REGION 6
DALLAS, TX 75270

NPDES Permit No. NM0030490

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"),

Dona Ana County Utilities Department
South Central Regional WWTP
845 N. Motel Blvd.
Las Cruces, NM 88007

is authorized to discharge from a facility located at East Sloan Road and Montes Road in La Mesa, Dona Ana County, New Mexico. The discharge from the facility will be to receiving waters named Rio Grande, in Segment No. 20.6.4.101 NMAC of the Rio Grande Basin,

the discharges are located on that water at the following coordinates:

Outfall 001: Latitude 32° 05' 22" North, Longitude 106° 39' 36" 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. NM0030490 issued June 17, 2019, with an effective date of August 1, 2019, and an expiration date of July 31, 2024.

This permit, prepared by Quang Nguyen, Environmental Engineer, NPDES Permitting and Wetlands Section, shall become effective on

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

Issued on

_____

Troy C. Hill, P.E.
Director
Water Division (6WQ)

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PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

1. FINAL Effluent Limits – 1.05 MGD Design Flow

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated municipal wastewater to the Rio Grande, in Segment Number 20.6.4.101 NMAC, from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

POLLUTANT	**MINIMUM**	**MAXIMUM**	**MORNITORING FREQUENCY**	**SAMPLE TYPE**
pH	6.6 Standard Units	9.0 Standard Units	5/Week	Grab

POLLUTANT (*1)	**30-DAY AVG**	**DAILY MAX**	**7-DAY AVG**	**30-DAY AVG**	**DAILY MAX**	**7-DAY AVG**	**MORNITORING FREQUENCY**	**SAMPLE TYPE**
Flow	Report MGD	Report MGD	Report MGD	N/A	N/A	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand, 5-day (BOD_5)	263 lbs/day	N/A	394 lbs/day	30 mg/l	N/A	45 mg/l	Once/Week	6-Hr Composite (*9)
BOD_5 Influent (*6)	N/A	N/A	N/A	Report (mg/L)	N/A	N/A	Once/Week	Grab
BOD_5 Percent Removal	$\geq$ 85% (*2)	N/A	N/A	N/A	N/A	N/A	Once/Week	Calculation (*2)
Total Suspended Solids (TSS)	263 lbs/day	N/A	394 lbs/day	30 mg/l	N/A	45 mg/l	Once/Week	6-Hr Composite (*9)
TSS Influent (*6)	N/A	N/A	N/A	Report (mg/L)	N/A	N/A	Once/Week	Grab
TSS Percent Removal	$\geq$ 85% (*2)	N/A	N/A	N/A	N/A	N/A	Once/Week	Calculation (*2)
E. Coli Bacteria	5.01 billion(*3)(*4)	N/A	N/A	126 (*3)	410 (*3)	N/A	Once/Week	Grab
Total Dissolved Oxygen	N/A	N/A	N/A	$\geq$ 5.0 mg/L (Minimum)(*10)	$\geq$ 5.0 mg/L (Minimum)(*10)	N/A	Once/Week	Grab
Total Residual Chlorine (*5)	N/A	N/A	N/A	N/A	11 ug/l	N/A	Daily	Instantaneous Grab
Boron, Total (*18)	6.567 lbs/day	N/A	6.567 lbs/day	750 ug/L	750 ug/L	N/A	2/Week	Grab
Cyanide, Total (*18)	0.046 lbs/day	N/A	0.046 lbs/day	5.2 ug/L	5.2 ug/L	N/A	2/Week	Grab
Adjusted Gross Alpha (*17)	N/A	N/A	N/A	Report (pCi/L)	N/A	N/A	1/6 Months	Grab
Uranium	N/A	N/A	N/A	Report (pCi/L)	N/A	N/A	1/6 Months	Grab
Gross Alpha	N/A	N/A	N/A	Report (pCi/L)	N/A	N/A	1/6 Months	Grab
Total Nitrogen (*11)	N/A	N/A	N/A	Report (mg/L)	Report (mg/L)	N/A	1/Month	6-Hr Composite (*9)
Total Phosphorous	N/A	N/A	N/A	Report (mg/L)	Report (mg/L)	N/A	1/Month	6-Hr Composite (*9)
PFAS Analytes (Effluent Characteristic) (*12)(*15)	***	***	***	***	Report (ng/L)	***	3/Permit Term (*16)	Grab
PFAS Analytes (Influent Characteristic) (*12)(*15)	***	***	***	***	Report (ng/L)	***	3/Permit Term (*16)	Grab
PFAS Analytes (Biosolids Characteristic) (*13)(*15)	***	***	***	***	Report (ng/g)	***	3/Permit Term (*16)	Grab (*14)

