which is compressed and introduced into the mixing guns. Sludge can also be treated with a second method using lime stabilization. Sludge is disposed of by using subsurface injections at the Paseo Real Sludge Disposal Injection Field adjacent to the WWTP. During the winter months when sludge injections cannot be used, sludges are stored in either sludge tank#1; 660,000 gallons or sludge tank#2; 1,618,000 gallons. The compost facility dewaters the digested sludge from the sludge storage tanks.

Appendix 1 shows an aerial view of the plant and the process flow schematic of the facility.

The discharge from PRWRF is to the Santa Fe River thence to the Rio Grande in Water-body Segment No. 20.6.4.113 NMAC of the Rio Grande Basin. The discharge is located at Latitude 35º 37’ 52.41” North, Longitude 106º 05’18.88” West.

The PRWRF is being upgraded using federal funding. Primary goals are to lower nutrients and bacteria entering the Santa Fe River while optimizing water reuse for local irrigation. The City of Santa Fe is also planning to build a new wastewater reclamation facility to replace the aging PRWRF. A completion date for the new facility has not been set.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Forms 2A and supplement information received on February 26, 2026, April 9, 2026, and July 27, 2026, are presented in Tables 1 and 2 below.

Table 1: Pollutants

Parameter	Max	Avg
	(mg/L unless noted)	
Flow, million gallons/day (MGD)	6.28	5.5
Temperature, winter	22.5 °C	14.8 °C
Temperature, summer	28.8 °C	21.2 °C
pH, minimum	6.48 s.u.	N/A
pH, maximum	7.96 s.u.	N/A
Carbonaceous Oxygen Demand, 5-day ($CBOD_5$)	16.06	2.58
E. Coli (#bacteria/100 ml)	8,000	13
Total Suspended Solids (TSS)	128.8	6.8
Ammonia (NH3)	18.7	1.41
Chlorine, Total Residual (TRC)	40 ug/L	0 ug/L
Dissolved Oxygen	10.7	7.5
Total Kjeldahl Nitrogen (TKN)	14.21	4.06
Nitrate plus Nitrite Nitrogen	9.84	4.56
Oil and grease	2.8	0.838
Phosphorus	27	13.24
Total Dissolved Solids (TDS)	436	373

Table 2: Expanded Pollutant list

Parameter	Max	Avg
Hardness ($CaCO_3$)	83 mg/L	83 mg/L
Antimony, total recoverable	0.85 ug/L	0.362 ug/L
Arsenic, total recoverable	3.4 ug/L	1.37 ug/L
Copper, total recoverable	24.6 ug/L	7.06 ug/L
Lead, total recoverable	1.82 ug/L	0.495 ug/L
Mercury, total recoverable	0.00872 ug/L	0.00347 ug/L
Nickel, total recoverable	3.6 ug/L	2.33 ug/L
Silver, total recoverable	1 ug/L	0.0682 ug/L
Zinc, total recoverable	87 ug/L	50.5 ug/L
Cyanide, total recoverable	13 ug/L	7.68 ug/L
Total Phenolic Compounds	43.2 ug/L	5.27 ug/L
Chloroform	1.74 ug/L	0.348 ug/L
Di-n-butyl phthalate	2 ug/L	0.4 ug/L
1,4-dichlorobenzene	0.38 ug/L	0.076 ug/L
Aluminum, total recoverable	190 ug/L	55.9 ug/L
Aluminum	12 ug/L	6 ug/L
Boron	406 ug/L	289 ug/L
Radium 228	0.165 pCi/L	0.0825 pCi/L
Molybdenum	32.2 ug/L	13.4 ug/L
Manganese	36 ug/L	28.5 ug/L
Strontium 90	0.9 pCi/L	0.9 pCi/L

A summary of the last 36 months of available pollutant data (i.e., January 2023 through January 2026) taken from DMRs indicates the facility experienced a number of exceedances of permit limits (shown in parenthesis) for DO (2), TSS (9), Total Suspended Solids removal (6), TRC (4), pH (2), Total Nitrogen (29), Total Phosphorous (18), *E. coli* (26), CBOD (4), Cyanide (5), and Copper (25)

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water"; more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit will be expired on August 31, 2026. A complete NPDES permit renewal application was received on July 27, 2026. The permit is administratively continued under 5 U.S.C. 558(c) until this draft permit is issued.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for TSS, BOD_5 and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, Total Phosphorous, Total Nitrogen, DO, pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of

guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures.

The facility is a POTW treating sanitary wastewater. POTW's have technology based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are $CBOD_5$, TSS and pH. $CBOD_5$ limits of 25 mg/L for the 30-day average and 40 mg/L for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a)(4). TSS limits of 30 mg/L for the 30-day average and 45 mg/L for the 7-day average, and 85% percent (minimum) removals are found at 40 CFR §133.102(b). ELG's for pH are between 6.0-9.0 s.u. and are found at 40 CFR §133.102(c). Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTW's, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/L * 8.345 lbs/gal * design flow in MGD

30-day average TSS loading = 30 mg/L * 8.345 lbs/gal * 13 MGD
30-day average TSS loading = 3,254 lbs

7-day average TSS loading = 45 mg/L * 8.345 lbs/gal * 13 MGD
7-day average TSS loading = 4,881 lbs

30-day average $CBOD_5$ loading = 25 mg/L * 8.345 lbs/gal * 13 MGD
30-day average $CBOD_5$ loading = 2,712 lbs

7-day average $CBOD_5$ loading = 40 mg/L * 8.345 lbs/gal * 13 MGD
7-day average $CBOD_5$ loading = 4,339 lbs

Table 3: A summary of the technology-based limits for the facility

Final Effluent Limits - 13 MGD design flow.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/L (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
$CBOD_5$	3,712(*3)	4,339	25(*3)	40(*3)
CBOD, % removal (*1)	≥ 85	---	---	---
TSS	3,254 (*2)	4,881	30(*2)	45
TSS, % removal (*1)	≥ 85	---	---	---
pH	N/A	N/A	6.0 – 9.0 standard units (*4)	

Footnotes:
(*1) Percent removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] * 100.
(*2) The draft permit will propose the previous permit TSS mass limit of 2,127 lbs/day and concentration of 30 mg/L TSS at end-of-pipe based on the EPA approved 2000 TMDL. They are more stringent than the technology-based limits.

(*3) The previous permit $CBOD_5$ mass limits of 709 lbs/day at a target end-of-pipe monthly average concentration of 10 mg/L and 7-day average concentration of 15 mg/L (based on the EPA approved 2001 TMDL) will be continued in the draft permit. These limits are more stringent than the technology-based limits.
(*4) The draft permit will propose the previous permit pH limits of 6.6 s.u. to 9.0 s.u. based on EPA approved 2001 TMDL. These limits are more stringent than the technology-based limits.

The facility is required to monitor influent of $CBOD_5$ and TSS on a once per week frequency for use to determine the removal percentage. The facility shall diligently maintain a log. The influent data is not required to be reported on NetDMR but must be kept at the facility and made available to EPA or its agents upon request.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits are more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

2. Implementation

The NPDES permits contain TBELs reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional WQBELs and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in New Mexico State Standards for Interstate and Intrastate Surface Water (20.6.4 NMAC, effective on August 14, 2025). The facility discharges into the Santa Fe River in segment number 20.6.4.113 NMAC of the Rio Grande Basin. The designated uses of the receiving waters are irrigation, livestock watering, wildlife habitat, primary contact and coolwater aquatic life. The 2026-2028 State of New Mexico CWA §303(d) / §305(b) Integrated Report identifies the Segment is impaired due to *E. coli* and Nutrient/Eutrophication.

The facility discharge point into the Santa Fe River is approximately 15 miles upstream of the Pueblo de Cochiti (Cochiti), which does not have EPA-approved WQS. Effluent limitations and/or conditions established in the draft permit are consistent with State water quality standards, EPA approved TMDLs, and the applicable water quality management plan. These criteria are established to protect the designated uses of New Mexico surface waters and are also expected to be protective of downstream Cochiti surface waters.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. BACTERIA

Primary contact currently is one of the designated uses of the Santa Fe River in segment number 20.6.4.113 NMAC of the Rio Grande Basin. The State of New Mexico WQS criteria applicable to the primary contact designated use of the receiving stream are the monthly geometric mean of *E. coli* bacteria of 126 cfu/100 mL (or MPN/100 mL) and single sample of 410 cfu/100 mL (or MPN/100 mL). The results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN) depending on the analytical method used. The facility experienced numerous exceedances of the permit limits. The *E. coli* limits (i.e. monthly geometric mean of 126 cfu/100 mL, and a single sample maximum of 410 cfu/100 mL) in the previous permit will be continued in the draft permit. The previous permit also included a 30-day average mass loading limit of 31 billion (1.0×10^9) cfu/day based on the WLA in the EPA approved *E. coli* TMDL developed for the Santa Fe River (Cienega Creek to the Santa Fe WWTP). The EPA proposes continuing the mass loading limit and monitoring frequency requirement in the previous permit in the draft permit.

b. pH

The previous permit pH limits of 6.6 to 9.0 s.u. based on the stream segment specific (20.6.4.113 NMAC) WQS were in the EPA approved 2001 TMDL. These limits, which are more stringent than the technology-based limits, will be continued in the draft permit.

c. DISSOLVED OXYGEN

Stream segment specific (20.6.4.113 NMAC) WQS for dissolved oxygen requires 5.0 mg/L. No separate DO model was conducted. The previous permit DO-limits consistent with the WLA in the approved DO TMDL will be continued in the draft permit.

d. NUTRIENTS

The Santa Fe WWTP discharges treated effluent into the Santa Fe River in Water Quality Segment 20.6.4.113 NMAC (Segment) with designated uses of coolwater aquatic life, irrigation, livestock

watering, wildlife habitat, and primary contact. The 2026-2028 State of New Mexico CWA §303(d) / §305(b) Integrated Report identifies the Segment is impaired due to Nutrient/Eutrophication.

