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

NPDES Permit No NM0030848

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"),

City of Santa Fe
Buckman Direct Diversion
341 Caja del Rio Road
Santa Fe, NM 87506

is authorized to discharge from a facility located at 341 Caja del Rio Road, Santa Fe, Santa Fe County, New Mexico. The discharge will be to receiving waters named Rio Grande, in Waterbody Segment Code No. 20.6.4.114 of the Rio Grande Basin,

the discharge is located at the following coordinates:

Outfall 001: Latitude 35° 50’ 10” North, Longitude 106° 9’ 43” West,

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit, prepared by Ruben Alayon-Gonzalez, Environmental Engineer, Permitting Section (6WQ-PP), supersedes and replaces NPDES Permit No. NM0030848 with an effective date of September 1, 2014.

This permit shall become effective on

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

Issued on

Charles W. Maguire
Director
Water Division (6WD)

DOCUMENT ABBREVIATIONS

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

4Q3	Lowest four-day average flow rate expected to occur once every three-years
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
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
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	Settleable 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	Wasteload 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

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 gravity separated wastewater to Rio Grande, in Segment Number 20.6.4.114, from Outfall 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.	Once/Week	Instantaneous Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted (*1)			
POLLUTANT	30-DAY AVG	DAILY MAX	30-DAY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow, outfall 001	Report MGD	Report MGD	N/A	N/A	Continuous	Record
Flow, stream, instantaneous (*1)	Report CFS	Report CFS	N/A	N/A	Continuous	Record
Turbidity-Instream Upstream (*2,*3)	N/A	N/A	N/A	Report (*4)	Once/Week (*8)	Grab (*9)
Turbidity-Instream Downstream (*3,*5)	N/A	N/A	N/A	Report (*4)	Once/Week (*8)	Grab (*9)
Turbidity (*6,*7)	N/A	N/A	N/A	0	Once/Week	Calculation

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (48-Hour Static Renewal) (*10, *11)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex (1st year)	Report	Once/Quarter	12-hr Composite
Pimephales promelas (1st year)	Report	Once/Quarter	12-hr Composite

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (48-hour acute test) (*10, *11)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex (years: 2nd, 3rd, 4th, 5th)	Report	Once/6 months (*12)	12-hr Composite
Pimephales promelas (years: 2nd, 3rd, 4th, 5th)	Report	Once/Year (*12)	12-hr Composite

Footnotes:

*1 The permittee shall report flow data from USGS gauging station USGS 08313000 “Rio Grande at Otowi Bridge, NM”. The permittee is prohibited to discharge to the receiving stream during any period in which the instantaneous stream flow is 150 cfs or less.

*2 Instream upstream sample point, 01U is located at least 30 feet upstream but not greater than 100-feet of Outfall 001. Sample must be taken within one (1) hour of sample from instream downstream sample point 01D.

*3 The permittee shall report all turbidity measurements taken at sample points 01U and 01D within the reporting period. Results cannot be averaged for reporting purposes (See Part II, Section E, Turbidity Testing).

*4 Nephelometric turbidity units (NTU).

*5 Instream downstream sample point 01D is located at least 100-feet downstream but not greater than 150-feet of Outfall 001. Sample must be taken within one (1) hour of sample from instream upstream sample point 01U.

*6 The permittee shall report the total number of test failures for each reporting period. (See Part II, Section E, Turbidity Testing). A test failure constitutes an effluent exceedance.

*7 If turbidity $\leq$50 NTU, delta $\leq$10 NTU; if turbidity $\geq$50 NTU, delta $\leq$20% increase. Example calculations are provided in Part II, Section E.4.

*8 Turbidity measurements are required on a weekly basis only on days when the river diversion is operating.

*9 The permittee may utilize an instream probe for the purpose of measuring turbidity. However, the same sample type shall be used to measure both upstream and downstream turbidity

*10 See Part II, Section F of the permit.

*11 12-hr composite sample consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.

*12 If there is a failure, the frequency for that species reverts to quarterly for the remainder of the permit.

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

None

C. MONITORING AND E- 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. 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 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) 665-7179. 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 to NMED as required (See Part III.D.IV of the permit).

    a. Reporting periods shall end on the last day of each month.

    b. The permittee is required to submit regular monthly reports as described above postmarked no later than the 15th day of the month following each reporting period.

    c. 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.

    d. Any 30-day, 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.

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.

D. 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.

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:

   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 degrees Fahrenheit or 60 degrees Centigrade 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 pollutant 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 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable 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, and 308 of the Act, including any requirements established under 40 CFR Part 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

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.

c. 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, 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.

- None

D. 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 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 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].

E. TURBIDITY TESTING

1. Reporting Turbidity Measurements at Instream Sample Points 01U and 01D

Instream upstream sample point, 01U is located at least 30-feet upstream but not greater than 100-feet of Outfall 001. Instream downstream sample point, 01D is located at least 100-feet downstream but not greater than 150-feet of Outfall 001. There are no other discharges or tributaries within this area that would add sediments or affect turbidity, so the difference in measurements are expected to be due primarily, if not exclusively to the BDD discharge.