WHOLE EFFLUENT TOXICITY LIMITS (7-Day Chronic Static Renewal/NOEC) (*7)	**Value**	**MORNITORING FREQUENCY**	**DMR REPORTING FREQUENCY**	**SAMPLE TYPE**
Ceriodaphnia dubia	100	Once/Quarter	Monthly	24-Hr Composite (*8)
Pimephales promelas	100	Once/Quarter	Monthly	24-Hr Composite (*8)

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 Colony forming units (cfu) per 100 ml or Most Probable Number (MPN) per 100 ml. The 30-day average for E. coli bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

*4 Billion (1.0×10^9) cfu/day. The loading limit shall be calculated as follows: [Flow in MGD x cfu/100 mL in effluent x 3.79×10^7] /1.0×10^9

*5 This facility uses Ultraviolet light to treat E. coli. Sampling and reporting are required when chlorine is used for either bacteria control and/or when chlorine is used to treat filamentous algae and/or used to disinfect process treatment equipment at the facility. 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 The facility will be required to monitor the influent of BOD_5 and TSS on a once per month frequency for use to determine the removal percentage. The facility shall diligently maintain a log. The influent data is not required to be reported in NetDMR but must be kept at the facility and made available to EPA or its agents upon request.

*7 Compliance with the Whole Effluent Toxicity limitation is required on the effective date of the permit. See Part II of the permit for WET testing requirements and limitation conditions. Grab samples are allowed per method, if needed.

*8 Composite grab samples from different batch discharges to obtain the "24-hour composite" sample.

*9 Composite grab samples from at least two (2) batch discharges.

*10 The effluent limit for dissolved oxygen is the minimum daily limit allowed, and the minimum 30-day average allowed.

*11 Total Nitrogen (TN) is the sum of Total Kjeldahl Nitrogen (TKN) and nitrite plus nitrate ($NO_2 + NO_3$).

*12 Report in nanograms per liter (ng/L). This reporting requirement for the 40 PFAS parameters takes effect the first full calendar quarter after 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. 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.

*13 Report in nanograms per gram (ng/g). This reporting requirement for the 40 PFAS parameters takes effect the first full calendar quarter after 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. 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.

*14 Biosolids 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.

*15 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.

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

*17 [Adjusted Gross Alpha] (pCi/L) = [Gross Alpha] (pCi/L) – {[Uranium] µg/L) * 0.67}]. A conversion factor of 0.67 (pCi/L) µg is used to convert uranium concentrations (in µg/L) to uranium activity (in pCi/L) prior to subtraction. U-238 can be used in the absence of natural uranium.

*18 A compliance schedule is established for meeting the effluent limits, see Part 1.B. Schedule of Compliance for additional information.

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam other than in 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.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the Boron (Total) effluent limitations specified for discharges in accordance with the following schedule:

ACTIVITY	DATE OF COMPLETION
Achieve Final Effluent Limitations	36 months after the permit effective date.

   a. The permittee shall submit a progress report to both EPA and NMED (at addresses listed in Part III.D.4 of the permit) outlining the status of the activities (i.e., analyzers installation, Process Optimization Study, etc.) during the months of January, April, July, and October, of each year, until compliance is achieved as stated above.
   b. No later than 14 calendar days following the date for compliance for the Boron (Total) effluent limitations, the permittee shall submit a written notice of compliance or noncompliance. The written notice shall report on all tasks that were done to achieve compliance.
   c. Where the project completion reported is less than would be required to assure compliance by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