According to the approved New Mexico's Antidegradation Policy[1] and Implementation Procedures[2], the Segment is classified as Tier 1 for nutrients (i.e., phosphorus and nitrogen); therefore, any increase in pollutant load or other activity that would cause further degradation of water quality is not allowed. Each NPDES permit issued must contain requirements necessary to achieve water quality standards. Consistent with NM's Policy and Procedures, the level of water quality necessary to protect existing uses must be maintained and protected. Furthermore, where surface water is impaired, there shall be no further degradation or lowering of the water quality with respect to the pollutants causing the impairment (e.g., nutrients).

To protect and maintain existing water quality and to prevent further degradation of water quality in the Santa Fe River in accordance with 40 CFR 131.12, Subsection A of 20.6.4.8 NMAC, and the New Mexico Continuing Planning Process – Antidegradation Policy and Implementation Procedures, the limits of 108 lbs/day and 3.1 mg/L end-of-pipe of Total Phosphorous concentration and limits of 265 lbs/day and 6.9 mg/L end-of-pipe of Total Nitrogen concentration (from the previous permit) will be continued in the draft permit. These limits will ensure that nutrient loading to the river is not increased, and current water quality is not further degraded.

e. TOXICS

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are like POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

[1] http://www.nmenv.state.nm.us/swqb/Planning/WQMP-CPP/
[2] Appendix A of the Continuing Planning Process – http://www.nmenv.state.nm.us/swqb/Planning/WQMP-CPP/

Based on the NMIP as of March 15, 2012, EPA conducted an Reasonable Potential (RP) screening analysis using submitted data listed in the Section IV "Effluent Characteristics" to determine if RP to cause or contribute to the State WQS exceedances exists. If RP exists, appropriate limits needed to be protective of such designated uses will be established in the draft permit as required by 40 CFR 122.44(d)(1)(iii). Upstream of the WWTP, the Santa Fe River is generally a dry arroyo with upstream flow during some snowmelt periods in the spring and after some storm events the rest of the year. The 4Q3 for the receiving water is zero (0) cfs. The CD for the facility is 100%; therefore, discharges must meet WQS at end-of-pipe. The receiving stream ambient hardness value of 70.03 mg/L was also used in the screening for any hardness-dependent WQS. The results are shown in Appendix 2. There were no pollutants that demonstrated RP to violate WQS consistently with the designated uses for the receiving water. As mentioned, the facility experienced exceedances of effluent Cyanide and Copper limits. The Cyanide and Copper limits on the previous permit will be continued in the draft permit. For Heptachlor, DMR shows that it was not detected in the facility effluent in the previous permit term. The EPA proposes to remove Heptachlor effluent limits and to remain monitoring and reporting only with 3 per month frequency.

f. TRC

Criteria for TRC are 19 ug/L (acute) and 11 ug/L (chronic) for protection of aquatic life and wildlife habitat, pursuant to 20.6.4.900.J NMAC. The facility uses a UV system to control bacteria. Chlorine usage may still occur at the facility for various purposes such as disinfection of process equipment and/or algae control. The TRC effluent limit of 11 ug/L from the previous permit will be continued in the draft permit and is applicable when chlorine is used in the treatment process. If a test result is less than the MQL specified in Part II.A of the permit it can be reported as zero for compliance purposes. TRC reporting shall be the instantaneous maximum grab sample shall be taken during periods of chlorine use and cannot be averaged for reporting purposes. Regulations at 40 CFR §136 define "instantaneous grab" as analyzed within 15 minutes of collection.

g. Per- and Polyfluoroalkyl Substances (PFAS)

The EPA currently has no data indicating that PFAS is present in the City of Santa Fe WWTP discharge. No industrial users of the system are expected to contribute PFAS into the collection system. The standard reopener language in the permit allows additional permit conditions if warranted by future changes in the listing of receiving waterbody segment (i.e., PFAS) and/or new TMDLs. As explained at https://www.epa.gov/pfas, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects (EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan, EPA 823R18004, February 2019). The EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses.

Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2022 New Mexico Water Quality Standards narrative criterion supply guidance including:

20.6.4.7(E)(2) NMAC states: "**Emerging contaminants"** refer to water contaminants that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria.

20.6.4.7(T)(2) NMAC states: **"Toxic pollutant"** means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and sludge sampling for PFAS according to the frequency outlined in the permit.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

"SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

> *(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require;".*

The EPA notes that there is currently not analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for

PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with Method 1633, if appropriate.

The EPA has included PFAS monitoring in the draft permit using analytical Method 1633 (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas for more information). Table 4 lists Region 6 recommended PFAS monitoring frequencies for different facility types.

Table 4: Region 6 Recommended Monitoring Frequencies

Facility Type [1,2]	**Measurement Frequency**
Minor (< 0.1 MGD)	Once/Term
Minor (0.1 < 1.0 MGD) [2,3]	3/Term
Major (if NOT in an applicable category) [2]	Once/6 Months
Major (if IS in an applicable category) [2]	Quarterly
Major (with required pretreatment OR discharge is > 5 MGD)	Quarterly

Footnotes:

1. These recommended frequencies are only for facilities where an applicable ELG for PFAS does not apply. These frequencies may be altered if an industry category is known or suspected to discharge PFAS or based on the permit writer's BPJ.
2. More information on PFAS is available at https://www.epa.gov/pfas.
3. PFAS samples must be collected and analyzed in three separate calendar years

There are currently no applicable Federal and/or State/Tribe surface water quality standards for PFAS. The EPA proposes PFAS pollutants in the influent, effluent and sewage sludge are to be monitored at once every 6 months based on the plant design flow to gather information on the presence or absence of PFAS in the discharge.

5. TMDL Requirements

NMED developed several TMDLs for the Santa Fe River (in segment number 20.6.4.113 NMAC of the Rio Grande Basin) and approved by EPA. They are Total Residual Chlorine/Stream Bottom Deposits TMDL (March 2000), DO/pH TMDL (January 2001) and *E. coli* bacteria TMDL (May 2017). The Total Residual Chlorine and Stream Bottom Deposits TMDL established TRC limits of 11 ug/L, TSS 30-Day average mass limits of 2,127 lbs/day and monthly average concentration of 30 mg/L TSS at end-of-pipe. The draft permit will maintain the 11 ug/L limit when the facility uses chlorine to disinfect equipment or in the control of algae at WWTP. DMR shows that the facility experienced exceedances of effluent TSS limits. The TSS limits in the previous permit will be continued in the draft permit since they are more restrictive than the technology-based limits described in Part B above.

The approved DO and pH TMDL established limits for $CBOD_5$, nitrate-nitrite, ammonia, DO and pH. They are $CBOD_5$ daily mass limits of 709 lbs/day at a target end-of-pipe concentration of 10 mg/L, nitrate-nitrite daily limits of 212.67 lbs/day at end-of-pipe target concentration of 3 mg/L, ammonia limits of 141.78 lbs/day at end-of-pipe target concentration of 2 mg/L, DO limit of 5.0 mg/L minimum and pH limits of 6.6 s.u to 9.0 s.u. (more restrictive than the technology-based limits). The $CBOD_5$, DO and pH effluent limits were the previous permit and will be continued in the draft permit. The draft permit does not have ammonia and nitrate-nitrite limits. These were removed, after consultation with NMED, in the previous permit cycle because pre-established Total Nitrogen limits in the permit contain both Ammonia and Nitrate-Nitrite components.

The approved *E. coli* bacteria TMDL established a 30-day average mass limit of 3.1×10^{10} cfu/day, which will be proposed in the draft permit.

