



**Region 6**  
**1445 Ross Avenue**  
**Dallas, Texas 75202-2733**

**NPDES Permit No. NM0022306**

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**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"),

Chevron Mining Inc. – Questa Mine  
P.O. Box 469  
Questa, NM 87556

is authorized to discharge from a facility located near Questa in Taos County, to the receiving water named

Red River, Waterbody Segment Code No. 20.6.4.122 of the Rio Grande Basin

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

This permit supersedes and replaces NPDES Permit No. NM0022306 issued on October 1, 2006.

This permit shall become effective on

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

Issued on

Prepared by

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William K. Honker, P.E.  
Director  
Water Quality Protection Division (6WQ)

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Isaac Chen  
Environmental Engineer  
Permits Section (6WQ-PP)

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PART I  
REQUIREMENTS FOR NPDES PERMITS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL 002

During the period beginning the effective date and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 002 – collected seepage from tailings facility.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY</u>	<u>DAILY</u>	<u>MONTHLY</u>	<u>DAILY</u>		
	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	Continuous	Record
Total Manganese	1.0	1.5	5.38	8.07	1/month (*1)	24-hr. composite
Fluoride	3.0	3.0	16.1	16.1	1/month (*1)	24-hr. composite
Total Suspended Solids	20	30	107.6	161.4	1/month (*1)	24-hr. composite
Total Mercury	1 µg/l	2 µg/l	0.005	0.011	1/month (*1)	24-hr. composite
Total Arsenic	0.207	0.310	1.11	1.67	1/month (*1)	24-hr. composite
Total Cadmium	1.19 µg/l	1.79 µg/l	0.0064	0.0096	1/month (*1)	24-hr. composite
Total Copper	0.029	0.044	0.158	0.237	1/month (*1)	24-hr. composite
Total Lead	0.057	0.086	0.308	0.463	1/month (*1)	24-hr. composite
Total Mercury	3.17 µg/l	4.76 µg/l	0.017	0.026	1/month (*1)	24-hr. composite
Total Molybdenum	5.28	7.92	28.4	42.6	1/month (*1)	24-hr. composite
Total Zinc	0.485	0.640	2.61	3.44	1/month (*1)	24-hr. composite
Total Aluminum	Report	Report	Report	Report	1/quarter (*1)	24-hr. composite

The pH limit range shall be no less than 6.6 standard units and no greater than 8.8 standard units and shall be monitored 1/day by grab sample.

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
WHOLE EFFLUENT TOXICITY TESTING (7-day Static Renewal)				
Ceriodaphnia dubia	Report	Report	1/3 Months (*2)	24-Hr Composite
Pimephales promelas	Report	Report	1/3 Months (*2)	24-Hr Composite

Note: (\*1) indicates effluent limitation guidelines-based limitations, and (\*2) indicates water quality-based effluent limitations. Only the most stringent limitations will be established in the final permit.

(\*3) Monitoring frequency increases to 1/day when milling operations take place.

(\*4) The frequency for the first year (12 months) is 1/3 months. If all tests pass, the frequencies for year 2 to 5 are 1/6 months for Ceriodaphnia dubia and 1/year for Pimephales promelas. If fails any test, frequency returns to 1/3 months for remainder of the permit term.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the final Outfall 002. The quarterly WET testing sample must be collected during the milling operation period if milling operations take place in that quarter.

Monitoring reduction associated with Compliance Schedule specified in Part I.B. of this permit: All monitoring requirements at Outfall 002 could be reduced to 1/6 months and WET tests could be reduced to 1/year after CMI demonstrates that: 1) CMI ceases conveying all waste streams to tailings facility; 2) discharges at Outfall 002 after cessation of water conveyance to the tailings facility are in compliance with effluent limitations and pass WET tests; and 3) the maximum discharge flow at Outfall 002 is below and not expected to exceed 0.645 MGD for the rest of the permit term.

