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

NPDES Permit No NM0028746

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"),

Westmoreland San Juan Mining LLC
P.O. Box 561
Waterflow, NM 87421

is authorized to discharge from a facility located on County Road 6800, about 16 miles west of Farmington, Waterflow in San Juan County, NM. Possible discharges from multiple outfalls are to receiving waters: Westwater Arroyo & Shumway Arroyo as intermittent streams subject to 20.6.4.98 NMAC and San Juan River (segment 20.6.401 of the San Juan River Basin). Outfall coordinates are stated in the attached Outfall List.

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

This permit, prepared by Tung Nguyen, Environmental Engineer, Permitting Section (6WD-PE), supersedes and replaces NPDES Permit No. NM0028746 with an effective date of October 5, 2018.

This permit shall become effective on February 1, 2024

This permit and the authorization to discharge shall expire at midnight, January 31, 2029

Issued on January 18, 2024

DZUNG NGO KIDD Digitally signed by DZUNG NGO KIDD
Date: 2024.01.19 15:42:13 -06'00'

Dzung Kim Ngo Kidd
Acting Director
Region 6 Water Division

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
NOEC	No observable effect concentration
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 plan

PART I – REQUIREMENTS FOR NPDES PERMITS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Outfalls 001, 002, 010, 011, 013 and 014

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 runoff associated with western alkaline mining reclamation from Outfalls (sediment ponds) 001, 002 & 014 to Westwater Arroyo and from Outfalls 010, 011 & 013 to Shumway Arroyo. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

POLLUTANT	DISCHARGE LIMITATIONS MINIMUM	DISCHARGE LIMITATIONS MAXIMUM	MEASUREMENT FREQUENCY (*7)	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	1/day	Instantaneous Grab (*6)

POLLUTANT	30-DAY AVG, lbs/day, unless noted	DAILY MAX lbs/day, unless noted	30-DAY AVG mg/l, unless noted (*1)	7-DAY AVG mg/l, unless noted (*1)	DAILY MAX mg/l, unless noted (*1)	MEASUREMENT FREQUENCY (*7)	SAMPLE TYPE
Flow	NA	N/A	Report MGD	NA	Report MGD	1/day	Estimated (*2)
Aluminum (*3)	NA	N/A	7.07	NA	7.07	1/day	Grab
TDS	NA	2000 (*4)	NA	NA	NA	1/day	Grab
Form 2C constituents (*5)	NA	NA	NA	NA	Report	Once/term	Grab

Footnotes:
*1 See **Appendix A of Part II** of the permit for minimum quantification limits.
*2 The flow can be estimated using best engineering judgment; e.g., calculation of discharge volume over discharge duration.
*3 Total recoverable form; limits are applicable to Outfall 002 only.
*4 Total limit from all discharge outfall(s).
*5 Shall be collected during the first discharge for analyses of pollutants in Form 2C and EFFLUENT CHARACTERIZATION EVALUATION specified below.
*6 Analyzed within 15 minutes of collection.
*7 Shall be collected when discharge occurs.

2. Outfalls 006, 007 and 008

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 from runoff associated with coal stockpile Outfall 006, ready-line equipment Outfall 007 and buildings 008 to Shumway Arroyo. Such discharges shall be limited and monitored by the permittee and reported as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

POLLUTANT	DISCHARGE LIMITATIONS MINIMUM	DISCHARGE LIMITATIONS MAXIMUM	MEASUREMENT FREQUENCY (*7)	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	1/day	Instantaneous Grab (*3)

POLLUTANT	30-DAY AVG, lbs/day, unless noted	DAILY MAX lbs/day, unless noted	30-DAY AVG mg/l, unless noted (*1)	7-DAY AVG mg/l, unless noted (*1)	DAILY MAX mg/l, unless noted (*1)	MEASUREMENT FREQUENCY (*7)	SAMPLE TYPE
Flow	NA	NA	Report MGD	NA	Report MGD	1/day	Estimated (*2)
Total settable solid	NA	NA	NA	NA	0.5 mL/L	1/day	Grab
TDS	NA	2000 (*4)	NA	NA	NA	1/day	Grab
Form 2C constituents (*5)	NA	NA	NA	NA	Report	Once/term	Grab

WHOLE EFFLUENT TOXICITY TESTING 7-DAY CHRONIC NOEC FRESHWATER (*6)	NOEC	MEASUREMENT FREQUENCY(*6)	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/term	Grab
Pimephales promelas	Report	Once/term	Grab

Footnotes:

*1 See **Appendix A of Part II** of the permit for minimum quantification limits.