D. MONITORING FREQUENCY FOR LIMITED PARAMETERS

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to ass.u.re compliance with permit limitations, 40 CFR §122.44(i)(1). Sample frequency is based on March 2012, NMIP. Ammonia, *E. coli* bacteria, $CBOD_5$, TSS, DO, Copper, and Cyanide have daily monitoring frequency requirement. Heptachlor, Total Phosphorous and Total Nitrogen have 3 per month monitoring frequency requirement. The rest of limited parameters have 1/week monitoring frequency requirement. Flow is proposed to be monitored continuously by totalizing meter. *E. coli* bacteria, Copper, Cyanide and Heptachlor shall use grab samples, and the other parameters (i.e., $CBOD_5$, TSS, Total Phosphorous and Total Nitrogen) shall use 24-hr composite samples. When chlorine is used to disinfect treatment equipment and/or treat filamentous algae, TRC shall be sampled daily using instantaneous grab samples. Using instantaneous grab samples are also applied to pH and DO. Regulations at 40 CFR §136 define instantaneous grab as being analyzed with 15-minutes of collection.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. The EPA conducted an analysis of past WET data to determine reasonable potential (RP), and with 19 tests conducted for *Pimephales promelas* and 12 tests conducted for *Ceriodaphnia dubia*, EPA has concluded there is no reasonable potential for either species (see Appendix 3). As a result, WET limits are not established in the draft permit. WET monitoring and reporting requirements for *P. Promelas* and *Ceriodaphnia dubia* are continued in the draft permit. WET monitoring will be required at a quarterly frequency, in accordance with the NMIP, for both species (*Ceriodaphnia dubia* and *Pimephales promelas)* at a CD of 100%.

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge treated sanitary wastewater from Outfall 001 to the Santa Fe River. Discharges shall be limited and monitored by the permittee as specified below:

Whole Effluent Toxicity Testing (Chronic Static Renewal/NOEC)*	**VALUE**	**Measurement Frequency**	**Sample Type**
Ceriodaphnia dubia	REPORT	Once/Quarter	24-hr Composite
Pimephales promelas	REPORT	Once/Quarter	24-hr Composite

* Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements and additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge". The specific requirements in the permit apply as a result of the design flow of the facility, the type of waste discharged to the collection system, and the sewage sludge disposal or reuse practice utilized by the treatment works. Permittee shall submit an Annual Sludge Status report in accordance with NPDES Permit NM0022292, Parts I and Part IV.

B. WASTEWATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve operating efficiency and extend the useful life of the treatment system.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has four non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The facilities, their services and estimated long-term flow contribution to the POTW are as follows:

Discharger	Product	Discharge Volume
Christus St. Vincent's Hospital	Medical care	0.04915 MGD
Esoterix Genetics	Medical lab testing	0.027608 MGD
New Mexico History Museum	Remediated ground water	0.000041MGD

Presbyterian Santa Fe Medical Center as a non-categorical Significant Industrial User (SIU) has not been included in the City's annual POTW Industrial Pretreatment report because its flow does not meet the Flow criteria (of greater than 25,000 gallons per day) for a hospital to be permitted as an SIU. The Presbyterian Santa Fe Medical Center is currently discharging less than 25,000 gallons per day.

The facility has an approved pretreatment program in place and will be continued with this draft permit. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW subject to pretreatment standards under §307(b) of the CWA and 40 CFR 403.

D. OPERATION AND REPORTING

The applicant is required to always operate the treatment facility at maximum efficiency; to monitor the facility's discharge on a regular basis; and report the results monthly. Reporting requirements and the requirement of using EPA-approved test procedures (methods) for the analysis and quantification of pollutants or pollutant parameters are contained in 40 CFR 122.41(l) and 40 CFR 122.21 (e), respectively. All Discharge Monitoring Reports (DMRs) shall be electronically reported to EPA per 40 CFR 127.16. The monitoring results will be available to the public.

VII. 303(d) LIST

The EPA approved 2026-2028 State of New Mexico CWA §303(d) / §305(b) Integrated Report identifies the receiving stream segment no, 20.6.4.113 NMAC is impaired for nutrient/eutrophication and *E. coli* bacteria. Previously in Part V of the Fact Sheet, permit conditions were identified as being based on approved TMDLs to address these pollutants. No additional pollutants are listed for this waterbody. The standard reopener language in the permit allows additional permit conditions if warranted by future changes and/or new TMDLs.

VIII. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set for in the proposed permit are developed from the State water quality standards and are protective of the designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet anti-backsliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. No draft permit condition is less stringent than the previous one with applicable exceptions.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, https://ecos.fws.gov/ecp/report/species-listings-by-current-range-county?fips=35049, seven species in Santa Fe County are listed as endangered (E) or threatened (T). They are Southwestern willow flycatcher (*Empidonax traillii extimus*) (E), the Mexican spotted owl (*Strix occidentalis lucida*) (T), New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) (E), Yellow-billed Cuckoo (*Coccyzus americanus*) (T), Mexican wolf (*Canis lupus baileyi*) (E), Silverspot (*Speyeria nokomis nokomis*) (T), Jemez Mountains salamander (*Plethodon neomexicanus*) (E).

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the reissuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1) In the previous permit issued July 29, 2021, EPA made a "no effect" determination for federally listed species mentioned above except for Mexican wolf (*Canis lupus baileyi*) (E), Silverspot (*Speyeria nokomis nokomis*) (T), and Jemez Mountains salamander (*Plethodon neomexicanus*)(E). EPA has received no additional information since then which would lead to a revision of that "no effect" determination. EPA determines that this reissuance will not change the environmental baseline established by the previous permit, and therefore, EPA concludes that reissuance of this permit will have "no effect" on the listed species and designated critical habitat.

2) The Silverspot is a relatively large butterfly with up to a 3-inch wingspan. Males typically have bright orange on the upper side of the wing, while females typically have cream or light yellow with brown or black. The underside of the wing of both sexes has silvery-white spots, giving the subspecies' the common name of Silverspot butterfly. Population of Silverspot occurs between 5,200 feet (ft) (1,585 m) and 8,300 ft (2,530 m). The butterfly requires moist habitats in mostly open meadows with a variety of herbaceous and woody vegetation. Eggs are laid on or near the bog violet (Viola nephrophylla/V. sororia var. affinis), which the larvae feed on exclusively. A variety of flowering plants provide adult nectar sources. The butterfly completes its entire life cycle in one year. Habitat loss and fragmentation, human-caused hydrologic alteration (i.e., diversions for agricultural and domestic use; erosion and stream channel incision caused by livestock grazing, mining, roads, or dredging and filling of wetlands; removal of beaver dams; manipulation of waterways that minimizes flooding and reduces natural meander features; and creation and operation of large human-made dams), livestock grazing, genetic isolation, exotic plant invasion, climate change, climate events, larval desiccation, and collecting are all factors that influence or could influence the subspecies' viability. The draft permit does not authorize activities that may cause destruction of the Silverspot habitat, and issuance of the permit will have no effect on this species.

3) The Mexican wolf (*Canis lupus baileyi*) is a top predator native to the southwestern United States and Mexico that lives in packs and requires large amounts of forested terrain with adequate ungulate (deer and elk) populations to support the pack. Today, Mexican wolves again inhabit portions of the southwestern United States in Arizona and New Mexico, and the northern Sierra Madre Occidental of Chihuahua in Mexico. Mexican wolves are present in these areas due to ongoing reintroduction efforts in both countries, supported by the binational captive breeding program. The threats to the Mexican wolf have generally remained consistent over time, including human- caused mortality and related legal protections, extinction risk due to small population size, and genetic issues. The draft permit does not authorize activities that may cause destruction of the Mexican wolf habitat, and issuance of the permit will have no effect on this species.

4) The Jemez Mountains salamander (*Plethodon neomexicanus*) is uniformly dark brown above, with occasional fine gold to brassy coloring with stippling dorsally (on the back and sides) and is sooty gray ventrally (underside). The salamander is slender and elongate, and it possesses foot webbing and a reduced fifth toe. The Jemez Mountains salamander is restricted to the Jemez Mountains in northern New Mexico, in Los Alamos, Rio Arriba, and Sandoval Counties, around the rim of the collapsed caldera (large volcanic crater), with some occurrences on topographic features (e.g., resurgent domes) on the interior of the caldera. The majority of salamander habitat is located on federally managed lands, including the U.S. Forest Service (USFS), the National Park Service (Bandelier National Monument), Valles Caldera National Preserve, and Los Alamos National Laboratory, with some habitat located on tribal land and private lands. Wildland fires have significantly degraded important features of salamander habitat, including removal of tree canopy and shading, increases of soil temperature, decreases of soil moisture, increased pH, loss or reduction of soil organic matter, reduced soil porosity, and short-term creation of hydrophobic (water-repelling) soils. These and other effects limit the amount of available above ground habitat, and the timing and duration when salamanders can be active above ground, which negatively impacts salamander behavior (e.g., maintenance of water balance, foraging, and mating) and physiology (e.g., increased dehydration, heart rate and oxygen consumption, and increased energy demands). The draft permit does not authorize activities that may cause destruction of the Jemez Mountains salamander habitat, and issuance of the permit will have no effect on this species.

5) No additions have been made to the critical habitat designation in the area of discharge since prior issuance of the permit.

6) EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.

7) The draft permit is no less stringent than the previous permit. It is consistent with the States WQS and does not allow the facility to increase pollutant loading.

8) EPA determines that Items 1, 5, 6 and 7 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State/Tribal Water Quality Standards are promulgated or revised. In addition, if either the State and/or Tribe develops a TMDL, this permit may be reopened to establish effluent limitations for the

parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgating at 40 CFR §124.53. EPA will send a draft permit and a draft public notice to the District Engineer, Corps of Engineers, Regional Director of the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service prior to the publication of that notice.

XV. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Forms 2A and 2S and supplements were received on February 26, 2026, April 9, 2026, and July 27, 2026.

B. 40 CFR CITATIONS

Citations to 40 CFR Sections 122, 124, 125, 133, 136

C. MISCELLANEOUS

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, effective August 14, 2025

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 2012.

State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process, May 10, 2020.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2026-2028.

Total Maximum Daily Load for the Santa Fe River from the Cochiti Pueblo to the Santa Fe Wastewater Treatment Plant for Chlorine and Stream Bottom Deposits, approved by EPA March 20, 2000.

Total Maximum Daily Load for the Santa Fe River for Dissolved Oxygen and pH, approved by EPA January 11, 2001.

Santa Fe River *E. coli* TMDL, approved by EPA May 3, 2017

APPENDIX 1

Liquid Stream
1 – Headworks
2 – Primary Clarifiers
3 – Bioselectors
4 – Aeration Basins (Biological Process)
5 – Secondary Clarifiers
6 – Filters
7 – UV Disinfection
8 – Post Aeration

Solids Handling
A – Sludge Thickening (DAF)
B – Anaerobic Digesters
C – Sludge Holding Tanks
D – Lime Sludge Stabilization
E – Sludge Dewatering
F – Biosolids Compost Facility
G – Sludge Injection Field
H – Sludge Drying Beds
I – Temp Biosolids Storage

FIGURE 1 – Facility Aerial View

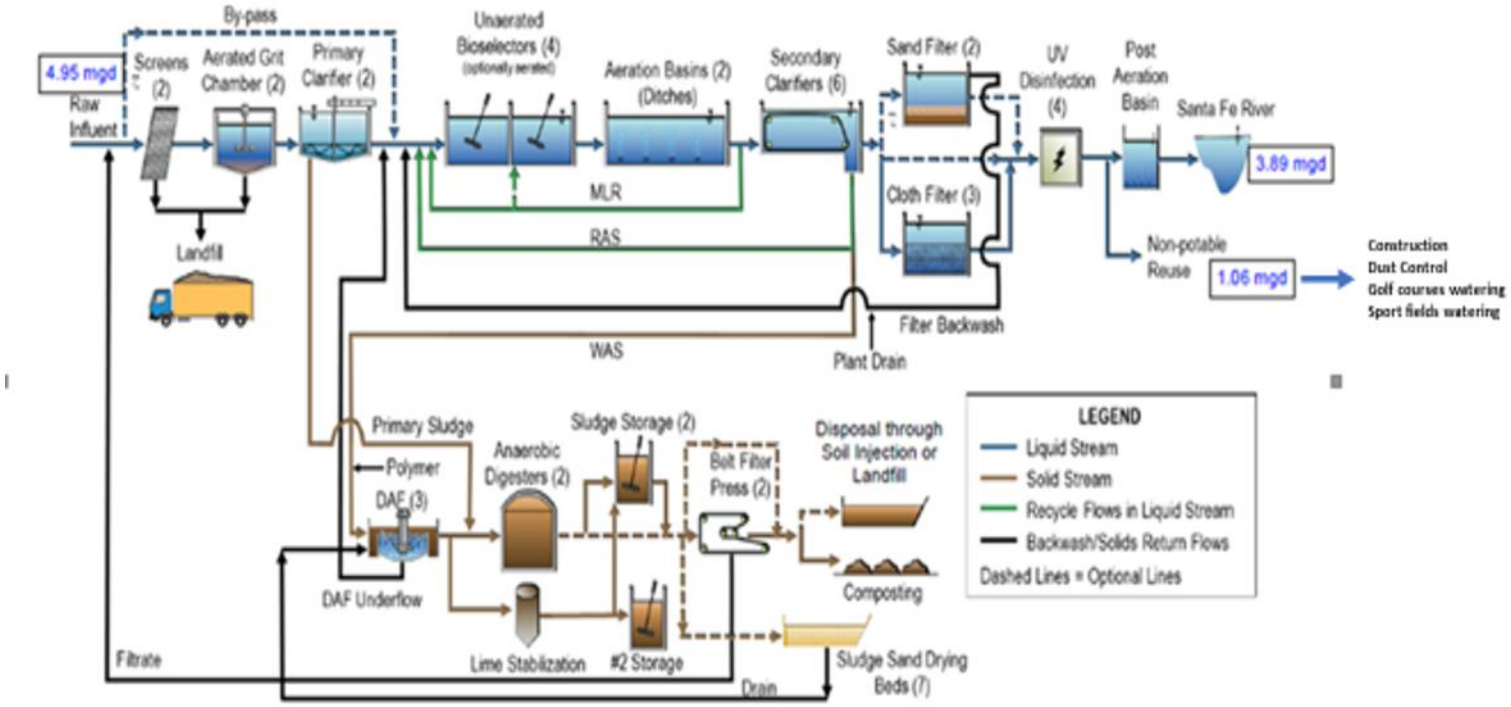

FIGURE 2 – Facility Process Flow Schematic

APPENDIX 2

			CALCULATIONS OF NEW MEXICO WATER QUALITY-BASED EFFLUENT LIMITATIONS				
NMAC 20.6.4.	NMWQS as of 2023 (EPA Approved January 19, 2023)						
Calculations Specifications:		Excel	Revised as of February 2023				
Prepared By:	Quang Nguyen		31-Jul-26	2:50 PM			
STEP 1:	REFERENCE IMPLEMENTATION PROCEDURES		APPENDIX A				
	INPUT FACILITY AND RECEIVING STREAM DATA		of FACT SHEET				
	LIST SOURCE OF DATA INPUT						
IMPLEMENTATION PROCEDURES							
The State of New Mexico Standards for Interstate and Intrastate Surface Waters are implemented in this spread sheet							
by using procedures established in the current "Procedures for Implementing NPDES Permits in New Mexico"							
FACILTY				DATA INPUT			
Permittee				City of Santa Fe WWTP			
NPDES Permit No.				NM0022292			
Outfall No.(s)				1			
Plant Effluent Flow (MGD)				13	For industrial and federal facility, use the highest monthly average flow		
Plant Effluent Flow (cfs)				20.15	for the past 24 months. For POTWs, use the design flow.		
RECEIVING STREAM				DATA INPUT			
Receiving Stream Name				Santa Fe River			
Basin Name				Rio Grande			
Waterbody Segment Code No.				20.6.4.113			
Is a publicly owned lake or reservoir (enter "1" if it's a lake, "0" if not)				0			
Are acute aquatic life criteria considered (1= yes, 0= no)				1			
Are chronic aquatic life criteria considered (1= yes, 0=no)				1			
Are domestic water supply criteria considered (1= yes, 0=no)				0			
Are irrigation water supply criteria considered (1= yes, 0=no)				1			
Livestock watering and wildlife habitat criteria applied to all streams							
USGS Flow Station							
WQ Monitoring Station No.			30SantaF032.9, F035.9, F040 and F041.2				
Receiving Stream TSS (mg/l)				182.32	For intermittent stream, enter effluent TSS		
Receiving Stream Hardness (mg/l as CaCOs)		RANGE: 0 - 400		70.03	For intermittent stream, enter effluent Hardness (If no data, 20 mg/l is used)		
Receiving Stream Critical Low Flow (4Q3) (cfs)				0	Enter "0" for intermittent stream and lake.		
Receiving Stream Harmonic Mean Flow (cfs)				0	Enter harmonic mean or modified harmonic mean flow data or 0.001 if no data is available		
Avg. Receiving Water Temperature (C)				21.46			
pH (Avg), Receiving Stream				8.65			
Fraction of stream allowed for mixing (F)				1	Enter 1, if stream morphology data is not available or for intermittent streams.		
Fraction of Critical Low Flow				0			

STEP 2: INPUT AMBIENT AND EFFLUENT DATA

CALCULATE IN-STREAM WASTE CONCENTRATIONS

DATA INPUT — Input pollutant geometric mean concentration as micro-gram per liter (ug/l or ppb)

unless other unit is specified for the parameter.

Effluent value reported as "< detection level" (DL) but the DL is greater than MQL, input "1/2 DL" for calculation.

Effluent value reported as "< detection level" (DL) and the DL is smaller than MQL, no data is inputted.

If a less than MQL vakue is reported, input either the reported value or "0" for calculation.

