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Deputy Secretary

JAMES H. DAVIS, Ph.D.
Director
Resource Protection Division

Certified Mail – Return Receipt Requested

August 17, 2012

Mr. David Partridge, Vice President
Chevron Mining, Inc.
116 Inverness Drive East Suite 207
Englewood, Colorado 80112

Re: Minor Non-Municipal, SIC 1221, NPDES Compliance Evaluation Inspection, Chevron Mining, Inc./Ancho Mine, NM0030180, August 7, 2012

Dear Mr. Partridge,

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by USEPA to determine compliance with the national Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications and compliance schedules.

My thanks for the help and cooperation of Mr. Cameron Twing of Trihydro Corporation during this inspection. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 222-9587.

Sincerely,
/s/ Sarah Holcomb
Sarah Holcomb
Surface Water Quality Bureau

CC: Carol Peters-Wagnon, USEPA (6EN- WM) by email
Rashida Bowlin, USEPA (6EN-AS) by email
Diana McDonald, USEPA (6EN-WM) by email
Larry Giglio, USEPA (6EN-P) by email
Dave Clark, EMNRD, MMD, Coal Program, by email
Steve Linse, Trihydro Corporation, by email
Bob Italiano, NMED District II Manager, by email
Hannah Branning, USEPA (6EN-AS), by email

Darlene Whitten-Hill, USEPA (6EN-AS), by email



Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 3 0 1 8 0 11 12 1 2 0 8 0 7 17 18 C 19 S 20 2					
Remarks					
B I T U M I N O U S C O A L M I N E					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 3	71 N	72 N	73	74 75 80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) CHEVRON MINING, INC/ANCHO MINE, 3310 HIGHWAY 555, RATON, NM, COLFAX COUNTY; FROM I-25, TAKE EXIT 450 AT RATON. TRAVEL 33 MILES WEST ON HIGHWAY 555. OFFICE: 216 PARK AVENUE, RATON, NM 87740.	Entry Time /Date 0730 hours / 8-7-2012	Permit Effective Date 7-1-2009
	Exit Time/Date 1230 hours / 8-7-2012	Permit Expiration Date 6-30-2014
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Cameron Twing, Trihydro Corporation (307) 745-7474	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. David Partridge, Vice President, Chevron Mining, Inc. 116 Inverness Drive East, Arvada, CO 80112	At Mine Office:	
	Lat 36° 52 12.3 Long -104° 55 15.2 SIC 1221	
Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> *		

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	S	Operations & Maintenance	N	CSO/SSO
M	Records/Reports	M	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
M	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

- Please see report for further explanations.

Name(s) and Signature(s) of Inspector(s) Sarah Holcomb /s/ Sarah Holcomb	Agency/Office/Telephone/Fax NMED/SWQB 505-222-9587	Date 8-17-2012
Signature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers	Date

EPA Form 3560-3 (Rev. 9-94) Previous editions are obsolete.

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED NO)

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

Y N NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

Y N NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

Y N NA

4. ALL DISCHARGES ARE PERMITTED

Y N NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.
DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED YES)

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

Y N NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

S M U NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

Y N NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

Y N NA

c) ANALYTICAL METHODS AND TECHNIQUES.

Y N NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

Y N NA

e) DATES AND TIMES OF ANALYSES.

Y N NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

Y N NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

S M U NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.

S M U NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

Y N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.
DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED NO)

1. TREATMENT UNITS PROPERLY OPERATED.

S M U NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

S M U NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.

S M U NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.

S M U NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE

S M U NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.

S M U NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

S M U NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

Y N NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

Y N NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

Y N NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? Y N NA
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? Y N NA
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? Y N NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? Y N NA
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT? Y N NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED YES).
 DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. Y N NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. Y N NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT. Y N NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. Y N NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. Y N NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE Y N NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. Y N NA

b) PROPER PRESERVATION TECHNIQUES USED. Y N NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. Y N NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? Y N NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED NO).
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE Estimate

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. Y N NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. Y N NA

4. CALIBRATION FREQUENCY ADEQUATE. Y N NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES. Y N NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. Y N NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. Y N NA

6. HEAD MEASURED AT PROPER LOCATION. Y N NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. Y N NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED NO).
 DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) Y N NA

SECTION F - LABORATORY (CONT'D)

- 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED Y N NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. S M U NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE. S M U NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 100 % OF THE TIME. Y N NA
- 6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME. Y N NA
- 7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME TESTAMERICA LABORATORIES, INC.
 LAB ADDRESS 4955 YARROW STREET, ARVADA, CO 80002
 PARAMETERS PERFORMED ALUMINUM, DISSOLVED ALUMINUM, HARDNESS

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. S M U NA (FURTHER EXPLANATION ATTACHED YES.)

