

NPDES PERMIT NO. NM0030180
STATEMENT OF BASIS

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

APPLICANT: Chevron Mining, Inc.
Ancho-Gachupin Brackett Mine
116 Inverness Drive East
Suite Englewood, CO 80112

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

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

PERMIT ACTION: Proposed reissuance of the current National Pollutant Discharge Elimination System (NPDES) permit issued June 10, 2004, with an effective date of July 1, 2004 and an expiration date of December 31, 2008.

DATE PREPARED: March 16, 2009

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of December 5, 2008.

CERTIFICATION: The permit is in the process of certification by the State agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service; and to the National Marine Fisheries Service prior to the publication of that notice.

FINAL DETERMINATION: The public notice describes the procedures for the formulation of final determinations.

I. PROPOSED CHANGES FROM PREVIOUS PERMIT

It is proposed that the current permit be reissued for a 5-year term.

The changes from the current permit issued June 10, 2004, with an effective date of July 1, 2004 and an expiration date of December 31, 2008 are:

A. Delete monitoring requirements for total selenium, total vanadium, dissolved vanadium, gross alpha and pH; and

B. Add effluent limitation and monitoring requirement for total aluminum.

II. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code(s) 1221, the applicant operates a post-operative coal mine area. The mine received a Phase II bond release. On-going activities include routine inspection and sampling of monitoring wells and impoundments, vegetative cover sampling, and ground inspections. Future activities may include the breaching or removal of temporary impoundments as required by the land owner.

III. DISCHARGE LOCATION

As described in the application, the Ancho Mine is located in York Canyon, end of N.M. Highway 555, Colfax County, New Mexico. Discharges of mine drainage are to Salyers Canyon, Ancho Canyon, Gachupin Canyon, Brackett Canyon, and Vermejo River, thence to the Canadian River in the Segment No. 20.6.4.305 of Canadian River Basin.

IV. RECEIVING WATER USES

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, amended through August 1, 2007). The designated uses of intermittent waters (20.6.4.98) are livestock watering, wildlife habitat, aquatic life, and secondary contact. EPA was unable to approve section 20.6.4.98 of the NM WQS because the State did not submit a Use Attainable Assessment (UAA) to support an aquatic life designation that does not meet the CWA §101(a)(2) objective as required by 40 CFR 131.10(j)(1). The CWA sections 101(a)(2) and 303(c) require water quality standards to provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, wildlife, and recreation in and on the water, functions commonly referred to as "fishable/swimmable" uses. EPA's current water quality regulation effectively establishes a rebuttable presumption that "fishable/swimmable" uses are attainable and therefore should apply to a water body unless it can be demonstrated that such uses are not attainable. Prior to submittal of UAA, the designated uses of warmwater aquatic community and primary contact recreation are applicable to the receiving water.

V. DISCHARGE DESCRIPTION AND OPERATIONS

A quantitative description of the discharge(s) is described in the EPA Permit Application Form 2C. The facility submitted information in its application that describes the nature of the permitted discharge. The 2006 DMR summary indicated the following characteristics.

	Outfall 004	005	006	011
Average Flow (MGD)	0.01	0.0076	0.0034	0.0285
Dissolved Aluminum (750 µg/l*)	3740	14500	500**	370**
Total Selenium (5 µg/l*)	ND	ND	ND**	ND**
Total Vanadium (100 µg/l*)	20	50	30**	ND**
Dissolved Vanadium (100 µg/l*)	ND	20	ND**	ND**
Gross Alpha (15 pCi/l*)	8.9	3.8	9.3**	2.9**
pH (6 -9 s.u.*)	8.0	7.8	7.5**	8.2**

* Applicable NM water quality standards or effluent limitations, and
 ** 2007 and/or 2008 effluent data.

VI. TENTATIVE DETERMINATION

On the basis of preliminary staff review and after consultation with the State of New Mexico, the Environmental Protection Agency has made a tentative determination to reissue the permit for the discharge described in the application.

