REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

NPDES Permit No. NM0030520

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Dulce Wastewater Treatment Plant
Jicarilla Apache Utility Authority
P.O. Box 916
Dulce, NM 87528

is authorized to discharge from the Dulce Wastewater Treatment Plant located at 290 Narrow Gauge Road, Dulce, Rio Arriba County, New Mexico, to Amargo Creek, thence to the Navajo River in the Waterbody Segment Code No. 20.6.4.407 of the San Juan River Basin, from a point located approximately:

Outfall 001: Latitude 36º 56’ 47.77” North, Longitude 107º 01’ 13.2” West

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II, Part III, and Part IV hereof.

This permit supersedes and replaces NPDES Permit No. NM0030520 issued January 24, 2019.

This permit, prepared by Aron K. Korir, Physical Scientist, Permitting Section (6WD-PE), shall become effective on October 1, 2024

This permit and the authorization to discharge shall expire at midnight, September 30, 2024

Issued on August 27, 2024

TROY HILL Digitally signed by TROY HILL
Date: 2024.08.27 08:20:29
-05'00'

Troy C. Hill, P.E.
Director
Water Division (WD)

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
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MG	Million gallons
MGD	Million gallons per day
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
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settable solids
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
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
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

PART I – REQUIREMENTS FOR NPDES PERMITS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. OUTFALL 001 - Final Effluent Limits – 0.6 MGD Design Flow

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from outfall serial number 001. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
POLLUTANT	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	Daily	Instantaneous Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted (*1)				
POLLUTANT	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	***	***	***	Daily	Instantaneous
Biochemical Oxygen Demand, 5-day, Influent	N/A	NA	Report	N/A	N/A	1/Month	Grab
Biochemical Oxygen Demand, 5-day	150	225	30	45	N/A	2/Month	3-Hour Composite
BOD % Removal, minimum (*3)	≥ 85%	N/A	N/A	N/A	N/A	1/Month	Calculation (*2)
Total Suspended Solids, Influent	N/A	N/A	Report	N/A	N/A	1/Month	Grab
Total Suspended Solids	150	225	30	45	N/A	2/Month	3-Hour Composite
TSS % Removal, minimum (*3)	≥ 85%	N/A	N/A	N/A	N/A	1/Month	Calculation (*2)
Total Phosphorus	0.5	N/A	0.1	N/A	N/A	1/Month	Grab

E. coli Bacteria	N/A	N/A	126 (*4)	N/A	235 (*4)	1/Week	Grab
Total Residual Chlorine	N/A	N/A	Report	N/A	11 ug/l (*5)	Daily	Instantaneous Grab
Total Dissolved Solids, Drinking Water Plant Intake (*6)	N/A	N/A	Report	N/A	Report	1/Quarter	Grab
Total Dissolved Solids, Wastewater Plant Discharge (*7)	N/A	N/A	Report	N/A	Report	1/Quarter	Grab
Total Dissolved Solids, Net Increase (*8)	N/A	N/A	400 (*9)	N/A	Report	1/Quarter	Grab

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (7-Day Static Renewal) (*10)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/Year	24-hr Composite
Pimephales promelas	Report	Once/Year	24-hr Composite

Footnotes:
*1 See Part II. Section A. Minimum Quantification Level (MQL) of permit.
*2 Percent removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] *100
*3 Minimum value.
*4 Bacteria may be reported as either colony forming units (cfu) per 100 ml or most probable number (MPN)
*5 The effluent limitation for TRC is the instantaneous maximum grab sample taken during periods of chlorine use and cannot be averaged for reporting purposes. Instantaneous maximum is defined in 40 CFR Part 136 as being measured within 15-minutes of sampling.
*6 For permit compliance purposes, the TDS intake sample shall be taken at the intake of the drinking water plant.
*7 Total dissolved solids measured at the Dulce WWTP Outfall 001.
*8 Net total dissolved solids incremental increases in salinity shall be 400 mg/l or less. The increase shall be the difference between the TDS measured at the drinking water plant intake.
*9 If one sample is collected, then the increase shall be the difference between the TDS measured from Outfall 001 and the TDS measured at the drinking water plant intake. If additional samples are collected, then the increase shall be the difference between the 30-day average TDS measured from Outfall 001 and the 30-day average TDS measured at the drinking water plant intake.
*10 This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.
*11 Please advise the Southern Ute Indian Tribe about any potential daily maximum limitation violation for this facility.

2. FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts.
There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit prior to the receiving stream. The sample point shall be clearly marked by the facility if it is not at the final outfall location. There shall be no flow from any source into the piping system after the sample point and prior to the final outfall.