The following formular is used to calculate the Instream Waste Concentration (Cd)

See the current "Procedures for Implementing NPDES Permits in New Mexico"

Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Where:

Cd = Instream Waste Concentration

F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")

Ce = Reported concentration in effluent

Ca = Ambient stream concentration upstream of discharge

Qe = Plant effluent flow

Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria

The following formular convert metals reported in total form to dissolved form if criteria are in dissolved form

See the current "Procedures for Implementing NPDES Permits in New Mexico"

Kp = Kpo * (TSS**a) — Kp = Linear partition coefficient; Kpo and a can be found in table below

C/Ct = 1/ (1 + Kp*TSS* 10^-6) — TSS = Total suspended solids concentration found in receiving stream (or in effluent for intermittent stream)

Total Metal Criteria (Ct) = Cr / (C/Ct) — C/Ct = Fraction of metal dissolved; and Cr = Dissolved criteria value

		Stream Linear Partition Coefficient					Lake Linear Partition Coefficient				
Total Metals	Total Value	Kpo	alpha (a)	Kp	C/Ct	Dissolved Value in Stream	Kpo	alpha (a)	Kp	C/Ct	Dissolved Value in Lake
Arsenic	1.37	480000	-0.73	10735.74505	0.33814159	0.46325398	480000	-0.73	10735.74505	0.33814159	0.463254
Chromium III		3360000	-0.93	26531.59548	0.171313826	0	2170000	-0.27	532150.4939	0.010201825	0
Copper	7.06	1040000	-0.74	22080.85818	0.198974008	1.4047565	2850000	-0.9	26308.3723	0.172516636	1.2179674
Lead	0.495	2800000	-0.8	43500.13268	0.111970244	0.05542527	2040000	-0.53	129237.3315	0.040712385	0.0201526
Nickel	2.33	490000	-0.57	25206.96289	0.178707582	0.41638867	2210000	-0.76	42282.26039	0.114825041	0.2675423
Silver	0.0682	2390000	-1.03	11213.43215	0.328468394	0.02240154	2390000	-1.03	11213.43215	0.328468394	0.0224015
Zinc	50.5	1250000	-0.7	32683.30708	0.143702513	7.25697691	3340000	-0.68	96912.35218	0.053564561	2.7050103

The following formular is used to calculate hardness dependent criteria

(Please refer to State Water Quality Standards for details)

			Dissolved WQC (ug/l)	
Aluminum (T)	Acute	e(1.3695[ln(hardness)]+1.8308)	2100.017668	If Stream pH < 6.5, enter 750 in cell O114
	Chronic	e(1.3695[ln(hardness)]+0.9161)	841.3443564	If Stream pH < 6.5, enter 87 in cell P114
Cadmium (D)	Acute	e(0.8968[ln(hardness)]-3.5699)*CF1	1.219659931	CF1 = 1.136672 - 0.041838*ln(hardness)
	Chronic	e(0.7647[ln(hardness)]-4.2180)*CF2	0.35064061	CF2 = 1.101672 - 0.041838*ln(hardness)

									Dissolved						
									WQC (ug/l)						
Chromium III (D)			Acute			0.316 e(0.819[ln(hardness)]+3.7256)			425.5810717						
			Chronic			0.860 e(0.819[ln(hardness)]+0.6848)			55.35935379						
Copper (D)			Acute			0.960 e(0.9422[ln(hardness)]-1.700)			9.607210747						
			Chronic			0.960 e(0.8545[ln(hardness)]-1.702)			6.605372451						
Lead (D)			Acute			e(1.273[ln(hardness)]-1.46)*CF3			43.72787586		CF3 = 1.46203 - 0.145712*ln(hardness)				
			Chronic			e(1.273[ln(hardness)]-4.705)*CF4			1.704012544		CF4 = 1.46203 - 0.145712*ln(hardness)				
Manganese (D)			Acute			e(0.3331[ln(hardness)]+6.4676)			2651.594647						
			Chronic			e(0.3331[ln(hardness)]+5.8743)			1465.008746						
Nickel (D)			Acute			0.998 e(0.846[ln(hardness)]+2.255)			346.3976754						
			Chronic			0.997 e(0.846[ln(hardness)]+0.0584)			38.47408738						
Silver (D)			Acute			0.85 e(1.72[ln(hardness)]-6.59)			1.74303853						
Zinc (D)			Acute			0.978 e(0.9094[ln(hardness)]+0.9095)			115.7260342						
			Chronic			0.986 e(0.90947[ln(hardness)]+0.6235)			87.67788778						
						Instream Waste Concentration					Livestock&	Acute	Chronic	Human	Need
POLLUTANTS				Ambient	Effluent	Acute	Domestic	Chronic	Human	Domestic	Irrigation	Wildlife	Aquatic	Aquatic	Health	TMDL
				Conc.	Conc.	Aquatic	Supply	Aquatic	Health	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	
		CAS No.	MQL	Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
Radioactivity, Nutrients, and Chlorine																
Aluminum, total		7429-90-5		630.6	55.9	119.067	119.067	119.067	119.067	1E+100	1E+100	1E+100	2100.017668	841.34436	1E+100	N/A
Aluminum, dissolved		7429-90-5		92.2	6	12.78	12.78	12.78	12.78	1E+100	5000	1E+100	1E+100	1E+100	1E+100	N/A
Barium, dissolved		7440-39-3		0	0	0	0	0	0	2000	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Boron, dissolved		7440-42-8		0	289	615.57	615.57	615.57	615.57	1E+100	750	5000	1E+100	1E+100	1E+100	N/A
Cobalt, dissolved		7440-48-4		0	0	0	0	0	0	1E+100	50	1000	1E+100	1E+100	1E+100	N/A
Uranium, dissolved		7440-61-1		0	0	0	0	0	0	30	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Vanadium, dissolved		7440-62-2		0	0	0	0	0	0	1E+100	100	100	1E+100	1E+100	1E+100	N/A
Ra-226 and Ra-228 (pCi/l)				0	0.0825	0.175725	0.175725	0.175725	0.175725	5	1E+100	30	1E+100	1E+100	1E+100	N/A
Strontium (pCi/l)					0.9	1.917	1.917	1.917	1.917	8	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Tritium (pCi/l)					0	0	0	0	0	20000	1E+100	20000	1E+100	1E+100	1E+100	N/A
Gross Alpha (pCi/l)				0	0	0	0	0	0	15	1E+100	15	1E+100	1E+100	1E+100	N/A
Asbestos (fibers/l)						0	0	0	0	7000000	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Total Residual Chlorine		7782-50-5	33			0	0	0	0	1E+100	1E+100	11	19	11	1E+100	N/A
Ammonia as N, total (mg/l)				0	1.41	3.0033	3.0033	3.0033	3.0033	1E+100	1E+100	1E+100	Criterion	Criterion	1E+100	N/A
Nitrate as N (mg/l)						0	0	0	0	10	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Nitrite + Nitrate (mg/l)				0	4.56	9.7128	9.7128	9.7128	9.7128	1E+100	1E+100	132	1E+100	1E+100	1E+100	N/A
METALS AND CYANIDE																
Antimony, dissolved (P)		7440-36-0	60		0	0	0	0	0	6	1E+100	1E+100	1E+100	1E+100	640	N/A
Arsenic, dissolved (P)		7440-38-2	0.5	2	0.463253978	0.986730973	0.98673097	0.98673097	0.98673097	10	100	200	340	150	9	N/A
Beryllium, dissolved		7440-41-7	0.5			0	0	0	0	4	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Cadmium, dissolved		7440-43-9	1			0	0	0	0	5	10	50	1.219659931	0.3506406	1E+100	N/A
Chromium (III), dissolved		16065-83-1	10		0	0	0	0	0	1E+100	1E+100	1E+100	425.5810717	55.359354	1E+100	N/A
Chromium (VI), dissolved		18540-29-9	10			0	0	0	0	1E+100	1E+100	1E+100	16	11	1E+100	N/A
Chromium, dissolved		7440-47-3				0	0	0	0	100	100	1000	1E+100	1E+100	1E+100	N/A
Copper, dissolved		7440-50-8	0.5	0	1.404756496	2.992131337	2.99213134	2.99213134	2.99213134	1300	200	500	9.607210747	6.6053725	1E+100	N/A
Lead, dissolved		7439-92-1	0.5	0	0.055425271	0.118055827	0.11805583	0.11805583	0.11805583	15	5000	100	43.72787586	1.7040125	1E+100	N/A
Manganese, dissolved		7439-96-5		6.42	28.5	60.705	60.705	60.705	60.705	1E+100	1E+100	1E+100	2651.594647	1465.0087	1E+100	N/A

