

NPDES Permit No NM0030996

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"),

Peabody Natural Resources Company El Segundo Mine P.O. Box 757 Grants, NM 87020

is authorized to discharge from a facility located at 35 miles north of Milan, off State Road 509, Grants, in McKinley County, New Mexico. Possible discharges from multiple outfalls are to receiving water named Kim-me-ni-oli Valley Tributary, thence into Chaco River, a tributary of San Juan River (about 100 miles northwest of El Segundo Mine) and to Inditos Draw, a tributary of Vought Draw, which flows into Arroyo Chico, then to Rio Puerco (about 60 miles southeast the mine area), a tributary of the Rio Grande River. Kim-me-ni-oli Valley Tributary and Inditos Draw are unclassified receiving waters under 20.6.4.97 NMAC.

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

This permit, prepared by Tung Nguyen, Environmental Engineer, Permitting Section (6WD-PE), supersedes and replaces NPDES Permit No. NM0030996 with an effective date of July 1, 2020.

This permit shall become effective on November 1, 2025

This permit and the authorization to discharge shall expire at midnight, October 31, 2030

Issued on September 17, 2025.

Troy C. Hill, P.E.
Director
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

BOD₅ Biochemical oxygen demand (five-day unless noted otherwise)

BPJ Best professional judgment

CBOD₅ 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
ML Minimum level
MPN Most probable number
MOL Minimum quantification level

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

O&G Oil and grease

PFAS Per- and polyfluoroalkyl substances

POI Pueblo of Isleta

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. Coal Preparation & Associated Areas Outfalls

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 from outfalls (sediment ponds) listed in Attachment A – "Coal Preparation & Associated Areas" to Kim-me-ni-oli Valley Tributary. 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.

| | DISCHARGE LIMITATIONS | DISCHARGE LIMITATIONS | MEASUREMENT | |
|-----------|-----------------------|-----------------------|-------------|-------------------------|
| POLLUTANT | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| рН | 6.0 s.u. | 9.0 s.u. | 1/day | Instantaneous Grab (*5) |

| | 30-DAY AVG, | 7-DAY AVG | 30-DAY AVG | 7-DAY AVG | DAILY MAX | | |
|-------------|-----------------|-----------------|--------------|--------------|--------------|-------------|----------------|
| | lbs/day, unless | lbs/day, unless | mg/l, unless | mg/l, unless | mg/l, unless | MEASUREMENT | |
| POLLUTANT | noted | noted | noted (*1) | noted (*1) | noted (*1) | FREQUENCY | SAMPLE TYPE |
| Flow | N/A | N/A | Report MGD | N/A | Report MGD | 1/day | Estimated (*2) |
| TSS | N/A | N/A | 35 | N/A | 70 | 1/day | Grab |
| Iron, total | N/A | N/A | 3.0 | N/A | 6.0 | 1/day | Grab |

| WHOLE EFFLUENT TOXICITY TESTING | | | |
|----------------------------------|--------|----------------------------|-------------|
| 48-HR ACUTE NOEC FRESHWATER (*3) | NOEC | MEASUREMENT FREQUENCY (*4) | SAMPLE TYPE |
| Daphnia pulex | Report | Once/year | Grab |

- *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 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.
- *4 If discharges occur at more than one outfall at the same time, a representative sample from these specific (Attachment A) outfalls may be used. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the outfalls being represented; the rationale for outfalls being representative including a description of the control measures at each outfall.
- *5 Analyzed within 15 minutes of collection.

2. Alkaline Mine Drainage Outfalls

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 from outfalls (sediment ponds) listed in Attachment B – "Alkaline Mine Drainage" to Kim-me-ni-oli Valley Tributary and Inditos Draw. 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.

| | DISCHARGE LIMITATIONS | DISCHARGE LIMITATIONS | MEASUREMENT | |
|-----------|-----------------------|-----------------------|-------------|-------------------------|
| POLLUTANT | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| рН | 6.0 s.u. | 9.0 s.u. | 1/day | Instantaneous Grab (*5) |

