



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT
Surface Water Quality Bureau

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us



RYAN FLYNN
Cabinet Secretary-Designate

BUTCH TONGATE
Deputy Secretary

Certified Mail - Return Receipt Requested

June 25, 2013

Scott Jones, General Manager
San Juan Coal Company
P.O. Box 561
Waterflow, New Mexico 87421

RE: Minor Non-Municipal, SIC 1222, NPDES Compliance Evaluation Inspection, BHP Billiton San Juan Coal Company / San Juan Mine, NM0028746, May 23, 2013

Dear Mr. Jones:

Enclosed please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) 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, required to 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 the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency Region VI
Water Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Bruce Yurdin, Program Manager
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact me at 505-827-0418.

Sincerely,

/s/ Erin S. Trujillo

Erin S. Trujillo
Surface Water Quality Bureau

- cc: Rashida Bowlin, USEPA (6EN) by e-mail
Hannah Branning and Darlene Whitten-Hill, USEPA (6EN-WC) by e-mail
Jan Walker, USEPA (6EN-WC) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Brent Larsen and Larry Giglio, USEPA (6WQ-PP) by e-mail
Robert Italiano, NMED District II Santa Fe by e-mail
David Clark and Monte Anderson, EM&NRD, MMD, Coal Program by e-mail



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 2 8 7 4 6 11 12 1 3 0 5 2 3 17 18 C 19 S 20 2					
Remarks					
S U B - 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 2	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) BHP Billiton New Mexico Coal dba San Juan Coal Company, San Juan Mine, 300 County Road (CR) 6800, Waterflow, New Mexico (16 miles West of Farmington, North of US 64). San Juan County	Entry Time /Date ~0750 hours / 05/23/2013	Permit Effective Date August 1, 2006
	Exit Time/Date ~1335 hours / 05/23/2013	Permit Expiration Date December 31, 2010
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) -Steve Perkins, Superintendent Env. Permitting & Technical Services, BHP Billiton -Paul A. Nazaryk, Superintendent Env. & Regulatory Affairs, BHP Billiton / 505-589-2217 -Edward Epp, Env., BHP Billiton / 505-598-3327, cell 505-598-3327 -Warren Rider, Env. Specialist, BHP Billiton / 505-598-4275, cell 505-215-9196 -Shawn Smith, Env. Specialist, BHP Billiton San Juan Mine / 505-598-3376	Other Facility Data Entrance Gate Latitude 36.795383° Longitude -108.436504° SIC 1222	
Name, Address of Responsible Official/Title/Phone and Fax Number Scott Jones, General Manager, San Juan Coal Company, P.O. Box 561 Waterflow, New Mexico 87421 / 505-598-2815	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	U	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	U	Laboratory	N	Storm Water	N	Other:

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

1. SEE ATTACHED CHECKLIST REPORT WITH FURTHER EXPLANATIONS AND PHOTO LOG.

Name(s) and Signature(s) of Inspector(s) Erin S. Trujillo /s/ Erin S. Trujillo	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0418/505-827-0160	Date 06/25/2013
Signature of Management QA Reviewer Bruce J. Yurdin /s/Bruce J. Yurdin	Agency/Office/Telephone and Fax NMED/SWQB/505-827-2795 and 505-827-0160	Date 06/25/2013

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

 S M U NA (FURTHER EXPLANATION ATTACHED Yes)DETAILS: **Permit expired. Draft permit published 01/26/2013. USEPA has not issued the final permit as of writing of this report.**

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.

 Y N NA2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES. **Outfall 006** Y N NA3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT. **See further explanation for Outfall 012** 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.

