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

NPDES Permit No. NM0030686

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"),

Laguna Development Corporation – Rio Puerco WWTP
14500 Central Ave SW
Albuquerque, NM 87121

is authorized to discharge to receiving waters unnamed, a tributary to the Rio Puerco on Pueblo of Laguna Reservation Land from a facility located in Albuquerque, Bernalillo County, New Mexico, Interstate 40 at exit 140.

The discharge is located on that water at the following coordinates:

Outfall 001: Latitude 35° 01' 25" North and Longitude 106° 56' 53" West

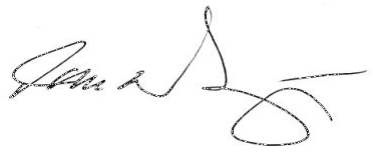
in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II, Part III, and Part IV hereof.

This permit supersedes and replaces NPDES Permit No. NM0030686 initially issued May 28, 2010 and previously renewed September 22, 2016 with an effective date of October 01, 2016, and an expiration date of September 30, 2021.

This permit renewal, prepared by Matias C. Fernandez, Life Scientist, Permitting Section (6WD-PE), shall become effective on December 1, 2021

This permit and the authorization to discharge shall expire at midnight, November 30, 2026.

Issued on October 28, 2021



Charles W. Maguire
Director
Water Division (6WD)

(This page intentionally left blank)

PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

FINAL Effluent Limits – 0.38 MGD Design Flow

During the period beginning the effective date of this permit and lasting through the expiration date of this permit (unless otherwise noted), the permittee is authorized to discharge treated municipal wastewater to unnamed a tributary to the Rio Puerco from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS Standard Units		MONITORING REQUIREMENTS	
POLLUTANT	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	6.6	9.0	1/Week	Instantaneous Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS lbs/day, unless noted			DISCHARGE LIMITATIONS mg/l, unless noted (*1)			MONITORING REQUIREMENTS	
POLLUTANT	30-DAY AVG	DAILY MAX	7-DAY AVG	30-DAY AVG	DAILY MAX	7-DAY AVG	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	N/A	Report MGD	N/A	N/A	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand, 5-day	95.13	N/A	142.7	30	N/A	45	2/Month	Grab
Total Suspended Solids	95.13	N/A	142.7	30	N/A	45	2/Month	Grab
Percent Removal (minimum), BOD_5	$\geq$ 85% (*2)	N/A	N/A	N/A	N/A	N/A	1/Month	Calculation (*2)
Percent Removal (minimum), TSS	$\geq$ 85% (*2)	N/A	N/A	N/A	N/A	N/A	1/Month	Calculation (*2)
Dissolved oxygen (DO)	N/A	N/A	N/A	5 (Minimum)	N/A	N/A	1/Week	Instantaneous Grab
E. coli Bacteria (*3)	N/A	N/A	N/A	47 cfu/100ml	88 cfu/100ml	N/A	5/Month	Grab
Enterococci Bacteria (*3)	N/A	N/A	N/A	30 cfu/100ml	N/A	N/A	4/Month	Grab
Total Residual Chlorine (TRC) (*9)	N/A	N/A	N/A	N/A	11 ug/l	N/A	1/Week	Instantaneous Grab (*4)
Total Dissolved Solid (TDS) (*8)	N/A	792.3	N/A	N/A	250	N/A	1/Quarter	Grab
Total Mercury (*8)	N/A	1.58 mg/day	N/A	N/A	0.0011 ug/L	N/A	2/Month	Grab

WHOLE EFFLUENT TOXICITY TESTING (7-Day Chronic NOEC Freshwater) (*5)	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
	30-DAY AVG	7-DAY MINIMUM	MEASUREMENT FREQUENCY (*6)	SAMPLE TYPE
Ceriodaphnia dubia (in 1st year)	Report	Report	Once in 1st year	24-Hr Composite
Pimephales promelas (in 1st year)	Report	Report	Once in 1st year	24-Hr Composite
WHOLE EFFLUENT TOXICITY TESTING (48-Hour Acute NOEC Freshwater) (*5)(*7)	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
	30-DAY AVG	48-HOUR MINIMUM	MEASUREMENT FREQUENCY (*6)	SAMPLE TYPE
*Daphnia pulex (*years: 2nd, 3rd,4th, 5th*)*	Report	Report	One/year	24-Hr Composite

Footnotes:

*1 See Appendix A of Part II of the permit for Minimum Quantification Limits.