					Instream Waste Concentration						Livestock&	Acute	Chronic	Human	Need
			Ambient	Effluent	Acute	Domestic	Chronic	Human	Domestic	Irrigation	Wildlife	Aquatic	Aquatic	Health	TMDL
POLLUTANTS			Conc	Conc.	Aquatic	Supply	Aquatic	Health	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	
	CAS No.	MQL	Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
Mercury, dissolved	7439-97-6	0.005			0	0	0	0	1E+100	1E+100	1E+100	1.4	0.77	1E+100	N/A
Mercury, total	7439-97-6	0.005	0	0.00347	0.0073911	0.0073911	0.0073911	0.0073911	2	1E+100	0.77	1E+100	1E+100	1E+100	N/A
Molybdenum, dissolved	7439-98-7				0	0	0	0	1E+100	1000	1E+100	1E+100	1E+100	1E+100	N/A
Molybdenum, total recoverable	7439-98-7				0	0	0	0	1E+100	1E+100	1E+100	7920	1895	1E+100	N/A
Nickel, dissolved (P)	7440-02-0	0.5	0	0.416388667	0.88690786	0.88690786	0.88690786	0.88690786	700	1E+100	1E+100	346.3976754	38.474087	4600	N/A
Selenium, dissolved (P)	7782-49-2	5			0	0	0	0	50	130	50	1E+100	1E+100	4200	N/A
Selenium, dis (SO4 >500 mg/l)		5			0	0	0	0	50	250	50	1E+100	1E+100	4200	N/A
Selenium, total recoverable	7782-49-2	5			0	0	0	0	1E+100	1E+100	5	20	5	1E+100	N/A
Silver, dissolved	7440-22-4	0.5	0	0.022401544	0.04771529	0.04771529	0.04771529	0.04771529	1E+100	1E+100	1E+100	1.74303853	1E+100	1E+100	N/A
Thalllium, dissolved (P)	7440-28-0	0.5			0	0	0	0	2	1E+100	1E+100	1E+100	1E+100	0.47	N/A
Zinc, dissolved	7440-66-6	20	0	7.256976905	15.45736081	15.4573608	15.4573608	15.4573608	10500	2000	25000	115.7260342	87.677888	26000	N/A
Cyanide, total recoverable	57-12-5	10			0	0	0	0	200	1E+100	5.2	22	5.2	140	N/A
Dioxin	1746-01-6	0.00001			0	0	0	0	3.00E-05	1E+100	1E+100	1E+100	1E+100	5.1E-08	N/A
VOLATILE COMPOUNDS															
Acrolein	107-02-8	50			0	0	0	0	18	1E+100	1E+100	1E+100	1E+100	400	N/A
Acrylonitrile	107-13-0	20			0	0	0	0	0.65	1E+100	1E+100	1E+100	1E+100	70	N/A
Benzene	71-43-2	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	160	N/A
Bromoform	75-25-2	10			0	0	0	0	44	1E+100	1E+100	1E+100	1E+100	1200	N/A
Carbon Tetrachloride	56-23-5	2			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	50	N/A
Chlorobenzene	108-90-7	10			0	0	0	0	100	1E+100	1E+100	1E+100	1E+100	800	N/A
Clorodibromomethane	124-48-1	10			0	0	0	0	4.2	1E+100	1E+100	1E+100	1E+100	210	N/A
Chloroform	67-66-3	50	0	0.348	0.74124	0.74124	0.74124	0.74124	57	1E+100	1E+100	1E+100	1E+100	2000	N/A
Dichlorobromomethane	75-27-4	10			0	0	0	0	5.6	1E+100	1E+100	1E+100	1E+100	270	N/A
1,2-Dichloroethane	107-06-2	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	6500	N/A
1,1-Dichloroethylene	75-35-4	10			0	0	0	0	7	1E+100	1E+100	1E+100	1E+100	20000	N/A
1,2-Dichloropropane	78-87-5	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	310	N/A
1,3-Dichloropropylene	542-75-6	10			0	0	0	0	3.5	1E+100	1E+100	1E+100	1E+100	120	N/A
Ethylbenzene	100-41-4	10			0	0	0	0	700	1E+100	1E+100	1E+100	1E+100	130	N/A
Methyl Bromide	74-83-9	50			0	0	0	0	49	1E+100	1E+100	1E+100	1E+100	10000	N/A
Methylene Chloride	75-09-2	20			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	10000	N/A
1,2,4,5-Tetrachlorobenzene	95-94-3				0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.03	N/A
1,1,2,2-Tetrachloroethane	79-34-5	10			0	0	0	0	1.8	1E+100	1E+100	1E+100	1E+100	30	N/A
Tetrachloroethylene	127-18-4	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	290	N/A
Tolune	108-88-3	10			0	0	0	0	1000	1E+100	1E+100	1E+100	1E+100	520	N/A
1,2-trans-Dichloroethylene	156-60-5	10			0	0	0	0	100	1E+100	1E+100	1E+100	1E+100	4000	N/A
1,1,1-Trichloroethane	71-55-6				0	0	0	0	200	1E+100	1E+100	1E+100	1E+100	200000	N/A
1,1,2-Trichloroethane	79-00-5	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	89	N/A
Trichloroethylene	79-01-6	10			0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	70	N/A
Vinyl Chloride	75-01-4	10			0	0	0	0	2	1E+100	1E+100	1E+100	1E+100	16	N/A
ACID COMPOUNDS															
2-Chlorophenol	95-57-8	10			0	0	0	0	175	1E+100	1E+100	1E+100	1E+100	800	N/A
2,4-Dichlorophenol	120-83-2	10			0	0	0	0	105	1E+100	1E+100	1E+100	1E+100	60	N/A
2,4-Dimethylphenol	105-67-9	10			0	0	0	0	700	1E+100	1E+100	1E+100	1E+100	3000	N/A
3-Methyl-4-chlorophenol	59-50-7				0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	2000	N/A
2-Methyl-4,6-dinitrophenol	534-52-1	50			0	0	0	0	14	1E+100	1E+100	1E+100	1E+100	30	N/A

					Instream Waste Concentration										
		Ambient	Effluent	Acute	Domestic	Chronic	Human	Domestic	Irrigation	Livestock&	Acute	Chronic	Human	Need
POLLUTANTS		Conc	Conc.	Aquatic	Supply	Aquatic	Health	Criteria	Criteria	Wildlife	Aquatic	Aquatic	Health	TMDL
	CAS No. MQL	Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
2,4-Dinitrophenol	51-28-5 50			0	0	0	0	70	1E+100	1E+100	1E+100	1E+100	300	N/A
Pentachlorophenol	87-86-5 50			0	0	0	0	1	1E+100	1E+100	19	15	30	N/A
Phenol	108-95-2 10			0	0	0	0	10500	1E+100	1E+100	1E+100	1E+100	860000	N/A
2,4,5-Trichlorophenol	95-95-4			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	600	N/A
2,4,6-Trichlorophenol	88-06-2 10			0	0	0	0	32	1E+100	1E+100	1E+100	1E+100	28	N/A
2-(2,4,5Trichlorophenoxy)propionic acid (Silvex)				0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	400	N/A
BASE/NEUTRAL														
Acenaphthene	83-32-9 10			0	0	0	0	2100	1E+100	1E+100	1E+100	1E+100	90	N/A
Anthracene	120-12-7 10			0	0	0	0	10500	1E+100	1E+100	1E+100	1E+100	400	N/A
Benzidine	92-87-5 50		0	0	0	0	0	0.0015	1E+100	1E+100	1E+100	1E+100	0.11	N/A
Benzo(a)anthracene	56-55-3 5		0	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.013	N/A
Benzo(a)pyrene	50-32-8 5			0	0	0	0	0.2	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
3,4-Benzofluoranthene	205-99-2 10			0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
Benzo(k)fluoranthene	207-08-9 5			0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.13	N/A
Bis(2-chloroethyl)Ether	111-44-4 10			0	0	0	0	0.3	1E+100	1E+100	1E+100	1E+100	22	N/A
Bis(2-chloro-1-methylethyl) ethe	108-60-1 10			0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	4000	N/A
Bis(2-ethylhexyl)Phthalate	117-81-7 10			0	0	0	0	6	1E+100	1E+100	1E+100	1E+100	3.7	N/A
Bis(chloromethyl) ether	542-88-1			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.17	N/A
Butyl Benzyl Phthalate	85-68-7 10			0	0	0	0	7000	1E+100	1E+100	1E+100	1E+100	1	N/A
2-Chloronapthalene	91-58-7 10			0	0	0	0	2800	1E+100	1E+100	1E+100	1E+100	1000	N/A
Chrysene	218-01-9 5			0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	1.3	N/A
2,4-Dichlorophenoxyacetic acid	94-75-7			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12000	N/A
Dibenzo(a,h)anthracene	53-70-3 5			0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
1,2-Dichlorobenzene	95-50-1 10			0	0	0	0	600	1E+100	1E+100	1E+100	1E+100	3000	N/A
1,3-Dichlorobenzene	541-73-1 10			0	0	0	0	469	1E+100	1E+100	1E+100	1E+100	10	N/A
1,4-Dichlorobenzene	106-46-7 10	0	0.076	0.16188	0.16188	0.16188	0.16188	75	1E+100	1E+100	1E+100	1E+100	900	N/A
3,3'-Dichlorobenzidine	91-94-1 5			0	0	0	0	0.78	1E+100	1E+100	1E+100	1E+100	1.5	N/A
Diethyl Phthalate	84-66-2 10			0	0	0	0	28000	1E+100	1E+100	1E+100	1E+100	600	N/A
Dimethyl Phthalate	131-11-3 10			0	0	0	0	350000	1E+100	1E+100	1E+100	1E+100	2000	N/A
Di-n-Butyl Phthalate	84-74-2 10	0	0.4	0.852	0.852	0.852	0.852	3500	1E+100	1E+100	1E+100	1E+100	30	N/A
2,4-Dinitrotoluene	121-14-2 10			0	0	0	0	1.1	1E+100	1E+100	1E+100	1E+100	17	N/A
1,2-Diphenylhydrazine	122-66-7 20			0	0	0	0	0.44	1E+100	1E+100	1E+100	1E+100	2	N/A
Fluoranthene	206-44-0 10			0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	20	N/A
Fluorene	86-73-7 10			0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	70	N/A
Hexachlorobenzene	118-74-1 5		0	0	0	0	0	1	1E+100	1E+100	1E+100	1E+100	0.00079	N/A
Hexachlorobutadiene	87-68-3 10			0	0	0	0	4.5	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Hexachlorocyclohexane (HCH)-	608-73-1			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Hexachlorocyclopentadiene	77-47-4 10			0	0	0	0	50	1E+100	1E+100	1E+100	1E+100	4	N/A
Hexachloroethane	67-72-1 20			0	0	0	0	25	1E+100	1E+100	1E+100	1E+100	1	N/A
Indeno(1,2,3-cd)Pyrene	193-39-5 5			0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.013	N/A
Isophorone	78-59-1 10			0	0	0	0	368	1E+100	1E+100	1E+100	1E+100	18000	N/A
Nitrobenzene	98-95-3 10			0	0	0	0	18	1E+100	1E+100	1E+100	1E+100	600	N/A
Nitrosamines	Various			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12.4	N/A
Nitrosodibutylamine	924-16-3			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	2.2	N/A
Nitrosodiethylamine	55-18-5			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12.4	N/A
n-Nitrosodimethylamine	62-75-9 50			0	0	0	0	0.0069	1E+100	1E+100	1E+100	1E+100	30	N/A
n-Nitrosodi-n-Propylamine	621-64-7 20			0	0	0	0	0.05	1E+100	1E+100	1E+100	1E+100	5.1	N/A
n-Nitrosodiphenylamine	86-30-6 20			0	0	0	0	71	1E+100	1E+100	1E+100	1E+100	60	N/A
N-Nitrosopyrrolidine	930-55-2			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	340	N/A
Nonylphenol	84852-15-3			0	0	0	0	1E+100	1E+100	1E+100	28	6.6	1E+100	N/A
Pentachlorobenzene	608-93-5			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Pyrene	129-00-0 10			0	0	0	0	1050	1E+100	1E+100	1E+100	1E+100	4000	N/A
1,2,4-Trichlorobenzene	120-82-1 10			0	0	0	0	70	1E+100	1E+100	1E+100	1E+100	0.76	N/A

