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

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 I, 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 January 18, 2016.

This permit shall become effective on July 1, 2020

This permit and the authorization to discharge shall expire at midnight, June 30, 2025

Issued on June 25, 2020

Charles Maguire

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
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. 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.

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

POLLUTANT	30-DAY AVG, lbs/day, unless noted	7-DAY AVG 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	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

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 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.

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

POLLUTANT	30-DAY AVG, lbs/day, unless noted	7-DAY AVG 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	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

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 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.

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

POLLUTANT	30-DAY AVG, lbs/day, unless noted	7-DAY AVG 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	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 MPN)/100 ml (*6)	N/A	2507 cfu (or MPN)/100 ml	1/week	Grab
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:

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

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

Footnotes:
*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 PARAMETER	UNIT	EFFLUENT LIMITATION	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	Daily	Estimated (*1)
pH	s.u.	6.0 – 9.0	Daily	Instantaneous Grab (*2)

Footnotes:

*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 1-56 (listed in Attachments A, B and C; Excluded Outfalls 42-47, 53), 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 1-56 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 PARAMETER	EFFLUENT LIMITATION, Annual Max.	CONCENTRATION, 30-day average (mg/L)	CONCENTRATION, daily max (mg/L)	MEASUREMENT FREQUENCY	SAMPLE TYPE
TDS	< 366 tons/year*	Report	Report	Daily**	Grab

Footnotes:
* 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) × total discharge flow (MG) × 8.34 ÷ 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 pre-mined, 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 pre-mined, 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.

POLLUTANT	CAS NUMBER	POLLUTANT	CAS NUMBER
Aluminum, total recoverable*	7429-90-5	Zinc, dissolved	7440-66-6
Antimony, dissolved	7440-36-0	Adjusted gross alpha	
Arsenic, dissolved	7440-38-2	Radium 226 + Radium 228	
Boron, dissolved	7440-42-8	Tritium	
Cadmium, dissolved	7440-43-9	Aldrin	309-00-2
Chlorine residual	7782-50-5	Benzo(a)pyrene	50-32-8
Chromium III, dissolved	16065-83-1	Gamma-BHC (Lindane)	58-89-9
Chromium VI, dissolved	18540-29-9	Chlordane	57-74-9
Chromium, dissolved	7440-47-3	Diazinon	333-41-5
Cobalt, dissolved	7440-48-4	4,4'-DDT and derivatives	
Copper, dissolved	7440-50-8	Dieldrin	60-57-1
Cyanide, total recoverable	57-12-5	Dioxin	
Lead, dissolved	7439-92-1	alpha-Endosulfan	959-98-8
Manganese, dissolved	7439-96-5	beta-Endosulfan	33213-65-9
Mercury	7439-97-6	Endrin	72-20-8
Mercury, dissolved	7439-97-6	Heptachlor	76-44-8
Molybdenum, total recoverable	7439-98-7	Heptachlor epoxide	1024-57-3
Nickel, dissolved	7440-02-0	Hexachlorobenzene	118-74-1
Nitrite + Nitrate		Nonylphenol	84852-15-3
Selenium, dissolved	7782-49-2	Polychlorinated Biphenyls (PCBs)	1336-36-3
Selenium, total recoverable	7782-49-2	Pentachlorophenol	87-86-5
Silver, dissolved	7440-22-4	Tetrachloroethylene	127-18-4
Thallium, dissolved	7440-28-0	Toxaphene	8001-35-2
Vanadium, dissolved	7440-62-2	Dissolved hardness (as $CaCO_3$)	

* 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. 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

C. MONITORING AND REPORTING (MINOR DISCHARGERS)

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until 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 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.

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(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.

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 ACCUTE 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 shall 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):	All Outfalls in Attachments A, B & C
REPORTED ON DMR AS FINAL OUTFALL:	All Outfalls in Attachments A, B & C
CRITICAL DILUTION (%):	100
EFFLUENT DILUTION SERIES (%):	32, 42, 56, 75 and 100
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136

   Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate shall be used in the control and in each effluent dilution of this test.

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

   c. The conditions of this item are effective beginning with the effective date of the WET limit. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

   d. The purpose of additional tests (also referred to as ‘retests’ or confirmation tests) is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.

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

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:

Each toxicity test control (0% effluent) shall have a survival equal to or greater than 90%.

The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent).

The percent coefficient of variation between replicates shall be 40% or less in the critical dilution unless significant lethal effects are exhibited.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Daphnia pulex survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods EPA 821-R-02-012 or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

c. Dilution Water

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 where the receiving stream is classified as intermittent or where the receiving stream has no flow 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 2.a was run concurrently with the receiving water control;

the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);

the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3.a 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 (GRAB sample is authorized for this permit)

The permittee shall collect two grab samples from the outfall(s) listed at Item 1.a above.

The permittee shall collect a second grab sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee shall collect the grab samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee shall have initiated the toxicity test within 36 hours after the collection of the last portion of the first grab sample. Samples shall be chilled to 6 degrees Centigrade during collection, shipping, and/or storage.

The permittee shall collect the grab 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.

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 shall collect an effluent grab sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent grab sample collection duration and the static renewal protocol associated with the abbreviated sample collection shall be documented in the full report required in Item 3 of this section.

3. REPORTING

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA 821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report shall be submitted for agency review.

b. The permittee shall report the Whole Effluent Lethality values for the 30-Day Average Minimum and the 48 Hr. Minimum on the DMR for that reporting period in accordance with PART III.D.4 of this permit.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

A valid test for each species shall be reported on the DMR during each reporting period specified in PART I of this permit. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period shall be attached to the DMR for EPA review.

c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period in accordance with PART III.D.4 of this permit, 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.

✓ Daphnia pulex

- If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
- Report the NOEC value for survival, Parameter No. TOM3D.
- Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

If retests are required by NMED, enter the following codes:

- 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."