B. SCHEDULES OF COMPLIANCE

I. Total Phosphorous

Conduct a survey to identify sources of dissolved boron being contributed to the collection system. The survey must include sample collection at representative locations throughout the collection systems and within the facility. Samples must be analyzed for boron using 40 CFR 136 sufficiently sensitive test methods with a ML at or below the New Mexico Water Quality Standard.

a. The Permittee shall achieve compliance with the pollutant effluent limitations specified discharges in accordance with the following Schedule:

   Total Phosphorous (30-Day Average 0.5 lbs/day): Three (3) years plus one (1) day from the effective date of the final permit.

b. The Permittee shall develop and submit a water quality sampling plan within three (3) months from the effective date of the final permit.

c. The Permittee shall collect and evaluate water quality samples within nine (9) months from the effective date of the final permit.

d. The Permittee shall evaluate control treatment options within nine (9) months of the effective date from effective date of the final permit.

e. The Permittee shall select the control treatment option within twelve (12) months from the effective date of the final permit. Once a control treatment is identified, the Permittee shall complete the procurement process to select a control treatment system vendor and construction company, secure the appropriate contracts, purchase control treatment system equipment, and obtain any additional permits, as needed.

f. The Permittee shall install and implement the control treatment system within 30 months from the effective date of the final permit. Once the control treatment system is installed and implemented, the Permittee shall undergo troubleshooting and adapt the new control treatment equipment.

g. The Permittee shall achieve compliance with the effluent limitations within 36 months from the effective date of the final permit.

h. The Permittee shall submit quarterly Compliance Status Reports to EPA, with a copy to NMED, that highlight actions being taken to comply with effluent limitations for total phosphorous. Reporting quarters shall end on the last day of the months March, June, September, and December. The reports should be submitted per Part III.D.4.

i. No later than 14 calendar days following the date for compliance for pollutant effluent limitations, the Permittee shall submit a final written report that details all tasks that were done to achieve compliance. The report should be submitted per Part III.D.4.

C. MONITORING AND E- REPORTING (MINOR DISCHARGERS)

Applicable reports (DMRs, Biosolids/Sewage Sludge, Sewer Overflow/Bypass Event Pretreatment Program) shall be electronically reported to EPA at https://cdx.epa.gov/. The permittee may seek a waiver from electronic reporting or until approved for electronic reporting, the permittee shall first submit an electronic reporting waiver request to: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-7179. If paper reporting is granted, the permittee shall submit reports on paper in accordance with signature and certification as required by Part III.D.11, and all other reports required by Part III.D. to the EPA and copies to NMED (under Part III.D.4 of the permit).

Applicable e-Reporting Program	e-Reporting Compliance Date	Reporting Frequency
DMRs	Permit effective date	Quarterly
Biosolids/Sewage Sludge Report	Permit effective date	Annually for major permit
Pretreatment Program Report	By 21 December 2025	Annually
Sewer Overflow/Bypass Event Reports and Anticipated Bypass Notices	By 21 December 2025	Quarterly

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at: https://usepa.servicenowservices.com/oeca_icis?id=netdmr_homepage. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-6468. If paper reporting is granted temporarily, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies and NMED as required (See Part III.D.IV of the permit). Reports shall be submitted quarterly.

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period.

1. Reporting periods shall end on the last day of the months March, June, September, and December.

2. The permittee is required to submit regular monthly reports as described above postmarked no later than the 28th day of the month following each reporting period.

3. NO DISCHARGE REPORTING: If there is no discharge at Outfall 001 during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report

4. If any 7-day average or daily maximum value exceeds the effluent limitations specified in Part I.A, the permittee shall report the excursion in accordance with the requirements of Part III.D.

5. Any 30-day average, 7-day average, or daily maximum value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I.A shall constitute evidence of violation of such effluent limitation and of this permit.

6. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for five-day Biochemical Oxygen Demand (BOD_5) or for five-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), as applicable, where the permittee can demonstrate long-term correlation of the method with BOD_5 or $CBOD_5$ values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data reported must also include evidence to show that the proper correlation continues to exist after approval.

7. No discharge reporting.

If there is no discharge at Outfall 001 during the sampling month, place an X in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

D. OVERFLOW REPORTING

The permittee shall report all overflow/bypass via the website with the compliance date mentioned above. If the reports on paper are submitted before the compliance dated, these reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary).