						Instream Waste Concentration						Livestock&	Acute	Chronic	Human	Need
				Ambient	Effluent	Acute	Domestic	Chronic	Human	Domestic	Irrigation	Wildlife	Aquatic	Aquatic	Health	TMDL
POLLUTANTS				Conc	Conc.	Aquatic	Supply	Aquatic	Health	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	
	CAS No.	MQL		Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
PESTICIDES AND PCBS																
Aldrin	309-00-2	0.01				0	0	0	0	0.021	1E+100	1E+100	3	1E+100	0.0000077	N/A
Alpha-BHC	319-84-6	0.05				0	0	0	0	0.056	1E+100	1E+100	1E+100	1E+100	0.0039	N/A
Beta-BHC	319-85-7	0.05				0	0	0	0	0.091	1E+100	1E+100	1E+100	1E+100	0.14	N/A
gamma-BHC (Lindane)	58-89-9	0.05				0	0	0	0	0.2	1E+100	1E+100	0.95	1E+100	4.4	N/A
Chlordane	57-74-9	0.2				0	0	0	0	2	1E+100	1E+100	2.4	0.0043	0.0032	N/A
Dichlorodiphenyldichloroethane (DDD)						0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.0012	N/A
Dichlorodiphenyldichloroethylene (DDE)						0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.00018	N/A
Dichlorodiphenyltrichloroethane (DDT)						0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.0003	N/A
4,4'-DDT and derivatives	50-29-3	0.02				0	0	0	0	1	1E+100	0.001	1.1	0.001	1E+100	N/A
Dieldrin	60-57-1	0.02				0	0	0	0	0.022	1E+100	1E+100	0.24	0.056	0.000012	N/A
Diazinon	333-41-5					0	0	0	0	1E+100	1E+100	1E+100	0.17	0.17	1E+100	N/A
Alpha-Endosulfan	959-98-8	0.01				0	0	0	0	62	1E+100	1E+100	0.22	0.056	30	N/A
Beta-Endosulfan	33213-65-9	0.02				0	0	0	0	62	1E+100	1E+100	0.22	0.056	40	N/A
Endosulfan sulfate	1031-7-8	0.1				0	0	0	0	62	1E+100	1E+100	1E+100	1E+100	40	N/A
Endrin	72-20-8	0.02				0	0	0	0	2	1E+100	1E+100	0.086	0.036	0.03	N/A
Endrin Aldehyde	7421-93-4	0.1				0	0	0	0	10.5	1E+100	1E+100	1E+100	1E+100	1	N/A
Heptachlor	76-44-8	0.01				0	0	0	0	0.4	1E+100	1E+100	0.52	0.0038	0.000059	N/A
Heptachlor Epoixde	1024-57-3	0.01				0	0	0	0	0.2	1E+100	1E+100	0.52	0.0038	0.00032	N/A
PCBs	336-36-3	0.2				0	0	0	0	0.5	1E+100	0.014	2	0.014	0.00064	N/A
Toxaphene	8001-35-2	0.3				0	0	0	0	3	1E+100	1E+100	0.73	0.0002	0.0071	N/A

STEP 3: SCAN POTENTIAL INSTREAM WASTE CONCENTRATIONS AGAINST WATER QUALITY CRITERIA

AND ESTABLISH EFFLUENT LIMITATIONS FOR ALL APPLICABLE PARAMETERS

No limits are established if the receiving stream is not designated for the particular uses.

No limits are established if the potential instream waste concentrations are less than the chronic water quality criteria.

The most applicable stringent criteria are used to establish effluent limitations for a given parameter.

Water quality criteria apply at the end-of-pipe for acute aquatic life criteria and discharges to public lakes.

If background concentration exceeds the water quality criteria, water quality criteria apply. And "Need TMDL" shown to the next column of Avg. Mass

Monthly avg concentration = daily max. / 1.5.

APPLICABLE WATER QUALITY-BASED LIMITS

The following formular is used to calculate the allowable daily maximum effluent cincentration — See the current "Procedures for Implementing NPDES Permits in New Mexico"

Daily Max. Conc. = Cs + (Cs - Ca)(F*Qa/Qe) — Monthly Avg. Conc. = Daily Max. Conc. / 1.5

Where:

Cs = Applicable water quality standard

Ca = Ambient stream concentration

F = Fraction of stream allowed for mixing (1.0 is assigned to domestic water supply and human health uses)

Qe = Plant effluent flow

Qa = Criteria Low flow (4Q3) or Harmonic Mean flow for Human Health Criteria

POLLUTANTS	CAS No.	STORET	Domestic Limits	Irrigation Limits	Livestock or Wildlife Limits	Acute Aquatic Limits	Chronic Aquatic Limits	Human Health Limits	Daily Max Conc ug/l	Monthly Avg Conc ug/l	Daily Max Total ug/l	Mon. Avg Total ug/l	Daily Max Load lb/day	Monthly Avg Load lb/day
Radioactivity, Nutrients, and Chlorine, as Total														
Aluminum, Total	7429-90-5	01105	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aluminum, dissolved	7429-90-5		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barium, dissolved	7440-39-3	01007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boron, dissolved	7440-42-8	01022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt, dissolved	7440-48-4	01037	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium, dissolved	7440-61-1	22706	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vanadium, dissolved	7440-62-2	01087	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 and Ra-228 (pCi/l)		11503	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Strontium (pCi/l)		13501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tritium (pCi/l)		04124	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Alpha (pCi/l)		80029	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asbestos (fibers/l)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Residual Chlorine	7782-50-5	50060	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ammonia as N, total (mg/l)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrate as N (mg/l)		00620	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrite + Nitrate (mg/l)		00630	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
METALS AND CYANIDE, as Total														
Antimony, Total (P)	7440-36-0	01097	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic, Total (P)	7440-38-2	1002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium, Total	7440-41-7	01012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium, Total	7440-43-9	01027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium (III), dissolved	16065-83-1	01033	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium (VI), dissolved	18540-29-9	01034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium, Total	7440-47-3	01034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper, Total	7440-50-8	01042	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead, Total	7439-92-1	01051	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manganese, dissovled	7439-96-5	01056	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury, Dissolved	7439-97-6	71900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury, Total	7439-97-6	71900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Molybdenum, dissolved	7439-98-7	1060	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Molybdenum, total recoverable	7439-98-7	01062	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nickel, Total (P)	7440-02-0	01067	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, Total (P)	7782-49-2	01147	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, Total (SO4 >500 mg/l)		01147	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, Total recoverable	7782-49-2	01147	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silver, Total	7440-22-4	01077	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Thalllium, Total (P)	7440-28-0	01059	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zinc, Total	7440-66-6	1092	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyanide, total recoverable	57-12-5	00720	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DIOXIN														0
2,3,7,8-TCDD	1746-01-6	34675	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOLATILE COMPOUNDS														
Acrolein	107-02-8	34210	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acrylonitrile	107-13-0	34215	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	71-43-2	34030	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

