

**NPDES PERMIT NO. NM0022306
FACT SHEET**

**FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES**

APPLICANT

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

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

PREPARED BY

Isaac Chen
Environmental Engineer
NPDES Permits & Technical Branch (6WQ-PP)
Water Quality Protection Division
VOICE: 214-665-7364
FAX: 214-665-2191
EMAIL: chen.isaac@epa.gov

DATE PREPARED

March 30, 2016

PERMIT ACTION

Proposed modification of permit issued with an effective date of November 1, 2013 and an expiration date of October 31, 2018.

RECEIVING WATER BASIN

Red River – Segment No. 20.6.4.122 of the Red River Basin

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued September 30, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018, are:

A. Establish water quality-based combined loading effluent limitations at Outfall 101 which is a “virtual” outfall for Outfall 002 and New Outfall 001 as required by the amended State Section 401 certification.

II. BACKGROUND

On June 29, 2013, EPA proposed the permit reissuance to Chevron Mining, Inc. (CMI) for the wastewater discharges associated with the Questa Mine, covered under NPDES permit NM0022306. On September 12, 2013 New Mexico Environment Department (NMED) issued a Section 401 certification which conditionally required the loading limitations established in the 2006 permit not to be increased in the 2013 final permit. EPA issued the final permit decision on September 30, 2013 and incorporated State 401 certification conditions into the final permit.

Following the issuance of the certification by NMED on September 12, 2013, CMI appealed the certification to the Secretary of NMED under provisions of NMED rules found in NMAC 20.6.2.2001.H. The CMI appeal was specific to:

- 1) Outfall 002 concerning the limitations established for the collected seepage from the tailings facility and on the prohibition on increases in loadings which, due to changes in the collected seepage pumpback, could allow for additional flow and loading at this outfall, and
- 2) Outfall 004 and 005 regarding the possible constituents in and subsequent monitoring of the stormwater discharged at those outfalls.

On November 16, 2015, NMED issued an amended Section 401 certification which removes the original Condition #1 and addresses changes to the requirements for Outfall 002. The amended certification requires the total or combined loading limitations of New Outfall 001 and Outfall 002, which will be tracked via a new virtual Outfall 101, as below.

Pollutant	<u>Outfall 101: Combined Loading for Outfall 002 and New Outfall 001</u>	
	Monthly Average (Lbs/Day)	Daily Maximum (Lbs/Day)
Total Manganese	8.97	13.45
Total Arsenic	1.66	6.27
Total Cadmium	0.0162	0.0298
Total Copper	0.673	1.009
Total Lead	0.609	0.914
Total Mercury	0.00649	0.0119
Total Molybdenum	39.28	59.42
Total Zinc	8.604	10.532
Total Aluminum	1.28	5.80
Total Cyanide	0.0429	0.0640

The amended certification condition will result in changes of total loading limitations from the 2013 final permit as below.

<u>Change From 2013 Final Permit in Combined Loading for Outfall 002 and New Outfall 001</u>		
Pollutant	Monthly Average (Lbs/Day)	Daily Maximum (Lbs/Day)
Total Manganese	3.59	5.38
Total Arsenic	-1.35	-2.21
Total Cadmium	-0.0012	0.0032
Total Copper	No Change	No Change
Total Lead	No Change	No Change
Total Mercury	-0.0098	-0.0126
Total Molybdenum	6.40	9.80
Total Zinc	No Change	-2.084
Total Aluminum	1.11	5.55
Total Cyanide	No Change	No Change

Due to more stringent loading limitations caused by the amendment, the amended certification also requires that the monthly average loading effluent limitations for total arsenic, total cadmium, and total mercury, as well as the daily maximum loading effluent limitations for total arsenic, total mercury, and total zinc for New Outfall 001 must be reduced to the combined limits provided above. Due to less stringent loading limitations caused by the amendment, the monthly average and daily maximum loading effluent limitations for total manganese, total molybdenum, and total aluminum, as well as monthly average loading effluent limitation for total cadmium may increase, but not exceed, the combined limits provided above.

NMED did not amend the 2013 Certification based on CMI's appeal regarding Outfalls 004 and 005.

On the letter dated January 18, 2016, the permittee, CMI, requested that EPA modify the loading limitations for Outfall 002 and new Outfall 001 to conform to the amendment of State 401 Certification.

III. EPA's DECISIONS

Effluent Limitations and Monitoring Requirements Tables are revised for Outfall 002 and New Outfall 001 and a new Outfall 101 is created in order to incorporate the combined loading effluent limitations into the permit. The combined loading limits will cause different levels of changes relative to Outfall 002 and New Outfall 001, concentration limits need to be changed to reflect associated loading limits, if appropriate.