OUTFALLS 004 and 005

During the period beginning the effective date and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfalls 004 and 005 – storm water.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/day	Measure by Weir
Chemical Oxygen Demand	125	125	---	---	1/day	Grab
Total Suspended Solids	20	30	---	---	1/day	Grab
Total Zinc	0.2	0.2	---	---	1/day	Grab
Total Arsenic	0.665	0.665	---	---	1/day	Grab
Total Cadmium	1.78 µg/l	1.78 µg/l	---	---	1/day	Grab
Total Copper	0.044	0.044	---	---	1/day	Grab
Total Lead	0.403	0.403	---	---	1/day	Grab
Total Mercury	1.4 µg/l	1.4 µg/l	---	---	1/day	Grab
Total Aluminum	3.87	3.87	---	---	1/day	Grab
Total Silver	0.012	0.012	---	---	1/day	Grab
Total Chlordane	2.4 µg/l	2.4 µg/l	---	---	1/day	Grab
Total Residual Chlorine	0.019	0.019	---	---	1/day	Grab

The pH limit range shall be no less than 6.6 standard units and no greater than 8.8 standard units and shall be monitored 1/day by grab sample.

All samples shall be collected at the outfall where overflows leave the catch basin whenever a discharge occurs.

New Outfalls 001

During the period beginning the start-up of Outfall 001 (no later than October 1, 2016) and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 – treated mills wastewater, mine drainage, storm water, captured groundwater and other sources of wastewaters.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/l, unless stated)		(lb/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	---	---	Report	Report	Continuous	Record
Total Suspended Solids	20	30	769	1153	1/month	24-hr. composite
Total Arsenic	0.039	0.059	1.50	2.25	1/ month	24-hr. composite
Total Cadmium	0.48 µg/l	0.48 µg/l	0.0186	0.0186	1/ month	24-hr. composite
Total Copper	0.029	0.029	1.12	1.12	1/ month	24-hr. composite
Total Lead	0.016	0.020	0.615	0.769	1/ month	24-hr. composite
Total Mercury	0.77 µg/l	1.01 µg/l	0.0296	0.0388	1/ month	24-hr. composite
Total Zinc	0.485	0.640	18.63	24.58	1/ month	24-hr. composite

The pH limit range shall be no less than 6.6 standard units and no greater than 8.8 standard units and shall be monitored 1/day by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
WHOLE EFFLUENT TOXICITY TESTING (7-day Static Renewal)				
Ceriodaphnia dubia	Report	Report	1/3 Months (*1)	24-Hr Composite
Pimephales promelas	Report	Report	1/3 Months (*1)	24-Hr Composite

Note: (\*1) The frequency for the first year (12 months) is 1/3 months. If all tests pass, the frequency for year 2 to 5 reduces to 1/6 months for Ceriodaphnia dubia and 1/year for Pimephales promelas. If fails any test, frequency returns to 1/3 months for remainder of the permit term.

#### Sampling Location

Samples shall be taken at Outfall 001, a point after the last Equalizer Tank but before reach the Red River.

**B. COMPLIANCE SCHEDULES**

The permittee shall comply with the following schedule of activities for cessation of waste streams to the tailings facility in order to substantially eliminate unauthorized tailings facility seepage and comply with effluent limitations established at Outfall 001:

- i. By 90 days from the effective date of the final permit (EDP): Commence engineering designs for cessation of waste streams to the tailings facility;
- ii. By 270 days from the EDP: Commence construction works which may include ground-breaking, start of new pipeline/facility installation, or start of significant modification of existing technology/facility;
- iii. By October 1, 2016: Totally cease conveying mill process wastewater, mine drainage, and captured groundwater or spring water to tailings facility; and
- iv. By October 1, 2016: Comply with the effluent limitations established at Outfall 001.

The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports shall expire when the discharge is in compliance with the effluent limitations.

<u>PROGRESS REPORT DATE</u>	<u>REPORTING PERIOD</u>
January 15	October - December
April 15	January - March
July 15	April - June
October 15	July - September

The quarterly progress reports shall address the progress towards cessation of waste streams to the tailings facility. Reports shall be submitted no later than “Progress Report Date” listed above. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. Compliance schedule progress reports shall be submitted to EPA and copy to NMED at addresses listed in Part III.D.4 of the permit.

**C. REPORTING OF MONITORING RESULTS**

Monitoring results must be reported to EPA on either the electronic or paper Discharge Monitoring Report (DMR) approved formats. Monitoring results can be submitted electronically in lieu of the paper DMR Form. To submit electronically, access the NetDMR website at [www.epa.gov/netdmr](http://www.epa.gov/netdmr) and contact the R6NetDMR.epa.gov in-box for further instructions. Until you are approved for Net DMR, you must report on the Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and other agencies as required. (See Part III.D.4 of the permit.)