*2 Percent removal is calculated as follows: {[(average monthly influent concentration – average monthly effluent concentration) / average monthly influent concentration] x 100}

*3 Colony forming units (cfu) per 100 ml. The 30-day average for E. coli and Enterococci bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

*4 Regulations at 40 CFR Part 136 define "instantaneous grab" as analyzed within 15 minutes of collection. The TRC concentration is the instantaneous maximum and cannot be averaged for reporting purposes. Sampling and reporting is 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.

*5 Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements for additional WET monitoring and reporting conditions.

*6 The test should occur in winter or springtime when most sensitive juvenile life forms are likely to be present in receiving water and colder ambient temperatures might adversely affect treatment processes. This will generally be defined as between November 1 and April 30. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation in the event of multiple

failures. However, upon failure of any WET test, the permittee must report the results to EPA, NMED, Pueblo of Isleta, and Pueblo of Laguna in writing, within 5 business days of notification of the test failure. EPA will review the test results and determine the appropriate action necessary, if any.

*7 This 48-hour acute test is required if the 7-day chronic test is passed in first year of the permit term.

*8 Pollutant is under a 3-year compliance schedule for the listed limit. Compliance with the Total Dissolved Solids (TDS) and Total Mercury Limits is required three (3) years from the effective date of the permit. The permittee is required to REPORT ONLY at the listed monitoring frequency until the end of the compliance schedule. See Section 1.B 'Schedule of Compliance' below.

*9 Pollutant is under a 6-month compliance schedule for the listed limit. Compliance with the Total Chlorine Limit is required six (6) months from the effective date of the permit. The permittee is required to REPORT ONLY at the listed monitoring frequency until the end of the compliance schedule. See Section 1.B 'Schedule of Compliance' below.

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 after the final treatment unit and prior to the receiving stream.

B. SCHEDULE OF COMPLIANCE

The permit has compliance schedules for TRC, TDS, and Total Mercury. Per 40 CFR 122.47 compliance schedules less than one year in length do not require interim steps and reporting. The permittee shall comply with the following schedule of activities for the attainment of state water quality standards-based final effluent limitations for TRC, TDS, and Total Mercury:

a. Determine exceedance cause(s);
b. Develop control options, if needed;
c. Evaluate and select control mechanisms;
d. Implement corrective action; and
e. Attain final effluent limitations no later than 6 months (TRC) and 36 months (TDS and Total Mercury) from the permit effective date.

The permittee shall submit quarterly progress reports to the EPA, Pueblo of Laguna, Pueblo of Isleta, and NMED in accordance with the following schedule. The permittee shall also include the following in its quarterly progress reports: design completion, construction start and construction completion if any. The requirement to submit quarterly progress reports shall expire after a written final report has been submitted. No later than 14 days after the date compliance with final limits have been met, the permittee shall submit a final report both to EPA and the State, stating that compliance has been completed. If at any time during the compliance periods the permittee determines that full compliance will not be met within the time allowed, a separate report will be sent to EPA, Pueblo of Laguna, Pueblo of Isleta, and NMED stating the explanation for this delay and proposed remedial actions.

PROGRESS REPORT DATES: December 30, March 30, June 30, Sept 30

The permittee should note that each date applies to the prior three-month period.

Progress and final reports shall be sent to the EPA, Pueblo of Laguna, Pueblo of Isleta, and NMED.

C. MONITORING AND REPORTING (MINOR DISCHARGERS)

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://netdmr.epa.gov. Until

you are approved for Net DMR, you must report on the Discharge Monitoring Report Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, 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 to NMED.

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 quarterly reports no later than the 28th day of the month following each reporting period.

3. If any 30-day average, 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.

4. 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.

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 overflows with the Discharge Monitoring Report submittal. 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).