Overflow/bypass that endanger health or the environment shall be orally reported to EPA (Part III.D.7), and the NMED Surface Water Quality Bureau at (505) 827-0187 or SWQ.Reporting@env.nm.gov (email preferred), within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows that endanger health or the environment shall be provided to EPA, NMED Surface Water Quality Bureau, Jicarilla Apache Nation and Southern Ute Indian Tribe at the addresses below within 5 days of the time the permittee becomes aware of the circumstance.

a. Jicarilla Apache Utility Authority
Dulce WWTP
290 Narrow Gauge Rd
Dulce, New Mexico 87528

b. Southern Ute Indian Tribe
P.O. Box 737
356 Ouray Drive,
Ignacio, CO 81137

E. POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing one) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:

a. The influent loadings, flow and design capacity;
b. The effluent quality and plant performance;
c. The age and expected life of the wastewater treatment facility's equipment;
d. Bypasses and overflows of the tributary sewerage system and treatment works;
e. New developments at the facility;
f. Operator certification and training plans and status;
g. The financial status of the facility;
h. Preventative maintenance programs and equipment conditions and;
i. An overall evaluation of conditions at the facility.

F. ADDITIONAL POLLUTANT SCAN

The permittee shall submit test results of per-and polyfluoroalkyl substances (PFAS) during the permit term as follows:

Effluent Characteristic	Discharge Limitation			Monitoring Requirement	
Parameter	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
PFAS Analytes[1, 4]	---	---	Report ng/L	Once/Term[3]	Grab

Influent Characteristic	Reporting Requirements			Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
PFAS Analytes[1, 4]	---	---	Report ng/L	Once/Term[3]	Grab

Sludge Characteristic	Reporting Requirements			Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
PFAS Analytes[2, 4]	---	---	Report ng/g	Once/Term[3]	Grab[3]

Footnotes:

1. Report in nanograms per liter (ng/L). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in wastewater, 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.

Additionally, report in NetDMR the results of all 40 PFAS analytes required to be tested as part of the method as shown in Appendix B of Part II.

2. Report in nanograms per gram (ng/g). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in sludge, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621can be used in conjunction with Method 1633, if appropriate.

   Additionally, report in NetDMR the results of all 40 PFAS analytes required to be tested as part of the method, as shown in Appendix B of Part II.

3. Sludge sampling shall be as representative as possible based on guidance found at https://www.epa.gov/sites/production/files/2018-11/documents/potw-sludge-sampling-guidance-document.pdf.

4. PFAS Analysis data should be submitted annually to NMED at SWQ.Reporting@env.nm.gov and NMENV-PFAS-DATA@env.nm.gov. The data submittal should include the electronic data deliverable and sampling narrative report provided by the analytical laboratory used to complete the analysis.

5. PFAS samples must be collected and analyzed in three separate calendar years.

PART II - OTHER CONDITIONS

A. MINIMUM QUANTIFICATION LEVEL (MQL)

EPA-approved test procedures (methods) for the analysis and quantification of pollutants or pollutant parameters, including for the purposes of compliance monitoring/DMR reporting, permit renewal applications, or any other reporting that may be required as a condition of this permit, shall be sufficiently sensitive. A method is "sufficiently sensitive" when (1) the method minimum level (ML) of quantification is at or below the level of the applicable effluent limit for the measured pollutant or pollutant parameter; or (2) if there is no EPA-approved analytical method with a published ML at or below the effluent limit (see table below), then the method has the lowest published ML (is the most sensitive) of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or 0, for the measured pollutant or pollutant parameter; or (3) the method is specified in this permit or has been otherwise approved in writing by the permitting authority (EPA Region 6) for the measured pollutant or pollutant parameter. The Permittee has the option of developing and submitting a report to justify the use of matrix or sample-specific MLs rather than the published levels. Upon written approval by EPA Region 6 the matrix or sample-specific MLs may be utilized by the Permittee for all future Discharge Monitoring Report (DMR) reporting requirements.

Current EPA Region 6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix A of Part II of this permit. The following pollutants may not have EPA approved methods with a published ML at or below the effluent limit, if specified:

POLLUTANT	CAS Number	STORET Code
Total Residual Chlorine	7782-50-5	50060
Cadmium	7440-43-9	01027
Silver	7440-22-4	01077
Thallium	7440-28-0	01059
Cyanide	57-12-5	78248
Dioxin (2,3,7,8-TCDD)	1764-01-6	34675
4, 6-Dinitro-0-Cresol	534-52-1	34657
Pentachlorophenol	87-86-5	39032
Benzidine	92-87-5	39120
Chrysene	218-01-9	34320
Hexachlorobenzene	118-74-1	39700
N-Nitrosodimethylamine	62-75-9	34438
Aldrin	309-00-2	39330
Chlordane	57-74-9	39350
Dieldrin	60-57-1	39380
Heptachlor	76-44-8	39410
Heptachlor epoxide	1024-57-3	39420
Toxaphene	8001-35-2	39400