Monthly monitoring report shall be summarized and reported no later than the 15th day of the month following the completed reporting period.

#### D. EFFLUENT CHARACTERISTIC ANALYSIS FOR NEW DISCHARGES

Beginning the start-up of the new water treatment and lasting through the expiration date of the permit, the permittee shall collect samples at Outfall 001 once per calendar year, during the period of mill operations, for analysis of effluent characteristics as listed below. Samples shall be taken at least six months apart or longer.

#### **RADIOACTIVITY, NUTRIENTS, AND CHLORINE**

Aluminum (T); Barium (D); Boron (D); Cobalt (D); Uranium (D); Vanadium (D); Ra-226 and Ra-228 (pCi/l); Strontium (pCi/l); Tritium (pCi/l); Gross Alpha (pCi/l); Total Residual Chlorine; Nitrate as N (mg/l); and Nitrite + Nitrate (mg/l).

#### **VOLATILE COMPOUNDS**

Acrolein; Acrylonitrile; Benzene; Bromoform; Carbon Tetrachloride; Chlorobenzene; Chlorodibromomethane; Chloroform; Dichlorobromomethane; 1,2-Dichloroethane; 1,1-Dichloroethylene; 1,2-Dichloropropane; 1,3-Dichloropropylene; Ethylbenzene; Methyl Bromide; Methylene Chloride; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Toluene; 1,2-trans-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; and Vinyl Chloride.

#### **ACID COMPOUNDS**

2-Chlorophenol; 2,4-Dichlorophenol; 2,4-Dimethylphenol; 4,6-Dinitro-o-Cresol; 2,4-Dinitrophenol; Pentachlorophenol; Phenol; and 2,4,6-Trichlorophenol.

#### **BASE/NEUTRAL**

Acenaphthene; Anthracene; Benzidine; Benzo(a)anthracene; Benzo(a)pyrene; 3,4-Benzofluoranthene; Benzo(k)fluoranthene; Bis(2-chloroethyl)Ether; Bis(2-chloroisopropyl)Ether; Bis(2-ethylhexyl)Phthalate; Butyl Benzyl Phthalate; 2-Chloronaphthalene; Chrysene; Dibenzo(a,h)anthracene; 1,2-Dichlorobenzene; 1,3-Dichlorobenzene; 1,4-Dichlorobenzene; 3,3'-Dichlorobenzidine; Diethyl Phthalate; Dimethyl Phthalate; Di-n-Butyl Phthalate; 2,4-Dinitrotoluene; 1,2-Diphenylhydrazine; Fluoranthene; Fluorene; Hexachlorobenzene; Hexachlorobutadiene; Hexachlorocyclopentadiene; Hexachloroethane; Indeno(1,2,3-cd)Pyrene; Isophorone; Nitrobenzene; n-Nitrosodimethylamine; n-Nitrosodi-n-Propylamine; n-Nitrosodiphenylamine; Nonylphenol; Pyrene; and 1,2,4-Trichlorobenzene.

#### **PESTICIDES AND PCBs**

Aldrin; Alpha-BHC; Beta-BHC; Gamma-BHC; Chlordane; 4,4'-DDT and derivatives; Dieldrin; Diazinon; Alpha-Endosulfan; Beta-Endosulfan; Endosulfan sulfate; Endrin; Endrin Aldehyde; Heptachlor; Heptachlor Epoixde; PCBs; and Toxaphene.

In addition to annual effluent characteristics samples as addressed above, the permittee must also take samples once per calendar quarter for metal analysis as listed below.

**METALS AND CYANIDE**

Arsenic (D); Beryllium (D); Cadmium (D); Chromium-III (D); Chromium-VI (D); Chromium (D); Copper (D); Lead (D); Manganese (D); Mercury (T & D); Molybdenum (T & D); Nickel (D); Selenium (T); Silver (D); Thallium (D); Zinc (D); and Cyanide (T). [Note: T means total recoverable or total and D means dissolved]

All analytical results shall be reported with next permit application renewal or upon EPA's request.