 S M U NA (FURTHER EXPLANATION ATTACHED Yes)DETAILS: **Last CEI inspection on 02/02/2011. Reviewed DMR summary since January 2010 as part of this report. Sediment Control Reports were submitted annually.**

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

 Y N NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

 S M U NAa) DATES, TIME(S) AND LOCATION(S) OF SAMPLING. **Location = N** Y N NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

 Y N NAc) ANALYTICAL METHODS AND TECHNIQUES. **pH** Y N NAd) RESULTS OF ANALYSES AND CALIBRATIONS. **pH** Y N NAe) DATES AND TIMES OF ANALYSES. **pH Date = Y, Times = N** Y N NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

 Y N NA3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE. **Contract Lab not inspected.** S M U NA

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

 S M U NA5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. **TDS** Y N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

 S M U NA (FURTHER EXPLANATION ATTACHED No)DETAILS: **No WWTP operator on site during CEI, but O & M evaluation includes info described by contracted operators after CEI. Design review of berm at Pond 33 (associated w/Outfall 001) appears needed (see Photos 1&2).**

1. TREATMENT UNITS PROPERLY OPERATED.

 S M U NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

 S M U NA**WWTP-No standby power (settling mode)**3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. **No backup/overflow anticipated (gravity flow to pond)** S M U NA**Pond 8 (High Water Float)**4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. **WWTP = NA** S M U NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE.

 S M U NA6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. **WWTP contracted operators** S M U NA7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. **WWTP not evaluated** S M U NA8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. **WWTP not evaluated** Y N NASTANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. **WWTP not evaluated** 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: **Surface Water Monitoring procedures dated 11/09/2009 were not updated for pH monitoring & instrument calibration.**

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. **WET 6 hr Composite** Y N NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. **TDS, Iron** Y N NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. **TDS, Iron** Y N NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE **pH holding times** Y N NA
- a) SAMPLES REFRIGERATED DURING COMPOSITING. **No composite samples obtained** Y N NA
- b) PROPER PRESERVATION TECHNIQUES USED. **Y = WET; 09/19/2011 cooling preservation not documented** Y N NA
Containers not documented
- c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. **pH exceeded holding time or not documented** 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: **Permit requires estimate flow measurements not subject to accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE **Not applicable**
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. **Measured and/or calculated (Graphical Peak Discharge)** 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 Yes)
 DETAILS: **Contract laboratory was not inspected. pH would need to be conducted w/15 minutes to be in accordance with 40 CFR 136.3 Table II.**

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) **pH** 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. **pH instrument not on site** S M U NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE. **Contract lab not inspected. See further explanations** S M U NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 0 % OF THE TIME. **Reviewed contract laboratory analytical reports** Y N NA
- 6. SPIKED SAMPLES ARE ANALYZED. 100 % OF THE TIME. **Reviewed contract laboratory analytical reports** Y N NA
- 7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME **1) Energy Laboratories, Inc.** **2) SeaCrest Group (303-661-9324)**
 LAB ADDRESS **3161 E. Lyndale, Helena, MT 59604** **1341 Cannon Street, Louisville, CO 88027**
 PARAMETERS PERFORMED **All** **WET**

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 discharge						

RECEIVING WATER OBSERVATIONS: **Shumway Arroyo, near Outfall 008, contained water on the day of this inspection. See further explanations for monitoring indicating effluent permit exceedances.**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No).
 DETAILS: **Permit does not have sewage sludge requirements. Waste solids transported to City of Farmington POTW.**

- 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: **Not Applicable** (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED No).

- 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

San Juan Coal Company / San Juan Mine
NPDES Permit No. NM0028746
Compliance Evaluation Inspection
May 23, 2013

Further Explanations

Introduction

On May 23, 2013, Erin Trujillo, accompanied by Daniel Valenta and Bruce Yurdin, of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the BHP Billiton dba San Juan Coal Company (SJCC), San Juan Mine located near Waterflow, in San Juan County, New Mexico. SJCC is classified as a minor discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0028746 which regulates discharge to San Juan River in Segment 20.6.4.401 *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*; and to Westwater Arroyo and Shumway Arroyo subject to and in 20.6.4.98 NMAC, thence to San Juan River.

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit. This inspection report is based on information provided by the Permittee's representatives, observations made by the NMED inspectors, and records and reports kept by the Permittee and/or NMED. Approved on April 7, 2011, San Juan Coal Company uses USEPA's NetDMR system to submit discharge monitoring reports (DMRs) for the San Juan Mine.