Any noncompliance which may endanger health or the environment shall be orally reported to the EPA at (214) 665-6595, Laguna Pueblo at (505) 552-7546, Isleta Pueblo at (505) 869-3111 and NMED Surface Water Quality Bureau at (505) 827-0187 within 12 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment shall be provided to EPA, Laguna Pueblo, Isleta Pueblo and NMED

Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.

E. POLLUTION PREVENTION REQUIREMENTS

1. 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.

PART II - OTHER CONDITIONS

A. MINIMUM QUANTIFICATION LEVEL & SUFFICIENTLY SENSITIVE METHOD

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 Laguna Pueblo, Isleta Pueblo, and NMED within 12 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

None

C. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of the Pueblo of Laguna revise and/or establish Water Quality Standards and/or Total Maximum Daily Loads are established.

In accordance with 40 CFR Part 122.62(s)(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. WHOLE EFFLUENT TOXICITY TESTING (7-DAY Chronic NOEC Freshwater)

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 ON DMR AS FINAL OUTFALL: 001
      CRITICAL DILUTION (%): 100 %
      EFFLUENT DILUTION SERIES (%): 32%, 42%, 56%, 75%, 100%
      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 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 may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. 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 EPA, in writing, within 5 business days of notification the test failure. EPA will review the results and determine the appropriate action necessary, if any.

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, the statistical analyses used to determine if there is a 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 DMR 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 2.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 2.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 3 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 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.

iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 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.

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 EPA/821/R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports 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 on the DMR 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. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

c. The permittee shall report the following results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit. 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.

i. Pimephales promelas (Fathead minnow)
   (a) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.
   (b) Report the NOEC value for survival, Parameter No. TOP6C.
   (c) Report the LOEC value for survival, Parameter No. TXP6C.
   (d) Report the NOEC value for growth, Parameter No. TPP6C.
   (e) Report the LOEC value for growth, Parameter No. TYP6C.
   (f) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP6C.
   (g) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia
   (a) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

(b) Report the NOEC value for survival, Parameter No. TOP3B.
(c) Report the LOEC value for survival, Parameter No. TXP3B.
(d) Report the NOEC value for reproduction, Parameter No. TPP3B.
(e) Report the LOEC value for reproduction, Parameter No. TYP3B.
(f) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP3B.
(g) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.

d. Enter the following codes on the DMR for retests only:

i. For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

ii. For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

E. WHOLE EFFLUENT TOXICITY TESTING (48-Hr. Acute NOEC Freshwater)

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 ON DMR AS FINAL OUTFALL: 001
CRITICAL DILUTION (%): 100 %
EFFLUENT DILUTION SERIES (%): 32%, 42%, 56%, 75%, 100%
COMPOSITE SAMPLE TYPE: Defined at PART I
TEST SPECIES/METHODS: 40 CFR Part 136

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012, or the latest 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 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. Acute 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.

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.

d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

e. 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 EPA, in writing, within 5 business days of notification the test failure. EPA will review the results and determine the appropriate action necessary, if any.

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 90%.

ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: Daphnia pulex survival test; and Fathead minnow survival test.

iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for: Daphnia pulex survival test; and Fathead minnow survival test.

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 Daphnia pulex survival test, the statistical analyses used to determine if there is a statistically 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-02-012 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 90% 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 an NOEC of not less than the critical dilution for the DMR 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 2.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 2.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 3 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 two flow weighted composite samples from the outfall(s) listed at Item 1.a above.

ii. The permittee shall collect a second composite sample for use during the 24 hour renewal of each dilution concentration for both tests. 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 EPA/821/R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports 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 on the DMR 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. Only ONE set of bio-monitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

c. The permittee shall report the following results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit. 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.

i. Daphnia pulex
(a) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D

(b) Report the NOEC value for survival, Parameter No. TOM3D.
(c) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

d. Enter the following codes on the DMR for retests only:

i. For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

ii. For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

F. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

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

a. 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^{o} F or 60^{o} C using the test methods specified in 40 CFR 261.21;

b. 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;

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

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

e. 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 ^{o} C (104 ^{o} F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

g. 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,

h. 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, & 308 of the Act, and requirements established under 40 CFR 403.

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

    a. 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

    b. 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.