| | 30-DAY AVG, | 7-DAY AVG | 30-DAY AVG | 7-DAY AVG | DAILY MAX | | |
|-------------|-----------------|-----------------|--------------|--------------|--------------|--------------------|----------------|
| | lbs/day, unless | lbs/day, unless | mg/l, unless | mg/l, unless | mg/l, unless | MEASUREMENT | |
| POLLUTANT | noted | noted | noted (*1) | noted (*1) | noted (*1) | FREQUENCY | SAMPLE TYPE |
| Flow | N/A | N/A | Report MGD | N/A | Report MGD | 1/day | Estimated (*2) |
| TSS | N/A | N/A | 35 | N/A | 70 | 1/day | Grab |
| Iron, total | N/A | N/A | 3.0 | N/A | 6.0 | 1/day | Grab |

| WHOLE EFFLUENT TOXICITY TESTING | | | |
|----------------------------------|--------|----------------------------|-------------|
| 48-HR ACUTE NOEC FRESHWATER (*3) | NOEC | MEASUREMENT FREQUENCY (*4) | SAMPLE TYPE |
| Daphnia pulex | Report | Once/year | Grab |

- *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 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.
- *4 If discharges occur at more than one outfall at the same time, a representative sample from these specific (Attachment B) outfalls may be used. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the outfalls being represented; the rationale for outfalls being representative including a description of the control measures at each outfall.
- *5 Analyzed within 15 minutes of collection.

3. Sewage Lagoon Outfall (Outfall 18)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated wastewater from Outfall 18 to Kim-me-ni-oli Valley Tributary. 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.

| | DISCHARGE LIMITATIONS | DISCHARGE LIMITATIONS | MEASUREMENT | |
|-----------|-----------------------|-----------------------|-------------|-------------------------|
| POLLUTANT | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| pН | 6.0 s.u. | 9.0 s.u. | 1/day | Instantaneous Grab (*5) |

| | 30-DAY AVG, | 7-DAY AVG | 30-DAY AVG | 7-DAY AVG | DAILY MAX | | |
|-------------------------------------|-----------------|-----------------|--------------|--------------|--------------|-------------|-------------------------|
| | lbs/day, unless | lbs/day, unless | mg/l, unless | mg/l, unless | mg/l, unless | MEASUREMEN | |
| POLLUTANT | noted | noted | noted (*1) | noted (*1) | noted (*1) | T FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | *** | *** | *** | 1/day | Estimated (*2) |
| BOD_5 | N/A | N/A | 30 | 45 | N/A | 1/week | Grab |
| BOD ₅ % removal, minimum | ≥85 | *** | *** | *** | *** | 1/month | Calculation (*3) |
| TSS | N/A | N/A | 30 | 45 | N/A | 1/week | Grab |
| TSS % removal, minimum | ≥85 | *** | *** | *** | *** | 1/month | Calculation (*3) |
| E. coli bacteria | N/A | N/A | 548 cfu (or | N/A | 2507 cfu (or | 1/week | Grab |
| | | | MPN)/100 ml | | MPN)/100 ml | | |
| | | | (*6) | | | | |
| TRC | N/A | N/A | N/A | N/A | 11 ug/L (*4) | 1/week | Instantaneous Grab (*5) |

| WHOLE EFFLUENT TOXICITY TESTING | | | |
|----------------------------------|--------|----------------------------|-------------|
| 48-HR ACUTE NOEC FRESHWATER (*7) | NOEC | MEASUREMENT FREQUENCY (*8) | SAMPLE TYPE |
| Daphnia pulex | Report | Once/5 years | 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 Percent removal is calculated using the following equation:

 $Percent \ removal = \frac{\text{average monthly influent concentration}\left(\frac{mg}{L}\right) - \text{average monthly effluent concentration}\left(\frac{mg}{L}\right)}{\text{average monthly influent concentration}\left(\frac{mg}{L}\right)}$

- *4 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- *5 Analyzed within 15 minutes of collection.
- *6 The 30 day-average for E. coli bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
- *7 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.
- *8 The sample collection shall take place when discharge occurs.

4. Discharge Resulting from Precipitation Events

a. 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 from outfalls listed in Attachment A – "Coal Preparation & Associated Areas" and Attachment B – "Alkaline Mine Drainage" resulting from precipitation events less than or equal to a 10-year, 24-hour precipitation event to the receiving waters. 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.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the outfalls being represented; the rationale for outfalls being representative including a description of the control measures at each outfall. The permittee shall have the burden of proof the discharge was caused by the precipitation event pursuant to 40 CFR 434.63(e).

| | | EFFLUENT | MEASUREMENT | |
|--------------------|------------|------------|-------------|----------------|
| EFFLUENT PARAMETER | UNIT | LIMITATION | FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | Daily | Estimated (*1) |
| | | | | Instantaneous |
| рН | s.u. | 6.0 - 9.0 | Daily | Grab (*2) |
| SS (*3) | ml/l | 0.5 | Daily | Grab |