The permittee shall report all turbidity measurements taken at Instream Sample Points 01U an 01D within the reporting period. Instream Sample Point 01U shall be reported as STORET Code No. 52330 and Instream Sample Point 01D shall be reported as STORET Code No. 52350. These values shall not be averaged for reporting purposes.

2. Determining Turbidity Test Results

(a) If turbidity reported at Instream Sample Point 01U is 50 NTU or less:

If the difference of the measured turbidity at Instream Sample Points 01U and 01D is greater than 10 NTU, assign a “1” to the turbidity test; otherwise, assign a “0”.

(b) If turbidity reported at Instream Sample Point 01U is greater than 50 NTU:

If the difference of the measured turbidity at Instream Sample Points 01U and 01D is greater than 20% of the turbidity recorded from Sample Point 01U, assign a “1” to the turbidity test; otherwise, assign a “0”.

3. Reporting Total Turbidity Test Failures

(a) If turbidity test failures occur during the reporting period:

Sum the numerical values assigned to each turbidity test taken within the reporting period. Enter this amount for STORET Code No. 51517 in the report.

(b) If no turbidity test failures occur during the reporting period:

Enter a “0” for STORET Code No. 51517 in the report.

4. Example Calculations

In this example, the permittee is required to sample four (4) time within a reporting period:

Sample 1

Instream Sample Point 01U turbidity measurement: 20 NTU
Instream Sample Point 01D turbidity measurement: 25 NTU

Instream Sample Point 01U turbidity is less than 50 NTU, therefore b.2(a) criteria will be used. The difference of the turbidity at Instream Sample Points 01U and 01D is 5 NTU, which is less than the 10 NTU criteria. Therefore, this sample is a “Pass” and would have a value of “0”.

Sample 2

Instream Sample Point 01U turbidity measurement: 20 NTU
Instream Sample Point 01D turbidity measurement: 40 NTU

Instream Sample Point 01U turbidity is less than 50 NTU, therefore b.2(a) criteria will be used. The difference of the turbidity at Instream Sample Points 01U and 01D is 20 NTU, which is greater than the 10 NTU criteria. Therefore, this sample is a “Fail” and would have a value of “1”.

Sample 3

Instream Sample Point 01U turbidity measurement: 100 NTU
Instream Sample Point 01D turbidity measurement: 115 NTU
Instream Sample Point 01U turbidity is greater than 50 NTU, therefore b.2(b) criteria will be used. Twenty percent (20%) of Instream Sample Point 01U turbidity is 20 NTU. The difference of the turbidity at Instream Sample Points 01U and 01D is 15 NTU, which is less than the 20 NTU criteria. Therefore, this sample is a "Pass" and would have a value of "0".

Sample 4

Instream Sample Point 01U turbidity measurement: 100 NTU
Instream Sample Point 01D turbidity measurement: 150 NTU
Instream Sample Point 01U turbidity is greater than 50 NTU, therefore b.2(b) criteria will be used. Twenty percent (20%) of Instream Sample Point 01U turbidity is 20 NTU. The difference of the turbidity at Instream Sample Points 01U and 01D is 50 NTU, which is greater than the 20 NTU criteria. Therefore, this sample is a "Fail" and would have a value of "1".

Sample Reporting

The permittee will report all turbidity measurements from Instream Sample Points 01U and 01D. The permittee shall also sum each pass/fail test result. In this example:

Sample 1: 0
Sample 2: 1
Sample 3: 0
Sample 4: 1
Total: 2

Therefore, the permittee would enter a "2" for STORET Code No. 51517.

F. WHOLE EFFLUENT TOXICITY TESTING (48-HR ACUTE 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 ON DMR AS FINAL OUTFALL:	001
EFFLUENT DILUTION SERIES:	0.5%, 0.7%, 0.9%, 1.2%, and 1.6%
CRITICAL DILUTION:	1.2%

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 01 012, 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.

Pimephales promelas (Fathead minnow) 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 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. 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. 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 test 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:

- The toxicity test control (0% effluent) must have survival equal to or greater than 90%.

- 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.

- 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 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 in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA 821 R 01 012 or the most recent update thereof.

- If the conditions of Test Acceptability are met in Item 3.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 concentration, 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 4 below.

c. Dilution Water

- 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;

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

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

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

  - the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

  - the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3 below; and

- 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

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

- The permittee shall collect second and third composite samples for use during 24-hour renewals 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.

- 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.

- 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 if the discharge occurs over multiple 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 section in accordance with the Report Preparation Section of EPA/821/R-02-013, or the most current publication, 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 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 for each reporting period. The data submitted should reflect the LOWEST lethal

and sub-lethal effects 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 for EPA review.

c. The permittee shall submit the results of each valid toxicity test as follows below. Submit retest information, if required, clearly marked as such. Only results of valid tests are to be reported.

- 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. TEM6C.

  (B) Report the NOEC value for survival, Parameter No. TOM6C.

  (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.

- 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:

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

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