2. The permittee shall achieve compliance with the Cyanide (Total) effluent limitations specified for discharges in accordance with the following schedule:

ACTIVITY	DATE OF COMPLETION
Achieve Final Effluent Limitations	36 months after the permit effective date.

   a. The permittee shall submit a progress report to both EPA and NMED (at addresses listed in Part III.D.4 of the permit) outlining the status of the activities (i.e., analyzers installation, Process Optimization Study, etc.) during the months of January, April, July, and October, of each year, until compliance is achieved as stated above.
   b. No later than 14 calendar days following the date for compliance for the Cyanide (Total) effluent limitations, the permittee shall submit a written notice of compliance or

noncompliance. The written notice shall report on all tasks that were done to achieve compliance.

c. Where the project completion reported is less than would be required to assure compliance by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

C. MONITORING AND REPORTING (MAJOR DISCHARGERS)

1. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge.

2. Applicable reports (DMRs, Biosolids/Sewage Sludge, Sewer Overflow/Bypass Event Pretreatment Program) shall be electronically reported to EPA, per 40 CFR 127.16, 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	Monthly
Biosolids/Sewage Sludge Report	Permit effective date	Annually for major permits
Pretreatment Program Reports	By 21 December 2025	Annually
Sewer Overflow/Bypass Event Reports and Anticipated Bypass Notices	By 21 December 2025	Monthly

3. If any 30-day average, monthly average, 7-day average, weekly 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.

4. Any 30-day average, monthly average, 7-day average, weekly 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.

5. 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.

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 reported via email to R6_NPDES_Reporting@epa.gov, and the NMED Surface Water Quality Bureau 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 circumstance. A written report of overflows that endanger health or the environment shall be provided to EPA and NMED, within 5 days of the time the permittee becomes aware of the circumstance.

PART II - OTHER CONDITIONS

A. A. MINIMUM QUANTIFICATION LEVEL (MQL) & SUFFICIENTLY SENSITIVE METHODS

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 O, 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-O-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. 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, and concurrently to NMED

within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

E. coli Bacteria
TRC
Boron (Total)
Cyanide (Total)

C. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR Part 122.44(c), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new State of New Mexico water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission.

In accordance with 40 CFR Part 122.62(a)(2), 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. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

D. POLLUTION PREVENTION REQUIREMENTS

The permittee shall continue an existing program 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.

E. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

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

- Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams 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;
- 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;
- Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
- 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;
- 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;
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- 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,
- 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:

   - 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; and,
   - 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.

   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.

F. 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 (%)	100%
EFFLUENT DILUTION SERIES (%)	32%, 42%, 56%, 75%, 100%
TEST SPECIES/METHODS	*Ceriodaphnia dubia/* Method 1002.0 (EPA-821-R-02-013 or latest version)
	Pimephales promelas/ Method 1000.0 (EPA/821/R-02-013 or latest version)
SAMPLE TYPE	Defined in PART I

b. The NOEC (No Observed Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity 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 may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

a. The conditions of this item are effective beginning with the effective date of the WET limit. When the effluent fails the lethal or sub-lethal endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until compliance with the No

Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. The purpose of the increased frequency for WET testing after a violation is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.

2. REQUIRED TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA

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:

Condition/Criteria	***Ceriodaphnia dubia***	***Pimephales promelas***
Test Duration	Until 60% or more of surviving control females have 3 broods (max 8 days)	7 days
# of replicates per concentration	10	5
# of organisms per replicate	1	8
# or organisms per concentration	10	40 (minimum)
# of test concentrations per effluent	5 and a control	5 and a control
Holding time *	36 hours for first use	36 hours for first use
Sampling Requirement *	Minimum of 3 samples	Minimum of 3 samples
Test Acceptability Criteria	≥80% survival of all control organisms.	≥80% survival of all control organisms.
	Average of 15 or more neonates per surviving control female.	Average dry weight per surviving organism in control must be ≥0.25mg.
	60% of surviving control females must produce 3 broods	
Coefficient of Variation **	40% or less, unless significant effects are exhibited.	40% or less unless significant effects are exhibited.
Percent Minimum Significant Difference (PMSD range) for Sublethal Endpoint **	13 – 47	12 - 30

Footnotes:

* 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 and the minimum number of effluent portions 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, and must meet the holding time between collection and first use of the sample. 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.