- *1 The flow can be estimated using best engineering judgment; e.g., calculation of discharge volume over discharge duration.
- *2 Sample shall be analyzed within 15 minutes of collection.
- *3 Procedure and method of detection limit for measurement of settable solids shall be in accordance with 40 CFR 434.64.

b. 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 from outfalls listed in Attachment A – "Coal Preparation & Associated Areas" and Attachment B – "Alkaline Mine Drainage" resulting from precipitation events greater than a 10-year, 24-hour precipitation event to the receiving waters. 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.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the outfalls being represented; the rationale for outfalls being representative including a description of the control measures at each outfall. The permittee shall have the burden of proof the discharge was caused by the precipitation event pursuant to 40 CFR 434.63(e).

| | | EFFLUENT | MEASUREMENT | |
|--------------------|------------|------------|-------------|----------------|
| EFFLUENT PARAMETER | UNIT | LIMITATION | FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | Daily | Estimated (*1) |
| | | | | Instantaneous |
| pН | s.u. | 6.0 - 9.0 | Daily | Grab (*2) |

- *1 The flow can be estimated using best engineering judgment; e.g., calculation of discharge volume over discharge duration.
- *2 Sample shall be analyzed within 15 minutes of collection.

5. Outfalls 1-41 (listed in Attachments A, B and C), including Sewage Lagoon Outfall 18

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 and treated wastewater from Outfalls 1-41 to Kim-me-ni-oli Valley Tributary. 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.

| | EFFLUENT | CONCENTRATION, | | | |
|--------------------|------------------|----------------|------------------|-------------|-------------|
| | LIMITATION, | 30-day average | CONCENTRATION, | MEASUREMENT | |
| EFFLUENT PARAMETER | Annual Max. | (mg/L) | daily max (mg/L) | FREQUENCY | SAMPLE TYPE |
| TDS | < 366 tons/year* | Report | Report | Daily** | Grab |

^{*} Totaled amount from outfall discharges. Cumulative load is the sum of all TDS loads for all applicable outfalls over the course of a calendar year. Load for an individual outfall for a discharge is calculated as: TDS concentration (mg/l) \times total discharge flow (MG) \times 8.34 \div 2,000 lbs/ton. For calculation of the cumulative loads, any discharges containing 500 mg/L or less TDS is considered fresh water and need not be included in the loading calculations.

^{**} If more than one outfall discharge on a day, sample results from a discharge representative of all discharges occurring that day may be used for loading calculations at all outfalls discharging. If samples are collected from a representative point, the permittee shall specify in the monitoring narrative: the outfalls being represented; the rationale for outfalls being representative including a description of the control measures at each outfall.

6. Western Alkaline Coal Mining Operation

The permittee shall implement and update as necessary an approved Sediment Control Plan (SCP) for all reclamation areas, brushing and grubbing areas, topsoil stockpiling areas and regraded areas as defined under Western Alkaline Coal Mining Rule at 40 CFR 434.80. The SCP, including all authorized updates, is incorporated into the permit as an effluent limitation as required by 40 CFR 434.82(a). As further set forth herein, for areas containing commingled drainage, it is understood that the permittee will comply with the Western Alkaline Coal Mining Rule by utilizing sediment ponds, and other measures set forth in its SCP approved by the Mining and Minerals Division of the Energy Minerals and Natural Resources Department for the State of New Mexico (NMMMD), required for outfalls set forth in Attachments A and B under the "alkaline mine drainage" requirements, 40 CPR Part 434, Subpart D, and "coal preparation plant and coal preparation plant associated areas," 40 CFR Part 434, Subpart B (collectively, "Active Mining"). After Active Mining ceases and 100% of the mining disturbed area in the drainage area to an outfall meets the definition of "western alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded areas," 40 CPR 434.80, a revised SCP will be submitted by the permittee to EPA and the NMMMD for approval to authorize the reclassification of such outfalls and the potential removal of sediment ponds.