San Juan Coal Company submitted a Notice of Intent (NOI) to obtain permit coverage under USEPA industrial stormwater Multi-Sector General Permit (MSGP) on December 29, 2000 (expired NPDES Tracking No. NMR05A745 expired) and February 10, 2009 (active NPDES Tracking No. NMR05GF83). An industrial stormwater MSGP CEI was not conducted as part of this inspection.

Upon arrival at the San Juan Mine offices at approximately 0750 hours on the day of this inspection, an entrance interview was conducted with Steve Perkins, Superintendent Environmental Permitting & Technical Services; Paul A. Nazaryk, Superintendent Environmental & Regulatory Affairs; Edward Epp, Environmental, BHP Billiton; Warren Rider, Environmental, Specialist of BHP Billiton and Shawn Smith, Environmental Specialist, BHP Billiton San Juan Mine. The inspector made introductions, presented credentials and explained the purpose of the inspection. A tour of the facility included ponds associated with outfall locations authorized under this permit. An exit interview to discuss preliminary findings was conducted with Mr. Nazaryk, Mr. Epp, and Mr. Rider on site. The inspectors left the facility at approximately 1335 hours on the day of this inspection.

Following the inspection, BHP Billiton San Juan Coal Company provided additional information in a letter to NMED SWQB dated June 6, 2013. Additional information on the operation and maintenance of the on-site waste water treatment plant was provided in a telephone conference call with Mr. Perkins, Mr. Epp and Mr. Rider; and Rick Myers, Operations Supervisor and Dean Rockwell, Operations Manager, CH2M Hill, Farmington, New Mexico on June 21, 2013.

Treatment Scheme/Solids Management

San Juan Mine, originally a surface mine, has been in operation since approximately 1976. In 2002, underground mining replaced surface mining operations. The permit effective August 1, 2006 allows discharges from 9 outfalls as follows:

Table 1:

NM0028746 Outfalls	Authorized Discharge (NPDES Permit effective August 1, 2006)
Outfall 001, 002, 006, 010 & 011	mine drainage from sediment ponds in reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, regraded areas, and adjacent facility areas
Outfalls 007 and 008	run-offs from equipment storage facility, maintenance shop, and parking facility areas
Outfall 009	treated sanitary waste
Outfall 012	discharge mine drainage from sediment ponds in reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas

As part of the renewal application and supplemental information, the Permittee notified USEPA that the discharge from Outfall 006 was similar to Outfall 007 and 008.

Table 2 summarizes pond design and capacity as of the day of this inspection:

Table 2 Existing Design and Capacity:

NM0028746 Outfalls	Associated Pond	Design Capacity	Storm	Watershed (acres)	Required/Max Capacity (acre-feet)	As-Built Capacity (acre-feet)
001	33	100 year 6 hour		31	2.66	3.76
002	2	100 year 6 hour		206.5	4.9	9.7
006	10	100 year 6 hour		66.3	5.2	9.7
007	49	100 year 6 hour		45.3	2.8	3.8
008	11	10 year 24 hour		41.1	2.4	5.3
009	12A 12B	NA NA		NA – No Watershed NA – No Watershed	4.4 12.1	7.4 16.0
010	64	100 year 6 hour		204.3	13.6	14.0
011	62	100 year 6 hour		256.5	8.58	9.33
012	S2	10 year 24 hour		225	11.3	17.6

Table 3 summarizes a proposed redesign for Outfall 001 submitted to NM MMD:

Table 3 Redesign submitted to NM MMD:

NM0028746 Outfalls	Associated Pond	Design Capacity	Storm	Watershed acres	MMD Permit Required Capacity (acre-feet)	As-Built Capacity (acre-feet)
001	33	100 year 6 hour		355	8.54	9.07

Permittee’s on-site representative indicated that the design and installation of a berm at the entrance to Pond 33 associated with Outfall 001 would be reviewed as part of the redesign (see Photos 1 & 2).