** Test failure may not be construed or reported as invalid due to a coefficient of variation value of

greater than 40%, or a PMSD value greater than the higher value on the range provided.

a. Statistical Interpretation

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 the appropriate method manual listed in Part II or the most recent update thereof.

b. Dilution Water

1) 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;
   i. toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
   ii. toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

2) If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria), 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:
   i. a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
   ii. the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
   iii. the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and
   iv. 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.

c. Samples and Composites

i. The permittee shall collect a minimum of three samples (flow-weighted composite if possible) from the outfall(s).

ii. The permittee shall collect second and third sample (composite samples if possible) for use during 24-hour renewals 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 for first use of the sample. 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. A holding time up to 72 hours is allowed upon notification to EPA of the need for additional holding time.

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

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. One set of biomonitoring data for each species is to be recorded on the DMR for each reporting period.

c. The permittee shall submit the results of each valid toxicity test on the DMR for that reporting period in accordance with PART I of this permit, as follows below. Although the biomonitoring frequency is once every quarter, the reporting frequency shall be monthly to accommodate for potential fluctuating frequencies due to test failures. During the period the permittee is out of compliance and testing monthly, test results for each month shall be reported separately on monthly DMRs. Use a no data

indicator (NODI) code of 9 (not required), for months when biomonitoring is not required.

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
Report the lowest NOEC value (survival, reproduction, or growth). COMPLIANCE CODE	51710	51714

4. MONITORING FREQUENCY REDUCTION

a. Monitoring frequency reduction is not allowed for any species that has a WET limit.

5. PERSISTENT TOXICITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects at or below the critical dilution. Significant toxic effects are herein defined as a statistically significant difference at the 95% confidence level between the survival, growth or reproduction of the appropriate test organism in a specified effluent dilution and the control (0% effluent). If the initial WET test conducted fails, the permittee will conduct monthly testing until compliance is achieved for three consecutive months.

a. Requirement to initiate a Toxicity Reduction Evaluation

If persistent lethality is demonstrated by failure in any two out of three consecutive months, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in sections below. If persistent sub-lethality is demonstrated by failure in any three consecutive months, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements. The permittee shall notify EPA in writing within 5 days of notification of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest for lethal TREs or second failed retest for sub-lethal TREs. A TRE may also be required due to a demonstration of intermittent effects at or below the critical dilution, or for failure to perform the required retests.

6. TOXICITY REDUCTION EVALUATION (TRE)

a. Within ninety (90) days of confirming lethality and/or sub-lethality, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE to the EPA WET Coordinator at 6WQ-PO. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A TRE is an investigation intended to determine those actions necessary to achieve compliance with water quality based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

1) Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, a Toxicity Identification Evaluation (TIE) and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Identification Evaluations to characterize the nature of the constituents causing toxicity, the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA 600/6-91/003) or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II

Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate;

2) Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified; Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where toxicity was demonstrated within 24 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;
3) Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
4) Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal.

c. The permittee shall submit a quarterly TRE Activities Report to the EPA WET Coordinator (6WQ-PO) in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
   1) Any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
   2) Any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
   3) Any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity at the critical dilution. A copy of the TRE Activities Report shall also be submitted to the state agency;
   4) Any results and interpretation of any chemical specific analysis, and for any characterization, identification, and confirmation tests performed during the quarter;

5) Any changes to the initial TRE plan and schedule that are believed necessary.

d. Finalizing a TRE
The permittee shall submit (to EPA 6WQ-PO) a final report on TRE activities no later than twenty-eight (28) months from confirming toxicity in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant toxicity at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism. A copy of the final report on TRE Activities shall also be submitted to the state agency.

A TRE may be stopped if there is no toxicity at the critical dilution for a period of 12 consecutive months (with at least monthly testing) following confirmation of toxicity in the retests. The permittee would submit a final report to EPA at that time.

e. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).