Unless otherwise indicated in this permit, if the EPA Region 6 MQL for a pollutant or pollutant parameter is sufficiently sensitive (as defined above) and the analytical test result is less than the MQL,

then a value of zero (0) may be used for reporting purposes on DMRs. Furthermore, if the EPA Region 6 MQL for a pollutant or parameter is not sufficiently sensitive, but the analytical test result is less than the published ML from a sufficiently sensitive method, then a value of zero (0) may be used for reporting purposes on DMRs.

B. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   i) Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

   ii) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

   iii) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   iv) Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   v) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

   vi) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   vii) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   viii) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

3. The permittee shall provide adequate notice of the following:

   i) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants.

ii) Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

iii) Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

C. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, Jicarilla Apache Nation, Southern Ute Indian Tribe and concurrently to New Mexico Environment Department at (505) 827-0187 or SWQ.Reporting@env.nm.gov (email preferred) as soon as possible, but within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

- E. Coli Bacteria
- Total Residual Chlorine

D. PERMIT MODIFICATION AND REOPENER

Because the Jicarilla Apache Nation has adopted the NM WQS until such time as the Nation establishes WQS, the permit may be reopened and modified during the life of the permit in accordance with 40 CFR § 122.62(a)(3) if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new State water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission. In addition, the permit may be reopened and modified during the life of the permit in accordance with 40 CFR § 122.62(a)(3) if new Jicarilla Apache Nation water quality standards are established.

In accordance with), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

If a TMDL is established for the Amargo Creek, the permit may be reopened, and new limitations based on the TMDL may be incorporated into the permit.

Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR § 122.44 and 124.5(c).

E. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

It is unlawful and a violation of this permit for a permittee or his designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA Region 6 or the State NPDES permitting authority.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S):	001
REPORTED AS FINAL OUTFALL:	001
CRITICAL DILUTION (%):	94%
EFFLUENT DILUTION SERIES (%):	30%, 40% 53%, 71%, and 94%
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA 821 R 02 013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA 821 R 02 013, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Lethal Effect Concentration) is herein defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

c. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report the test results to NMED, Surface Water Quality Bureau, and the EPA WET Coordinator (6WQ-PO) in writing, within 5 business days of notification of the test failure. NMED and EPA will review the test results and determine the appropriate action necessary, if any.

d. This permit may be reopened to require WET limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 80%.

ii. The mean number of *Ceriodaphnia dubia* neonates produced per surviving female in the control (0% effluent) must be 15 or more.

iii. 60% of the surviving control females must produce three broods.

iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.

v. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the *Ceriodaphnia dubia* reproduction test; the growth and survival endpoints of the Fathead minnow test.

vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the *Ceriodaphnia dubia* reproduction test; the growth and survival endpoints of the Fathead minnow test.

vii. A PMSD range of 13 - 47 for *Ceriodaphnia dubia* reproduction;

viii. A PMSD range of 12 - 30 for Fathead minnow growth.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the *Ceriodaphnia dubia* survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/821/R-02-013 or the most recent update thereof.

For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/821/R-02-013 or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the reporting requirements found in Item 3 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;

a) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

b) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;

b) the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);

c) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and

d) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item 1.a above.

ii. The permittee shall collect a second and third composite sample for use during the 24-hour renewal of each dilution concentration for each test. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 6 degrees Centigrade during collection, shipping, and/or storage.

iii. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3 of this section.

3. REPORTING

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this part in accordance with the Report Preparation Section of the most current publication of the method manual, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report and submit them upon the specific request of the Agency. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review.

b. A valid test for each species must be reported during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. One set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. Additional results are reported under the retest codes below.

c. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.

Reporting Requirement	Parameter STORET CODE	
	Ceriodaphnia dubia	Pimephales promelas
Enter a “1” if the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, otherwise enter a "0".	TLP3B	TLP6C
Report the NOEC value for survival	TOP3B	TOP6C
Report the LOEC value for survival	TXP3B	TXP6C
Enter a “1” if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a “0”.	TGP3B	TGP6C
Report the NOEC value for growth or reproduction	TPP3B	TPP6C
Report the LOEC value for growth	TYP3B	TYP6C
Report the highest (critical dilution or control) Coefficient of Variation	TQP3B	TQP6C

(If required) Retest 1 – Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	22418	22415
(If required) Retest 2- Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	22419	22416
(If required) Retest 3- Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	51444	51443