*2 The flow can be estimated using best engineering judgment; e.g., calculation of discharge volume over discharge duration.

*3 Analyzed within 15 minutes of collection.

*4 Total limit from all discharge outfall(s).

*5 Shall be collected during the first discharge for analyses of pollutants in Form 2C and EFFLUENT CHARACTERIZATION EVALUATION specified below.

*6 Sample shall be collected during the first discharge. 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. 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 and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

*7 Shall be collected when discharge occurs.

3. Outfall 009

Discharge is not authorized.

4. Outfall 012

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 from runoff associated with western alkaline mining reclamation from Outfall 012 to San Juan River. Such discharges shall be limited and monitored by the permittee and reported as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

POLLUTANT	DISCHARGE LIMITATIONS MINIMUM	DISCHARGE LIMITATIONS MAXIMUM	MEASUREMENT FREQUENCY (*6)	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	1/day	Instantaneous Grab (*5)

POLLUTANT	30-DAY AVG, lbs/day, unless noted	DAILY MAX lbs/day, unless noted	30-DAY AVG mg/l, unless noted (*1)	7-DAY AVG mg/l, unless noted (*1)	DAILY MAX mg/l, unless noted (*1)	MEASUREMENT FREQUENCY (*6)	SAMPLE TYPE
Flow	Report MGD	Report MGD	NA	NA	NA	1/day	Estimated (*2)
Aluminum, total	NA	NA	6.11	NA	6.11	1/day	Grab
Copper, total	NA	NA	0.115	NA	0.115	1/day	Grab
TDS	NA	2000 (*3)	NA	NA	NA	1/day	Grab
Form 2C constituents (*4)	NA	NA	NA	NA	Report	Once/term	Grab

Footnotes:
*1 See **Appendix A of Part II** of the permit for minimum quantification limits.
*2 The flow can be estimated using best engineering judgment, including calculation of discharge volume over discharge duration.
*3 Total limit from all discharge outfall(s).
*4 Shall be collected during the first discharge for analyses of pollutants in Form 2C and EFFLUENT CHARACTERIZATION EVALUATION specified below.
*5 Analyzed within 15 minutes of collection.
*6 Shall be collected when discharge occurs.

5. Western Alkaline Coal Mining Operation

SEDIMENT CONTROL PLAN (SCP)

(A) This subpart applies to drainage at Western alkaline coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regarded areas where the discharge, before any treatment, meets all the following requirements:

- pH is equal to or greater than 6.0;
- Dissolved iron concentration is less than 10 mg/L; and
- Net alkalinity is greater than zero.

(a) The term brushing and grubbing area means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil that is being salvaged.
(b) The term regarded area means the surface area of a coal mine that has been returned to required contour.
(c) The term sediment means undissolved organic and inorganic material transported or deposited by water.
(d) The term sediment yield means the sum of the soil losses from a surface minus deposition in macro-topographic depressions, at the toe of the hillslope, along field boundaries, or in terraces and channels sculpted into the hillslope.
(e) The term topsoil stockpiling area means the area outside the mine-out area where topsoil is temporarily stored for use in reclamation, including containment berms.
(f) The term western mining operation means a surface or underground coal mining operation located in the interior western United States, west of the 100th meridian west longitude, in an arid or semiarid environment with an average annual precipitation of 26.0 inches or less.

(B) Within three (3) months from the effective date of the permit, the operator permittee must update its site-specific SCP, that is designed to prevent an increase in the average annual sediment yield from pre-mined, undisturbed conditions. The operator is not required to resubmit another copy of SCP, rather the permittee shall update and keep a copy on site and continue to comply with the requirements of its SCP. The SCP must identify best management practices (BMPs) and also must describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices. If the SCP is approved by the Surface Mining Control and Reclamation Act (SMCRA) agency, the SCP is considered to meet EPA's approval requirement, unless EPA disapproves the SCP within 90 days upon receipt.

(C) Using watershed models, the operator must demonstrate that implementation of the Sediment Control Plan will result in average annual sediment yield that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The operator must use the same watershed model that was, or will be used to acquire the SMCRA Permit.

(D) The operator must submit an annual Sediment Control Report every 12 months from the approval of the Sediment Control Plan. This report shall demonstrate that the facility has met requirements set forth in above sub-sections (B) and (C). The permittee shall also send a copy of the annual report to the State of New Mexico Environment Department.