The Permittee contracts with CH2M Hill, Farmington New Mexico to operate, maintain and inspect the domestic waste water treatment plant (package plant). Flow from the package plant is to two lined evaporation ponds (Ponds 12A and 12B). The ponds do not have spillways associated with Outfall 009. Waste solids from the package plant are sent to City of Farmington Publicly Owned Treatment Works (NPDES Permit No. NM0020583).

Sediment Control Plan

The previous NPDES CEI report stated:

Some of the outfalls appear to be located in watersheds where reclamation has occurred and revegetation has begun and may be eligible for technology-based effluent limits described at 40 CFR Part 434 Subpart H (Western Alkaline Coal Mining). The permit provides that the permittee may prepare a Sediment Control Plan for approval in lieu of the current technology-based limits for these outfalls. Compliance with this plan allows implementation of alternative best management practices in lieu of treatment ponds as long as applicable water quality-based effluent limits are met.

San Juan Mine, Sediment Control Plan (SCP) was submitted to New Mexico Energy, Minerals and Natural Resource Department (EM&NRD), Mining Minerals Division (MMD) on October 31, 2006 and is contained in the MMD Permit 04-01. EM&NRD letter dated November 1, 2006 states “*The approved sediment control plan satisfies the requirements of the Surface Mining Act and the Coal Surface Mining Commission regulation, 19.8 NMAC.*” According to BHP Billiton San Juan Coal Company letter dated June 6, 2013, San Juan Mine’s MMD permit renewal in 2009 was an administrative reauthorization by MMD, did not involve modification to the contents of the MMD permit, and information relevant to the SCP had not changed.

Summary of Discharges

Table 4 provides a brief summary of the reported discharges since the last CEI:

Table 4 Discharges:

Outfall		Start of Discharge	Date of Sampling	Description of Reason for Discharge, Sampling
001	Westwater Arroyo	08/23/2012	08/23/2012	Substantial rain event/flow from Westwater Arroyo entered pond. Sample collected from flow from pond.
010	Shumway Arroyo	09/17/2011	09/19/2011	Sample collected of impounded water.

Section A – Permit Verification – Overall Rating of “S = Satisfactory”

Permit Requirements for Permit Verification

Part III.D.9 (Standard Conditions, Other Information) of the permit states:

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

Comment for Outfall 012

The permit effective August 1, 2006 and the Permittee’s renewal application lists the receiving water for Outfall 012 as San Juan River. The spillway for Pond S2 associated with Outfall 012 is located approximately 1,800 feet north of the San Juan River. Overflows would first enter an unnamed, unclassified tributary subject to 20.6.4.98 NMAC prior to discharging into the San Juan River. According to Permittee on-site representatives, there are no anticipated or planned discharges from Outfall 012 directly (e.g., pipe or by other means) to the San Juan River at this time. The Permittee can contact the USEPA permit writer if an application to directly discharge to the San Juan River was not intended.

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Recordkeeping and Reporting

Part I.A.5 (Total Dissolved Solids) of the permit states:

Each discharge shall not contribute more than 2,000 pounds of TDS per day.

Part III.C.4 (Standard Conditions, Record Contents) of the permit states:

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;*
- b. The individual(s) who performed the sampling or measurements;*
- c. The date(s) and time(s) analyses were performed;*
- d. The individual(s) who performed the analyses;*
- e. The analytical techniques or methods used; and*
- f. The results of such analyses.*

Findings for Recordkeeping and Reporting

A NetDMR summary provided by USEPA indicates that the electronic April 2011 DMR for Outfall 001A was not completed (flagged as not received). According to Permittee on-site representatives there was no discharge associated with Outfall 001 for that reporting period.