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
ALL							NO FLOW

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED NO.)
 DETAILS:

- 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. S M U NA
- 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. S M U NA
- 3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: _____ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED .)

- 1. SAMPLES OBTAINED THIS INSPECTION. Y N NA
- 2. TYPE OF SAMPLE OBTAINED
 GRAB _____ COMPOSITE SAMPLE METHOD _____ FREQUENCY _____
- 3. SAMPLES PRESERVED. Y N NA
- 4. FLOW PROPORTIONED SAMPLES OBTAINED. Y N NA
- 5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. Y N NA
- 6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. Y N NA
- 7. SAMPLE SPLIT WITH PERMITTEE. Y N NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.

Y N NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.

Y N NA

**Compliance Evaluation Inspection
Chevron Mining, Inc./Ancho Mine
NPDES Permit NM0030180, August 7, 2012**

Further Explanations

Introduction

On August 7, 2012, a Compliance Evaluation Inspection (CEI) was conducted at the Chevron Mining, Inc. (former Pittsburg & Midway Coal Mining Company)/Ancho Mine located near Raton, New Mexico by Sarah S. Holcomb of the State of New Mexico Environment Department (NMED). The Ancho Mine is classified as a minor discharger under the federal Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit number NM0030180. This permit allows process water and mine drainage discharges to receiving waters named Ancho/Gachupin/Brackett Canyons which are various tributaries to the Vermejo River; thence to the Canadian River in Segment 20.6.4.309 NMAC of the Canadian River Basin.

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA) each year. The purpose of this inspection is to provide USEPA with information to evaluate the permittee's compliance with their NPDES permit. This report is based on review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal information provided by the permittee's representatives.

An entrance interview was conducted with Mr. Cameron Twing of Trihydro Corporation at approximately 0730 hours on August 7, 2012. Trihydro Corporation is the reclamation and operational contractor for Chevron. The inspector made introductions, presented her credentials and discussed the purpose of the inspection.

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Section B – Recordkeeping and Reporting – Overall rating of “Marginal”

The permit requires in Part I.A.1:

Effluent Characteristics		Discharge Limitations				Monitoring Requirements	
		lbs/day, unless noted		mg/l, unless noted		Measurement Frequency	Sample Type
Pollutant	Storet Code	30-day avg	Daily max	30-day avg	Daily max		
Flow	50050	Report MGD	Report MGD	***	***	1/month	Estimate
Total Aluminum	01105	N/A	N/A	N/A	0.75	1/month	Grab
Dissolved Aluminum	01106	N/A	N/A	N/A	Report	1/month	Grab
Reclamation Inspection		Report		Report		1/quarter	Study

The permit requires in Part I.A.1:

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfalls 004-007, 011-012, 014-023, 030-034, and 037.

The permit requires in Part I.A.1:

If there is no discharge event at this outfall during the sampling month, place an “X” in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

Findings for Recordkeeping and Reporting:

Chevron/Trihydro is utilizing NetDMR instead of paper DMRs, and has been since 2010.

During the records review portion of this inspection, it was noted that the requirement to monitor for dissolved aluminum was not met for the sample taken at Outfall 005 on 9-8-2011. This particular sample was analyzed for total aluminum in addition to hardness as CaCO₃, but was not analyzed for dissolved aluminum. The chain of custody included with this sample was marked for analysis of dissolved metals, but the analysis never happened. The way this particular result was reported through the NetDMR system was the value obtained for total Al (3.8 mg/L) which was correct, but the dissolved Al number was reported as a non-detect, which is not accurate because dissolved Al was never analyzed. This mistake should be fixed as soon as possible.

The facility may not have sampled other outfalls on the site when there has been a discharge. The facility’s sampling procedure is discussed in Section D of this report, but either due to the time lapse between driving from Raton to the mine site, or due to adverse weather conditions, samples may have been missed from various outfalls in the Ancho-Gachupin-Brackett complex. The facility must figure out how to collect samples when there is a discharge.

The facility is required to submit quarterly reclamation inspection reports, as indicated above. During records review, the inspector found that a few of these reports were missing. The inspector reviewed files from 2011 and 2012. The first quarterly report for 2011 was submitted on 1-21-2011, however, the second quarterly report is missing. The annual report was submitted on 9-27-2011, and the fourth quarterly report was submitted on 1-9-2012. For 2012, the first quarterly report was submitted on 4-23-2012, however, the inspector could not find that the second quarterly report for 2012 (which was due on July 28, 2012) had been submitted.