6. Pollutants Monitoring Requirements

A. EFFLUENT CHARACTERIZATION EVALUATION

For Outfall 001, 002, 006, 007, 008, 010, 011, 013, 014: the following pollutants are required for analysis.

Pollutant	Pollutant	Pollutant
Antimony, (dissolved (D))	Zinc, (D)	Dieldrin
Arsenic, (D)	Aldrin	2,3,7,8-TCDD dioxin
Nickel, (D)	Benzo(a)pyrene	Hexachlorobenzene
Selenium, (D)	Chlordane	PCBs
Thallium, (D)	4,4'-DDT and derivatives	Tetrachloroethylene

For Outfall 012: the following pollutants are required for analysis.

Pollutant	Pollutant	Pollutant
Antimony (D)	2-Chlorophenol	Fluoranthene
Arsenic (D)	2,4-Dichlorophenol	Fluorene
Nickel (D)	2,4-Dimethylphenol	Hexachlorobenzene
Selenium (D)	2-Methyl-4-6-Dinitrophenol	Hexachlorobutadiene
Thallium (D)	2,4-Dinitrophenol	Hexachlorocyclopentadiene
Zinc (D)	Pentachlorophenol	Hexachloroethane
Cyanide, weak acid dissociable	Phenol	Indeno (1,2,3-cd)Pyrene
2,3,7,8-TCDD (Dioxin)	2,4,6-Trichlorophenol	Isophorone
Acrolein	Acenaphthene	Nitrobenzene
Acrylonitrile	Anthracene,	n-Nitrodimethylamine
Benzene	Benzidine,	n-Nitrosodi-n-Propylamine
Bromoform	Benzo(a)anthracene	n-Nitrosodiphenylamine
Carbon Tetrachloride	Benzo(a)pyrene	Pyrene
Chlorobenzene	Benzo(b)fluoranthene	1,2,4-Trichlorobenzene
Clorodibromomethane	Benzo(k)fluoranthene	Aldrin
Chloroform	Bis (2-chloroethyl) Ether	Alpha-BHC
Dichlorobromomethane	Bis (2-chloroisopropyl) Ether	Beta-BHC
1,2-Dichloroethane	Bis (2-ethylhexyl) Phthalate	Gamma-BHC
1,1-Dichloroethylene	Butyl Benzyl Phthalate	Chlordane
1,2-Dichloropropane	2-Chloronapthalene	4,4'-DDT and derivatives
1,3-Dichloropropene	Chrysene	Dieldrin
Ethylbenzene	Dibenzo(a,h)anthracene	Alpha-Endosulfan
Methyl Bromide	1,2-Dichlorobenzene	Beta-Endosulfan
Methylene Chloride	1,3-Dichlorobenzene	Endosulfan sulfate
1,1,2,2-Tetrachloroethane	1,4-Dichlorobenzene	Endrin
Tetrachloroethylene	3,3-Dichlorobenzidine	Endrin Aldehyde
Toluene	Diethyl Phthalate	Heptachlor 90
1,2--trans-Dichloroethylene	Dimethyl Phthalate	Heptachlor Epoxide
1,1,2-Trichloroethane	Dibutyl Phthalate	PCBs
Trichloroethylene	2,4-Dinitrotoluene	Toxaphene
Vinyl Chloride	1,2-Diphenylhydrazine	---

B. FORM 2C

In addition to all pollutants in Form 2C (Tables A to E), the permittee shall monitor all pollutants below at each outfall once per permit term when first discharge occurs. Data shall be sent to EPA and NMED as stated under Part I.C. Data from section A. above can be reported to Form 2C.

Pollutants	CAS Number	Pollutants	CAS Number	Pollutants	CAS Number
Aluminum, total*	7429-90-5	Strontium 90			
Chromium III, dissolved	16065-83-1	Tritium		Bis(chloromethyl) ether	542-88-1
Chromium VI, dissolved	18540-29-9	Nonylphenol	84852-15-	Demeton	8065-48-3
Methylmercury	22967-92-6	Polychlorinated Biphenyls (PCBs)**	1336-36-3	Hexachlorocyclohexane (HCH)-Technical	608-73-1
Nitrosodibutylamine	924-16-3	Nitrosodiethylamine	55-18-5	N-Nitrosopyrrolidine	930-55-2
Mirex	2385-85-5	Pentachlorobenzene	608-93-5	1,2,4,5-Tetrachlorobenzene	95-94-3
Tributyltin (TBT)	Various	2,4,5-Trichlorophenol	95-95-4	2-(2,4,5-Trichlorophenoxy)	93-72-1

Notes:
* Total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the NMED.
** PCBs must be tested using Method 1668A if conditioned in the State 401-Certification. One sample is sufficient. Previous sample maybe submitted with certification if no change in treatment process, SIU.