- a) The SCP shall be designed to prevent an increase in the average annual sediment yield from premined, undisturbed conditions. The SCP shall identify best management practices (BMPs) and also shall describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices. Where reclamation areas, brushing and grubbing areas, topsoil stockpiling areas and regraded areas are located in the same drainage area as active mining operations and coal preparation plant areas, the SCP may utilize and incorporate controls also used to comply with permit limitations applicable to the discharges from the active mining operations and coal preparation plant areas, including sediment ponds.
- b) The permittee shall use the same watershed model that was, or will be, used to acquire the NMMMD permit. Where drainage subject to the SCP comingles with and is treated by sediment ponds designed for treatment of active mining or coal preparation plant area drainage and wastewater, modeling of the sediment pond removal efficiency and area-specific BMPs may be used to demonstrate that average annual sediment yields from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas and regraded areas in the co-mingled drainage area will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. Watershed modeling for desired purposes of sediment control structures in these active mining or coal preparation plant areas based on sediment storage volume for the design event in accordance with NMMMD regulations may be used to meet average annual sediment yield modeling requirements.
- c) The permittee has prepared and submitted a sediment control plan to the NMMMD, which was approved by the NMMMD as part of permittee's application for NMMMD Permit No. 2010-01. The SCP is designed so as to prevent an increase in the average annual sediment yield from premined, undisturbed conditions. The permittee used SEDCAD watershed modeling in support of its NMMMD permit application, which demonstrates the effectiveness of the SCP. The SCP identifies BMI's, including sediment ponds, and describes design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the BMPs. The permittee shall design, implement, and maintain BMPs in the

manner specified in the SCP throughout the permit term. The approved SCP in effect as of the date of permit issuance consists of the portions of the NMMMD permit provided by LRCC and included as Attachment D of this permit. For the purposes of this permit, the requirement to implement the SCP applies to reclamation areas, brushing and grubbing areas, topsoil stockpiling areas and regraded areas and discharges subject to the WACM Effluent Guidelines. EPA recognizes that the Permittee's desire to use portions of the NMMMD permit as their SCP results in some portions of the SCP appearing to apply to areas not subject to the WACM Effluent Guideline Requirement for a SCP. The permittee is not required to implement the SCP on internal areas of a drainage area that are not reclamation areas, brushing and grubbing areas, topsoil stockpiling areas or regraded areas. The Permittee's SCP attached to this permit as Attachment D, and incorporated herein by reference, is the current EPA approved SCP.

- d) Operational changes may be made to an SCP without prior approval by EPA provided that the revisions:
 - ✓ do not add or remove outfalls or sediment ponds; and
 - ✓ do not relocate an existing outfall to a different receiving water segment and not more than the 15 seconds of latitude/longitude from the location at the time of permit issuance (approximately 1518 feet-the level of accuracy required for outfall location in NPDES permit applications); and
 - ✓ implement sediment controls that are as effective or more effective than those in the originally approved SCP for any new or expanded reclamation areas, brushing and grubbing areas, topsoil stockpiling areas and regraded areas or replace ineffective controls with ones that will be effective in meeting the original intent of the SCP; and
 - ✓ continue to route all drainage through sediment ponds; and
 - ✓ are no less effective than those in any revised SCP approved by the NMMMD.
- e) Once an outfall ceases to receive runoff from "alkaline mine drainage" areas (as defined under 40 CFR Part 434, Subpart D) and "coal preparation plant and coal preparation plant associated areas" (as defined under 40 CFR Part 434, Subpart B) and 100% of the drainage area to an outfall that has been disturbed by mining meets the definition of "western alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded areas" (as defined at 40 CFR 434.80), a revised SCP and watershed model meeting the requirements contained at 40 CFR Part 434.82 shall be submitted to and approved by EPA and the NMMMD before an outfall may be reclassified and a sediment pond that served as a BMP under a SCP may be removed and the revised SCP becomes effective. If the revised SCP is approved by the NMMMD, the SCP is considered to meet EPA approval, unless EPA disapproves it within 60 days after receiving the revised SCP. The Permittee will also send any EPA approved SCP revisions to NMED. The approval of a revised SCP to address the reclassification of an outfall to western alkaline coal mining (as defined under 40 C.F.R. Subpart H) or the termination of an outfall will be considered a minor modification to the permit as described in Part II.C of this permit.
- f) Inspections and reporting on the SCP controls and implementation shall be conducted in accordance with the current NMMMD requirements and any requirements in the SCP. The Permittee shall submit annual pond certification reports, NMMMD mine inspection reports, and any reports required by the SCP to EPA and NMED annually. Reports prepared by the Permittee for compliance with NMMMD requirements may be used to satisfy any corresponding reporting requirements of the SCP