Section D – Self Monitoring – Overall rating of “Marginal”

The permit requires in Part I.A.1:

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfalls 004-007, 011-012, 014-023, 030-034, and 037.

Findings for Self-Monitoring:

The inspector discussed various aspects of the site with the facility’s representative during the inspection with respect to sampling methodology, most of which will be discussed in another section of this report. The facility’s general procedure for sampling is that one Trihydro employee is stationed in Raton and is tasked with sampling the outfalls of the site when he estimates that it is raining at the mines. The York Canyon Complex is about 33 miles from Raton. In discussing this with the facility representative, he indicated that it is possible that there are discharges from outfalls that may not have been sampled and analyzed. The inspector discussed with the facility representative other possible options for collecting samples from outfalls, such as single stage samplers, which do not require a human to be there and also may catch the first flush of stormwater from the site. The facility representative indicated that this was a discussion that he would have with Chevron/Trihydro staff. This is pertinent to reporting in the respect that the inspector questioned why the outfalls were all being reported as “No Discharge” when it was possible that there could have been discharge from an outfall.

Section G – Effluent/Receiving Waters – Overall rating of “Marginal”

The permit requires in Part I.A.1:

Effluent Characteristics		Discharge Limitations				Monitoring Requirements	
		lbs/day, unless noted		mg/l, unless noted		Measurement Frequency	Sample Type
Pollutant	Storet Code	30-day avg	Daily max	30-day avg	Daily max		
Total Aluminum	01105	N/A	N/A	N/A	0.75	1/month	Grab

Dissolved Aluminum	01106	N/A	N/A	N/A	Report	1/month	Grab
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In 20.6.4.900.I(1) NMAC, it states:

Acute aquatic life criteria for metals. The equation to calculate acute criteria in ug/L is . Except for aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. The equation parameters are as follows:

<i>Metal</i>	<i>m_A</i>	<i>b_A</i>	<i>Conversion factor (CF)</i>
<i>Aluminum</i>	<i>1.3695</i>	<i>1.8303</i>	

Findings for Effluent/Receiving Waters:

During review of the sampling data submitted into the NetDMR system, it was evident that there are outfalls from the site that regularly have Aluminum exceedances. Please see the attached Excel spreadsheet (Exhibit 1) documenting the sampling results from the last two years. Specifically, this issue came up for two outfalls within the Ancho permit area, Outfall 005 and Outfall 007.

Outfall 005 consists of a series of two settling ponds with a spillway in between, and the outfall. The facility representative indicated that they have had issues getting vegetation established in this area, and their latest attempt is more straw mulch applied to encourage seed growth. (Please see Photo #1.) It is evident from the data that the effluent is improving, however the latest sampling result is about five times higher than the permit limit.

Outfall 007 consists of another series of two settling ponds. This particular outfall is located in an area where there is a large overburden pile next to the pond. (Please see Photo #2) The inspector questioned whether the overburden could be contributing to the Al exceedances at this particular outfall and whether the facility had done anything to cover or prevent stormwater from coming into contact with that pile. The facility representative indicated that it would be an issue for them to look into.

The Standards for Intrastate and Interstate Surface Waters, 20.6.4 NMAC, was reviewed and revised, then approved by the Water Quality Control Commission on January 14, 2011. The standards were also approved by USEPA on April 18, 2011. The standards for aluminum previously were based on dissolved aluminum criteria for both acute and chronic aquatic life uses. The change to the new standard will utilize the total recoverable aluminum after filtration (to minimize mineral phases as specified by the department) for Clean Water Act purposes in the next permit revision. While the inspector did not run through the calculations to see if this discharge would then be compliant, this could make a difference in the next issuance of this permit.

NMED/SWQB

Official Photograph Log

Photo # 1

Photographer: Sarah Holcomb	Date: 8-7-2012	Time: 1118 hours
City/County: Raton/Colfax County		
Location: Chevron/Ancho Mines, 33 miles west of Raton, NM		
Subject: Outfall 005 in Ancho. This photo shows the straw mulch applied to the area behind the pond (visible at the back of the photo, with the light tan color).		



NMED/SWQB

Official Photograph Log

Photo # 2

Photographer: Sarah Holcomb	Date: 8-7-2012	Time: 1133 hours
City/County: Raton/Colfax County		
Location: Chevron/Ancho Mines, 33 miles west of Raton, NM		
Subject: Outfall 007 in Ancho. This photo shows the overburden pile next to the outfall pond. No attempt has been made to cover or somehow divert water from coming into contact with this pile prior to discharge from the site. This could contribute to the AI exceedances from this outfall.		