Loading limits, but no concentration limits, are established for a new combined loadings at Outfall 101, which is a "virtual" outfall and not an actual physical outfall with discharges of its own. Outfall 101 will be used to enable reporting of combined loadings from New Outfall 001 and Outfall 002 on a Discharge Monitoring Report and track compliance with the combined loadings limits. Because concentration limitations established at New Outfall 001 and at Outfall 002 in the 2013 proposed and final permits were calculated based on estimated flow rates and applicable WQS to ensure that discharges at New Outfall 001 and Outfall 002 will not cause or contribute to a violation of NM WQS for designated uses in Red River, EPA determines to retain those limitations in this permit modification and the loading limits for these outfalls are replaced with "Report". Total molybdenum concentration limitations (i.e., 3.30 mg/l and 5.03 mg/l for monthly average and daily maximum limits, respectively) at

Outfall 002 reflect a minor modification under 40 CFR 122.63 to correct a typographical error. These correct concentrations were included in the response to comments for the final permit issued September 30, 2013.

This permit modification action is in compliance with 40 CFR §124.55(a)(2) to incorporate the conditions of the November 16, 2015, amended State 401 certification into the 2013 final permit. EPA does not propose any other changes beyond the scope of the amended State certification condition. The NMED has completed the public notice process for the certification amendment and the final certification was not appealed.

IV. ANTIDegradation

The NMAC, Section 20.6.4.8 “Antidegradation Policy and Implementation Plan” sets forth the requirements to protect designated uses through implementation of the State WQS. The limitations and monitoring requirements set forth in the proposed permit are developed from the State WQS and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2. NMED states, in the Section 401 certification, that “...any increase in loading would be considered a *de minimus* discharge, and further Tier 2 review was determined to not be required in accordance with the Antidegradation Procedure.” NMED SWQB has determined that the increase in total loading for total manganese, total molybdenum, total aluminum (both monthly average and daily maximum limits); and total cadmium (daily maximum limit only) listed above would cause $\leq 10\%$ reduction in available assimilative capacity. NMED also states that compliance with the terms and conditions of the permit with inclusion of the conditions in the certification will be in compliance with the antidegradation policy.

V. ANTIBACKSLIDING

The proposed permit modification is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit. The CWA Section 402(o)(2)(A) allows exemption due to material and substantial alternations or additions to the permitted facility and Section 402(o)(2)(B) allows exemption due to new information; and 40 CFR §122.44(l)(2)(i)(A) and (B) allow similar exemptions for less stringent effluent limitations. As the results of the amended certification condition, loading limitations for total manganese, total cadmium, total molybdenum, and total aluminum have been increased from the 2013 final permit. But, because the antibacksliding baselines are the 2006 issued permit, EPA has compared the total loading limitations under this amended certification with the 2006 permit for these four parameters as below:

	2006 Permit Monthly Ave (lb/day)	Proposed Permit Monthly Ave (lb/day)	2006 Permit Daily Max (lb/day)	Proposed Permit Daily Max (lb/day)
Parameter	Outfalls 001&002	Outfalls 001&002	Outfalls 001&002	Outfalls 001&002
Manganese	$35.8+2.9= 38.7$	8.97	$53.7+4.38= 58.08$	13.45
Cadmium	$0.107+0.009= 0.116$	0.0162	$0.157+0.013= 0.17$	0.0298
Molybdenum	$35.8+4.13= 39.93$	39.28	$71.6+6.2= 77.8$	59.42
Aluminum	$2.075+0.169= 2.244$	1.28	$3.11+0.25= 3.36$	5.80 (*)

(*) As noticed in the comparison above, the daily maximum loading for total aluminum in this permit modification is greater than the loading in the 2006 permit. The 2006 loading limitation for aluminum was based on dissolved aluminum water quality standard and the receiving water, Red River, was listed as impaired by dissolved aluminum. However, EPA approved the total recoverable aluminum standard in 2012 and also the receiving stream, Red River, has been delisted from aluminum-impaired Section 303(d) list since new aluminum standard was developed. In fact, EPA did not require monitoring of aluminum for New Outfall 001 and required “report only” for Outfall 002 in the 2013 draft permit because EPA determined that discharges from those two outfalls would have no reasonable to cause or contribute to a violation of WQS for aluminum. Because the increased loading limitation is due to substantial alternation and addition of the facility as well as new water quality standard for total recoverable aluminum, such an increase is allowable and complies with EPA’s antibacksliding policy.

VI. FINAL DETERMINATION

Because this permit modification action only affects Part I, Section A of the 2013 final permit, in accordance with 40 CFR §124.5(c)(2), only Part I, Section A of the permit is made available for review, and only the affected parts of Section A are open for public comments. The public notice describes the procedures for the formulation of final determinations.

VII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit modification:

Original State CWA Section 401 certification letter, dated September 12, 2013.

Revised State CWA Section 401 certification letter, dated November 16, 2015.

Chevron Mining Inc. letter to EPA, dated January 18, 2016.

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through November 20, 2012.

State of New Mexico 303(d)/305(b) Integrated Report, 2012 - 2014.

USEPA Approval, Withdrawal of the Red River (Rio Grande to Placer Creek) Dissolved Aluminum Total Maximum Daily Load (TMDL), New Mexico Statewide Water Quality Management Plan Update, January 16, 2012.