VII. PROPOSED PERMIT CONDITIONS

The specific effluent limitations and/or conditions will be found in the proposed permit.

VIII. DRAFT PERMIT RATIONALE

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

REASON FOR PERMIT ACTION

The current permit was issued June 10, 2004, with an effective date of July 1, 2004 and an expiration date of December 31, 2008. The permit renewal application was received on April 16, 2008 and additional information received on June 18, 2008.

It is proposed that the current permit be reissued for a 5-year term following regulations promulgated at 40 CFR 122.46(a). This approach coordinates with the EPA Basin Statewide Management Approach to Permitting in New Mexico, adopted March 2, 2000. This program

also known as the Statewide Basin Management Approach to permitting is a comprehensive framework to better coordinate and integrate water resource management activities geographically by river basin. Regulations found at 40 CFR 122.46(c) allow EPA to issue any permit for a duration that is up to the full allowable 5 year term.

TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at 40 CFR 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a) or on State water quality standards and requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR 122.44(a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

2. Effluent Limitations

The 40 CFR 434, subpart H applies to drainage at western coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas where the discharge, before any treatment, meets all the following requirements:

- (1) pH is equal to or greater than 6.0;
- (2) Dissolved iron concentration is less than 10 mg/l; and
- (3) Net alkalinity is greater than zero.

The best practical technology (BPT) and best available technology (BAT) effluent limitations applied to western alkaline coal mining are that the operator must have a site-specific Sediment Control Plan that is designed to prevent an increase in the average annual sediment yield from pre-mined, undisturbed conditions. The draft permit renewal requires the permittee comply with its Sediment Control Plan. For areas where impoundments have been (or will be) removed, the draft permit also proposes to add quarterly reclamation inspection requirements in conjunction with vegetation and erosion studies to ensure that the permittee take appropriate steps to well maintain reclamation processes and minimize erosion problems.

3. Monitoring Frequencies for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity 40 CFR 122.48(b) and to assure compliance with permit limitations contained in 40 CFR 122.44(i)(1). The permittee is required to submit annual sediment control reports. The draft permit also proposes that the permittee shall conduct quarterly reclamation inspections and submit inspection reports.

WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan.

2. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992, and the EPA Region 6 WET Permitting Strategy on May 1, 2005. The Regional policy and strategies are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State water quality standard resulting in nonconformance with the provisions of 40 CFR 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

3. Implementation

The Region is currently implementing its post third round policy in conformance with the Regional strategies. The NPDES permit contains technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

4. State Water Quality Numerical Standards

(a) General Comments

The use-specific numerical criteria set forth in 20.6.4.98 and 20.6.4.900 of the State Water Quality Standards is applicable to this discharge. The facility ceased mining in 2004 and has been undergone reclamation and received Phase II Bond release. When EPA drafted the permit renewal in 2002, EPA conducted a reasonable potential (RP) screening and established effluent limitations based on RP screening. EPA modified the permit in 2004 as new information on dissolved aluminum became available. Because the facility has been undergone reclamation process, EPA determined no RP for parameters that were detected below applicable WQS. Based on data reported in DMRs, EPA determined that the permittee has not demonstrated "no

RP” for dissolved aluminum.

(b) Revised Water Quality Standards

The NM WQCC adopted new WQS for the State of New Mexico. The revised WQS as amended through August 1, 2007 are available on the NMED's website at:

<http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0004.pdf>. The WQCC established the revised WQS in accordance with, and under authority of, the NM Water Quality Act [Chapter 74, Article 6, NMSA 1978 Annotated]. The WQS have been approved by EPA in accordance with Section 303 of the CWA.