WET DMRs for several outfalls and/or reporting periods were also flagged as not received. For example, below is a list of toxicity reporting periods for Outfall 012 that have been flagged as not received--in this case the permit requires a monitoring frequency of once every 6 months:

Outfall TX12S:

1/31/10	NODI=C
7/31/10	Not Received
1/31/11	Not Received
7/31/11	NODI=C
1/31/12	Not Received
7/31/12	NODI=C
1/31/13	Not Received

Note: NODI=C (No Discharge)

Analytical results on contract laboratory report dated 09/25/2012 were inconsistent with data reported on DMRs for samples collected of flow from Outfall 001 on 08/23/2012. The units for reporting total metals in NetDMR and in Part I.A.1 of the permit are micrograms per Liter ($\mu\text{g/L}$) and the units on the laboratory report are milligrams per Liter (mg/L). The units conversion was not correct for Aluminum and dissolved metal results appear to have been incorrectly reported on the NetDMR instead of totals. Below is a summary of the discrepancies:

	<i>Reported Total $\mu\text{g/L}$</i>	<i>Actual Total $\mu\text{g/L}$</i>	<i>Result Metals Dissolved mg/L</i>	<i>Results Metals Total (mg/L)</i>
As	1	5.6	0.0010	0.0056
Cu	4.5	4	0.0045	0.004
Al	0.263	14,400	0.263	14.4

Some record keeping did not indicate the exact place of sample collection or was inconsistent. For example, client sample IDs for samples collected on 09/19/2011 on chain of custody, and laboratory reports list Outfall 10, but the sample was actually collected of impounded water from the pond associated with Outfall 10. Other record keeping associate with this sample event, in this case a completed sample collection field form, did describe the exact location as an impoundment.

Permittee on-site representatives indicated that effluent loadings calculations based on estimated daily effluent flow and daily analytical data had not been conducted. DMRs from the permit effective August 1, 2006, did not include TDS reporting. However, recordkeeping of these calculations is needed to confirm compliance with TDS limitation requirements in Part II of the Permit.

Section D - Self-Monitoring – Overall Rating of “U = Unsatisfactory, N = Not Evaluated”
Section F – Laboratory – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Self-Monitoring and Laboratory

Part I.A lists the effluent monitoring requirements for each outfall.

Part I.A.5 of the permit states:

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.

Part III.C.2 (Standard Conditions, Representative Sampling) of the permit states:

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

Part III.C.5 (Standard Conditions, Monitoring Procedures) of the permit states:

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

Findings for Self-Monitoring and Laboratory

Some samples were not taken at a site specified in the permit. No samples were obtained at Outfall 010 during the discharge occurring on the weekend of 09/17 and 09/18/2011. The samples were not taken during discharge or at the points of discharge from the associated sediment pond. Grab samples of the impounded water was obtained on 09/19/2011. Sample collection of impounded water in retention or sediment ponds may not be representative of effluent characteristics during a discharge. Other issues related the discharge occurring from Outfall 010 on the weekend of 09/17 and 09/18/2011 include:

- TDS was not analyzed from a representative effluent sample prior to the receiving stream to determine compliance with Part I.A.5 of the Permit.
- Grab sample collected and analyzed for WET testing did not meet the 6-hr composite sample type required in Part I.A.1 of the Permit.

Some sample collection and quality control procedures were not adequate or were not documented, for example:

- USEPA approved analytical procedures in 40 CFR 136.3 Table II lists container types. Container type was not documented on reviewed chain of custody forms, or facility’s written procedures to verify compliance.

- USEPA approved analytical procedures in 40 CFR 136.3 Table II lists preservation requirements. Part I.A of the permit requires monitoring for parameters (e.g., TSS) that have cooling preservation requirements of less than or equal to 6°C. The chain of custody form for samples collected on 09/19/2011 indicates the samples were on ice, but that the receiving temperature at the laboratory was 6.9°C.
- Reviewed analytical reports from the contract laboratory for samples collected in August of 2012 did not include method approval dates. Effective June 18, 2012, EPA approved analytical procedures in 40 CFR 136.3 include approval dates. The permittee would need to contact the contract laboratory to verify compliance with approved methods.
- Duplicate samples documented in reviewed record-keeping. According to EPA’s NPDES Inspection Manual, “10 percent of the samples should be duplicated.” However, in this case with infrequent discharge, duplicate samples at that percentage rate may be too infrequent to evaluate quality control procedures.