7. Additional Pollutants Monitoring Requirements

The permittee shall monitor all pollutants below at each outfall listed in Attachment A – "Coal Preparation & Associated Areas" and Attachment B – "Alkaline Mine Drainage" once per calendar year when first discharge occurs in the year. This monitoring requirement is not applicable to Sewage Lagoon Outfall. Data shall be reported along with DMR as stated under Part I.C.

| Pollutants | CAS Number | • | CAS |
|-------------------------|------------|---------------------------------------|-----------|
| | | | Number |
| Aluminum, total* | 7429-90-5 | Chloride | 1688-70- |
| Chromium III, dissolved | 16065-83-1 | Tritium | |
| Chromium VI, dissolved | 18540-29-9 | Nonylphenol | 84852-15- |
| Methylmercury | 22967-92-6 | Polychlorinated Biphenyls (PCBs)** | 1336-36-3 |
| Tributyltin (TBT) | Various | | |

^{*} Total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the NMED.

8. 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.

9. Human Heath Data Requirements

The permittee shall monitor all pollutants in Section V of Form 2C at each outfall listed in Attachment A – "Coal Preparation & Associated Areas" and Attachment B – "Alkaline Mine Drainage" once per permit term when first discharge occurs. All the pollutants shall be tested. This monitoring requirement is not applicable to Sewage Lagoon Outfall. Data shall be reported along with DMR as stated under Part I.C.

10. 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.

11. 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 stream.

B. SCHEDULES OF COMPLIANCE

None

^{**} 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.

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). Reports shall be submitted as follow:

| Applicable e-Reporting | e-Reporting Compliance Date | Reporting Frequency |
|-------------------------------------|-----------------------------|--------------------------------------|
| DMRs | Permit effective date | Quarterly |
| Sewer Overflow/Bypass Event Reports | By December 21, 2025 | Within five (5) days of the time the |
| and Anticipated Bypass Notices | | permittee becomes aware of |

- 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 <u>postmarked no later than</u> 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.

Total iron

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 3 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 lists in Attachments A, B or C during the permit term to add, terminate or reclassify a discharge that occurs during the anticipating course of the existing mining activities. This will be accomplished thru a minor modification of the permit in accordance with 40 CFR Part 122.63. 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 (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) | | |
|--------------------------------|--|--|
| REPORTED AS FINAL OUTFALL | All Outfalls in Attachments A, B & C | |
| CRITICAL DILUTION (%) | 100% | |
| EFFLUENT DILTION SERIES (%) | 32, 42, 56, 75 and 100 | |
| TEST SPECIES AND METHODS | Daphnia pulex/ Method 2021.0 (EPA/821/R- | |
| | 02-012 or latest version) | |
| SAMPLE TYPE | Defined in PART I | |

- 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 WET limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

2. REQUIRED TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA

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

| Condition/Criteria | Daphnia pulex | |
|------------------------------|------------------------------|--|
| # of replicates per | 4 | |
| concentration | | |
| # of organisms per replicate | 5 | |
| # or organisms per | 20 | |
| concentration | | |
| # of test concentrations per | 5 and a control | |
| effluent | | |
| Holding time * | 36 hours for first use | |
| Test Acceptability Criteria | ≥90% survival of all control | |
| | organisms. | |
| Coefficient of Variation ** | 40% or less, unless | |
| | significant effects are | |
| | exhibited. | |

^{*} 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.

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;

^{**}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.

- 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 two samples (flow-weighted composite if possible) from the outfall(s).
- 2) The permittee shall collect a second 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 |
|---|--------------------------|
| | Daphnia pulex |
| Enter a "1" if the No Observed Effect | TEM3D |
| Concentration (NOEC) for survival is | |
| less than the critical dilution, otherwise | |
| enter a "0". | |
| Report the NOEC value for survival | TOM3D |
| Report the highest (critical dilution or control) | TQM3D |
| Coefficient of Variation | |
| (If required) Retest 1 – Enter a "1" if the NOEC | 22418 |
| for survival is less than the critical | |
| dilution, otherwise enter "0". | |
| (If required) Retest 2- Enter a "1" if the NOEC | 22419 |
| for survival is less than the critical | |
| dilution, otherwise enter "0". | |
| (If required) Retest 3- Enter a "1" if the NOEC | 51444 |
| for survival is less than the critical | |
| dilution, otherwise enter "0". | |