(c) Water Quality-based Limits

In general, the State WQS requires that the discharge protect acute aquatic toxicity in all reaches. In order to implement the acute water quality criteria, the discharge will have to meet applicable standards at the end-of-pipe. The critical dilution is 100%. The WQS also requires the discharge meet chronic standards at the mixing zone. Because the discharge of storm runoffs is intermittent and likely causes acute, instead of chronic, impacts on aquatic life in the receiving stream, only acute, not chronic, aquatic life criteria applies. Due to RP, effluent limitation based on acute criteria for total aluminum is established in the draft permit. 40 CFR 122.45(c) requires effluent limitations for a metal to be expressed in terms of “total recoverable metal” as defined in 40 CFR part 136. When the partition coefficient is not available to convert a dissolved metal standard to a total recoverable metal standard, any standards in dissolved form will be used to develop water quality-based limitations expressed in total form. Monitoring and reporting requirements for dissolved aluminum are retained to collect data for future RP analysis. If the permittee provides new representative data for dissolved aluminum during the public notice comment period, EPA would re-evaluate the RP.

Because effluent data demonstrated that the infrequent storm water discharges have met the water quality-based limitations for total selenium, total and dissolved vanadium, gross alpha and pH, monitoring requirements for those parameters and total vanadium are proposed to be deleted.

(d) Schedule of Compliance

A two-year compliance schedule is proposed for complying with the effluent limitation of total aluminum. Effluent limitation and monitoring requirement for total aluminum was removed from 2002 issued permit through modification process in 2004 based on effluent data available in 2004. The evidence of RP may be due to failure of reclamation or other types of management control, so a two-year compliance schedule is appropriate for the permittee to identify and correct the problem.

(e) Monitoring Frequencies for Limited Pollutants

Monitoring frequency of 1/month for total and dissolved aluminum is proposed.

- (f) Aquatic Toxicity Testing
- (1) General Comments

The State has established narrative criteria, which in part, state that:

"Surface waters of the State shall be free of toxic substances attributable to discharges in amounts, concentrations or combinations which affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms;..." (NM Standards 20.6.4.13 .F)

In a letter from Marcy Leavitt, NMED, to Claudia Hosch, EPA, December 16, 2005, NMED provided Narrative Toxics Implementation Guidance – Whole Effluent Toxicity, (NTIG-WET), an update to the 1995 Implementation Guidance.

- (2) Permit Action

Because the facility ceased mining and any potential discharge would be storm water runoffs without contact of any mining activity, whole effluent toxicity testing is not proposed.

IX. IMPAIRED WATER- 303(D) LIST

Vermejo River from Canadian River to Rail Canyon is not supporting for marginal warmwater aquatic life and the probable cause is low flow alteration due to diversion. Because the probable cause is not due to pollutants, no additional limitations are proposed for the discharge.

X. ANTIDegradation

The New Mexico 20.6.4.8 NMAC "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards 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 are protective of the assimilative capacity of the receiving waters, and are protective of the designated uses of that water.

XI. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet Antibacksliding provisions of the Clean Water Act, Section 402(o) and 40CFR122.44(l)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance.

XII. HISTORICAL AND ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The facility ceased all mining activities and is undergoing reclamation process. Historical and archeological structures are not expected by this permit.

XIII. ENDANGERED SPECIES

The Ancho mine is part of Chevron's York Canyon Complex. This permit action only authorizes discharges of mine drainage from reclamation areas during precipitation events. Because the authorized discharge is for stormwater only, with no process water included, EPA believes that this permitting action will not make threatened or endangered species more vulnerable to ingestion of toxic waste streams. In deed, the effluent characteristics have demonstrated that potential discharges would meet applicable water quality standards for wildlife habitat use.

Based on previous consultation (Cons. #2-22-94-I-155) and EPA's previous "effect" analysis, EPA determines that the reissuance of this permit has "no effect" on the endangered or threatened species listed in Colfax County.

XIV. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit in accordance with the provisions of 40 CFR 124.5.

XV. VARIANCE REQUESTS

No variance requests have been received.

XVI. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR 124.9:

A. APPLICATION(S)

- EPA application consolidated form 2C dated April 11, 2008. Supplemental application data dated June 17, 2008.

B. STATE WATER QUALITY REFERENCES

- The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, amended through August 1, 2007).