Monitoring for pH for Outfall 001 sample collected on 08/23/2012 exceeded the maximum holding times (within 15 minutes) in USEPA approved analytical procedures in 40 CFR 136.3 Table II and is invalid for reporting purposes.

Recordkeeping for pH monitoring of the impounded water associated with Outfall 010 on 09/19/2011 did not include the method, and did not have both sample and analysis time to verify compliance with maximum holding times. Calibration (standardization using three buffers required in Standard Methods 4500-H+) of the on-site pH instrument was not documented on the reviewed field form or facility’s written procedures. Standard Methods 4500-H+ pH method approved by the Standard Methods Committee in 2000 states, “The purpose of standardization is to adjust the response of the glass electrode to the instrument. When only occasional pH measurements are made standardize instrument before each measurement.”

Section G – Effluent/Receiving Waters – Overall Rating of “U = Unsatisfactory”

As indicated below, pollutants in effluent were reported to exceed permit limits for Outfall 001

Reported Exceedances at Outfall 001:

DMR	COD	pH	TSS	As, Total	Cu, Total	Zn, Total	Al, Total	Se, Total	Fe, Total	Flow
Limits	125	min 6	35 (AVG)	15 (AVG)	55 (AVG)	612(AVG)	500(AVG)	3.3 (AVG)	3.5(AVG)	Report
		max 9	70 (MAX)	22.6 (MAX)	83 (MAX)	918(MAX)	750(MAX)	5 (MAX)	7 (MAX)	
Units	mg/L	su	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	MGD
08/2012	22	8.1**	222*	1***	4.5***	<20	0.263***	<1	12	3.2

DMR	Alpha, Gross
Limits	10 (AVG)
	15 (MAX)
Units	pCi/L
08/2012	2.1

Notes:

- * = Reported Value Exceeds Permit Limits
- ** = Invalid (exceeded maximum holding time)
- *** = Incorrect value reported, Result Exceeds Permit Limit

Total Aluminum was incorrectly reported on the Outfall 001 August 2012 DMR, the analytical laboratory results 14.4 mg/L or 14,400 µg/L exceeded both the monthly average 500 µg/L and daily max 750 µg/L effluent limits of the permit.

Samples collected in September 2011 were from an impoundment associated with Outfall 010 to Shumway Arroyo. Effluent characteristics during discharge were not monitored. As indicated below, pollutants in effluent were reported to exceed permit limits for Outfall 010:

Reported Exceedances at Outfall 010:

DMR	COD	pH	TSS	As, Total	Cu, Total	Zn, Total	Al, Total	Se, Total	Fe, Total	Flow
Limits	125	min 6	35 (AVG)	15 (AVG)	55(AVG)	612(AVG)	500(AVG)	3.3 (AVG)	3.5 (AVG)	Report
		max 9	70 (MAX)	22.6 (MAX)	83 (MAX)	918(MAX)	750(MAX)	5 (MAX)	7 (MAX)	
Units	mg/L	su	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	MGD
09/2011	29	7.84	75*	3.1	7.7	0	15	0	12.5	0.001234

DMR	Alpha, Gross
	10
	pCi/L
09/2011	7.2

Notes:

** = Reported Value Exceeds Permit Limits*

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Erin S. Trujillo	Date: 05/23/2013	Time: 1133 hours
City/County: Near Waterflow / San Juan County	State: New Mexico	
Location: San Juan Coal Company, San Juan Mine, NM0028746		
Subject: Pond 33 associated with Outfall 001.		



**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: Erin S. Trujillo	Date: 05/23/2013	Time: 1133 hours
City/County: Near Waterflow / San Juan County		State: New Mexico
Location: San Juan Coal Company, San Juan Mine, NM0028746		
Subject: Arrow points to berm that crosses a swale on east side of pond shown in previous photo (Pond 33). Berm appeared to be only control to direct runoff flow into pond. Berm appeared to be in good condition on day of this inspection. But, a review of berm design (dimensions), materials, and installation for anticipated runoff volumes and rates at this location appeared needed.		