POLLUTANTS	CAS No.	STORET	Domestic Limits	Irrigation Limits	Livestock or Wildlife Limits	Acute Aquatic Limits	Chronic Aquatic Limits	Human Health Limits	Daily Max Conc ug/l	Monthly Avg Conc ug/l	Daily Max Total ug/l	Mon. Avg Total ug/l	Daily Max Load lb/day	Monthly Avg Load lb/day
Bromoform	75-25-2	32104	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	56-23-5	32102	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	108-90-7	34301	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Clorodibromomethane	124-48-1	32105	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chloroform	67-66-3	32106	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dichlorobromomethane	75-27-4	32101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	107-06-2	34531	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,1-Dichloroethylene	75-35-4	34501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloropropane	78-87-5	34541	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichloropropylene	542-75-6	34561	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	100-41-4	34371	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl Bromide	74-83-9	34413	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methylene Chloride	75-09-2	34423	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	95-94-3		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	79-34-5	34516	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tetrachloroethylene	127-18-4	34475	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tolune	108-88-3	34010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-trans-Dichloroethylene	156-60-5	34546	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,1,1-Trichloroethane	71-55-6		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,1,2-Trichloroethane	79-00-5	34511	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trichloroethylene	79-01-6	39180	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	75-01-4	39175	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ACID COMPOUNDS														
2-Chlorophenol	95-57-8	34586	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dichlorophenol	120-83-2	34601	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dimethylphenol	105-67-9	34606	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3-Methyl-4-chlorophenol	59-50-7		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Methyl-4,6-dinitrophenol	534-52-1	34657	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrophenol	51-28-5	34616	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	87-86-5	39032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenol	108-95-2	34694	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	95-95-4		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,6-Trichlorophenol	88-06-2	34621	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-(2,4,5Trichlorophenoxy)propionic acid (Silvex)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BASE/NEUTRAL														
Acenaphthene	83-32-9	34205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	120-12-7	34220	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzidine	92-87-5	39120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo(a)anthracene	56-55-3	34526	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo(a)pyrene	50-32-8	34247	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3,4-Benzofluoranthene	205-99-2	34230	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo(k)fluoranthene	207-08-9	34242	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bis(2-chloroethyl)Ether	111-44-4	34273	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bis(2-chloro-1-methylethyl) ethe	108-60-1	34283	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bis(2-ethylhexyl)Phthalate	117-81-7	39100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bis(chloromethyl) ether	542-88-1		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Butyl Benzyl Phthalate	85-68-7	34292	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Chloronapthalene	91-58-7	34581	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	218-01-9	34320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dichlorophenoxyacetic acid	94-75-7		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dibenzo(a,h)anthracene	53-70-3	34556	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	95-50-1	34536	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

POLLUTANTS	CAS No.	STORET	Domestic Limits	Irrigation Limits	Livestock or Wildlife Limits	Acute Aquatic Limits	Chronic Aquatic Limits	Human Health Limits	Daily Max Conc ug/l	Monthly Avg Conc ug/l	Daily Max Total ug/l	Mon. Avg Total ug/l	Daily Max Load lb/day	Daily Avg Load lb/day
1,3-Dichlorobenzene	541-73-1	34566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	106-46-7	34571	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	91-94-1	34631	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethyl Phthalate	84-66-2	34336	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dimethyl Phthalate	131-11-3	34341	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Di-n-Butyl Phthalate	84-74-2	39110	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	121-14-2	34611	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Diphenylhydrazine	122-66-7	34346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluoranthene	206-44-0	34376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluorene	86-73-7	34381	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorobenzene	118-74-1	39700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorobutadiene	87-68-3	34391	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorocyclohexane (HCH)-	608-73-1		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorocyclopentadiene	77-47-4	34386	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachloroethane	67-72-1	34396	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno(1,2,3-cd)Pyrene	193-39-5	34403	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Isophorone	78-59-1	34408	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	98-95-3	34447	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrosamines	Various		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrosodibutylamine	924-16-3		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrosodiethylamine	55-18-5		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n-Nitrosodimethylamine	62-75-9	34438	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n-Nitrosodi-n-Propylamine	621-64-7	34428	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n-Nitrosodiphenylamine	86-30-6	34433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N-Nitrosopyrrolidine	930-55-2		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonylphenol	84852-15-3		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorobenzene	608-93-5		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	129-00-0	34469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4-Trichlorobenzene	120-82-1	34551	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PESTICIDES AND PCBS														
Aldrin	309-00-2	39330	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alpha-BHC	319-84-6	39337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beta-BHC	319-85-7	39338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gamma-BHC	58-89-9	39340	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlordane	57-74-9	39350	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dichlorodiphenyldichloroethane (DDD)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dichlorodiphenyldichloroethylene (DDE)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dichlorodiphenyltrichloroethane (DDT)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT and derivatives	50-29-3	39300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	60-57-1	39380	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diazinon	333-41-5	39570	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alpha-Endosulfan	959-98-8	34361	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beta-Endosulfan	33213-65-9	34356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	1031-7-8	34351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	72-20-8	39390	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin Aldehyde	7421-93-4	34366	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	76-44-8	39410	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor Epoixde	1024-57-3	39420	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCBs	336-36-3	39516	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	8001-35-2	39400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX 3

Facility Name	City of Santa Fe							
NPDES Permit Number	NM0022292					Outfall Number	001	
Proposed Critical Dilution*	100							
			*Critical Dilution in draft permit, do not use % sign.					
			Enter data in yellow shaded cells only. Fifty percent should be entered as 50, not 50%.					
Test Data								
		VERTEBRATE				INVERTEBRATE		
Date (mm/yyyy)	Lethal NOEC	Sublethal NOEC	Lethal TU	Sublethal TU	Lethal NOEC	Sublethal NOEC	Lethal TU	Sublethal TU
2/28/22	100	100	1.00	1.00	100	100	1.00	1.00
5/31/22	100	100	1.00	1.00	100	100	1.00	1.00
8/31/22	100	100	1.00	1.00	100	100	1.00	1.00
11/30/22	100	100	1.00	1.00	100	100	1.00	1.00
2/28/23	100	100	1.00	1.00	100	100	1.00	1.00
5/31/23	100	100	1.00	1.00	100	100	1.00	1.00
8/31/23	100	100	1.00	1.00	100	100	1.00	1.00
12/31/23					100	100	1.00	1.00
6/30/24	100	75	1.00	1.33	100	100	1.00	1.00
retest 1	100	100	1.00	1.00				
retest 2- 5/2024	100	100	1.00	1.00				
retest 3- 6/2024	100	100	1.00	1.00				
9/30/24	100	100	1.00	1.00				
12/31/24	100	100	1.00	1.00				
3/31/25	100	100	1.00	1.00				
6/30/25	100	100	1.00	1.00	100	100	1.00	1.00
9/30/25	100	100	1.00	1.00				
12/31/25	100	100	1.00	1.00	100	100	1.00	1.00
3/31/26	100	100	1.00	1.00				
6/30/26	100	100	1.00	1.00	100	100	1.00	1.00
	100	75	1.00	1.33	100	100	1.00	1.00
Count			19	19			12	12
Mean			1.000	1.018			1.000	1.000
Std. Dev.			0.000	0.076			0.000	0.000
CV			0.0	0.075			0	0
RPMF			#N/A	#N/A			#N/A	#N/A
		1	Reasonable Potential Acceptance Criteria					
Vertebrate Lethal		#N/A	#N/A					
				No Reasonable Potential exists. Permit requires WET monitoring,				
Vertebrate Sublethal		#N/A	#N/A					
Invertebrate Lethal		#N/A	#N/A					
				No Reasonable Potential exists. Permit requires WET monitoring,				
Invertebrate Sublethal		#N/A	#N/A					
				No Reasonable Potential exists. Permit requires WET monitoring,				