7. Floating Solids, Visible Foam and/or Oils

There shall be no discharge of floating solids or visible foam in other than trace amounts, 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 points of discharge from the associate sediment ponds prior to the receiving stream.

8. Toxics

No discharge shall contain any substance, including but not limited to selenium, DDT, PCB's and dioxin, at a level which, when added to background concentration, can lead to bioaccumulation to toxic levels in any animal species.

9. Sampling Points

Samples taken in compliance with the monitoring requirements specified above shall be taken at the points of discharge from the associate sediment ponds prior to the receiving streams.

B. SCHEDULES OF COMPLIANCE

None

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://cdx.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). Other applicable reports shall be submitted as follow:

Applicable e-Reporting	e-Reporting Compliance Date	Reporting Frequency
DMRs	Permit effective date	Quarterly

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 reports as described above postmarked no later than the 28th day of the month following each reporting period.

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

D. SMCRA BOND RELEASE

When the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed on a watershed or a specific part of a disturbed area, the permittee may request to terminate the corresponding NPDES discharge points to that specific drainage area. The permittee must also demonstrate that the Phase III bond for that particular drainage area has been released before permit coverage can be terminated.

E. DOCUMENTS AND APPLICATION FOR RENEWAL

A copy of documents, required reports and application for permit renewal shall be sent to NMED at the mailing address listed in Part III.D.4 of this permit.

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. 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:

Aluminum and copper

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 NMWQS are revised, or new State water quality standards are established and/or remanded by New Mexico Water Quality Control Commission, respectively.

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.

This permit authorizes the discharge of wastewater from the authorized outfalls in distinct subcategories. Throughout the permit term, as mine operations continue in a linear fashion, new outfall locations may become necessary to treat runoff and other outfalls may need to be authorized under a different subcategory. Therefore, EPA may modify the outfall list during the permit term to add, terminate or reclassify a discharge that occurs during the anticipating course of the existing mining activities. The permit may be reopened to authorize new outfalls for an area not currently being mined through a major modification to the existing permit 40 CFR Part 122.63.

D. WHOLE EFFLUENT TOXICITY TESTING (7 DAY CHRONIC NOEC)

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.

CRITICAL DILUTION (%)	100%
EFFLUENT DILTION SERIES (%)	32%, 42%, 56%, 75%, 100%
TEST SPECIES AND 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.A

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

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

2. REQUIRED TEST ACCEPTABILITY CRITERIA AND TEST CONDITIONS

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

* 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 was run concurrently with the receiving water control;
    ii. the test indicating receiving water toxicity has been carried out to completion,
    iii. the permittee includes all test results indicating receiving water toxicity with the full report and information required; 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
    1) The permittee shall collect a minimum of three samples (flow-weighted composite if possible) from the outfall(s).

    2) The permittee shall collect a second and third sample (composite samples if possible) for use during the 24-hour renewal of each dilution concentration for each test. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours 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 hrs. is allowed upon notification to EPA and NMED of the need for additional holding time.

    3) The permittee must collect the composite samples such 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 unless the permittee is performing a TRE which may increase the frequency of testing and reporting. One set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. Additional results are reported under the retest codes below.

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

Reporting Requirement	**Parameter STORET CODE**	
	Ceriodaphnia dubia	*Pimephales promelas*
Enter a “1” if the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, otherwise enter a "0".	TLP3B	TLP6C
Report the NOEC value for survival	TOP3B	TOP6C
Report the LOEC value for survival	TXP3B	TXP6C
Enter a “1” if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a “0”.	TGP3B	TGP6C
Report the NOEC value for growth or reproduction	TPP3B	TPP6C
Report the LOEC value for growth	TYP3B	TYP6C
Report the highest (critical dilution or control) Coefficient of Variation	TQP3B	TQP6C
(If required) Retest 1 – Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	22418	22415
(If required) Retest 2- Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	22419	22416
(If required) Retest 3- Enter a “1” if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter “0”.	51444	51443