NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

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

Certified Mail - Return Receipt Requested

July 31, 2012

Mitch Knapton, General Manager/Chief Engineer
Lee Ranch Coal Company
P.O. Box 757
Grants, New Mexico 87020

RE: Minor Non-Municipal, SIC 1221, NPDES Compliance Evaluation Inspection, Lee Ranch Coal Company / El Segundo Mine, NM0030996, July 10, 2012

Dear Mr. Knapton,

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
Allied Bank Tower
Region VI Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

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

I appreciate the cooperation of Mark Hiles, Peabody Natural Resources during the inspection. 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
Samuel Tates, EPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Hannah Branning, USEPA (6EN-WC) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Bill Chavez, Acting NMED District I Manager by e-mail
David L. Clark, Prog. Manager, Coal Mine Reclamation, Mining & Minerals Division, EM&NRD by e-mail

EPA

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
N	NM0003096	120710	C	S	2

Remarks: BITUMINOUS COAL SURFACE MINE

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
	3	N	N	

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Lee Ranch Mine, Lee Ranch Coal Company, A Division of Peabody Natural Resources Company north of Milan, New Mexico. From I-40, take Exit 79 in Milan, travel north, at stop sign turn left onto Old Hwy 66, turn right onto NM 605, cross railroad tracks, travel 14 miles, at NM 509 travel north to mile maker 22, El Segundo Mine Gate is on left. McKinley County

Entry Time /Date: **1130 hours / 07/10/2012**

Exit Time/Date: **1815 hours / 07/10/2012**

Permit Effective Date: February 1, 2009

Permit Expiration Date: January 31, 2014

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

-Mark Hiles, Env. Systems Manager, Peabody Natural Resources, El Segundo Mine 505-285-3002

Name, Address of Responsible Official/Title/Phone and Fax Number

Mitch Knapton, Lee Ranch Coal Company, P.O. Box 757, Grants, New Mexico 87020 / General Manager/Chief Engineer / 505-285-4651 and Fax 505-285-4650

Contacted: Yes [ ] No [*]

Other Facility Data

Lee Ranch El Segundo Entrance

Latitude 35.639193°

Longitude -107.838095°

SIC 1221 (Sub-Bituminous Coal Mine)

Section C: Areas Evaluated During Inspection

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

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

2. **LEE RANCH COAL COMPANY, EL SEGUNDO MINE HAS ACTIVE PERMIT COVERAGE UNDER THE INDUSTRIAL STORMWATER MULTI-SECTOR GENERAL PERMIT (NPDES TRACKING #NMR05GC33 EFFECTIVE 02/04/2009). AN INDUSTRIAL STORMWATER COMPLIANCE EVALUATION INSPECTION WAS NOT CONDUCTED DURING THIS INSPECTION.**

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Erin S. Trujillo */s/ Erin S. Trujillo*	**NMED/SWQB/505-827-0418**	**07/31/2012**
Signature of Management QA Reviewer	**Agency/Office/Telephone/Fax**	**Date**
Richard E. Powell */s/ Richard E. Powell*	**NMED/SWQB/505-827-2798**	**07/31/2012**

Lee Ranch Coal Company / El Segundo Mine / July 10, 2012	PERMIT NO. **NM0030996**

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***No***)
DETAILS: **Permittee submitted application to add outfalls dated February 13, 2012**.

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. ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***No***)
DETAILS: **eNOI subscriber agreement dated 09/15/2011.**

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. **No reported discharges since last inspection**	☐ Y ☐ N ☒ NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE. **No sampling and analysis data**	☐ 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. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED* ***Yes***)
DETAILS: **Domestic Sewage Package Plant w/Chlorination System. Impoundment inspections (Routine, Quarterly)**

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

Lee Ranch Coal Company / El Segundo Mine / July 10, 2012	PERMIT NO. **NM0030996**

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 **No**).*

DETAILS: **No discharge. Sample collection procedures would need to be developed/updated prior to discharge.**

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**: Part I.A of the permit requires estimate. Discharge would be pumped or flow over spillway of impoundments.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.	☐ Y ☐ N ☒ NA
TYPE OF DEVICE **No Flow Measurement Device**	
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 **Yes**)*

DETAILS: **Contract laboratory not inspected. If discharge, then TRC (Outfall 019) & pH would be conducted on site.**

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

Lee Ranch Coal Company / El Segundo Mine / July 10, 2012	PERMIT NO. **NM0030996**

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. **Written procedures not developed/not updated.** ☐ S ☒ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. ____% 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	**1) Trace Analysis, Inc.**	**2) Bio-Aquatic Testing, Inc.**
LAB ADDRESS	**6701 Aberdeen Ave, Ste 9, Lubbock, TX 79424-1515**	**2501 Mayes Road, Ste 100, Carrollton, TX 75006-1378**
PARAMETERS PERFORMED	**TSS, BOD5, E.coli Bacteria, Iron, etc.**	**WET**

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED **No**).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
No Discharge	**No Discharge**	**No Discharge**	**No Discharge**	**No Discharge**	**No Discharge**	**No Discharge**	**No Discharge**

RECEIVING WATER OBSERVATIONS:

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☐ U ☒ NA *(FURTHER EXPLANATION ATTACHED **No**).*

DETAILS: **Domestic Sewage flows to lagoon.**

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

Lee Ranch Coal Company / El Segundo Mine
NPDES Permit No. NM0030996
Compliance Evaluation Inspection
July 10, 2012

Further Explanations

Introduction

On July 10, 2012, Erin Trujillo of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Lee Ranch Coal Company, El Segundo Mine, North of Milan in McKinley County, New Mexico.

The facility is classified as a minor industrial 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 NM0030996 which regulates discharge from several outfalls to unclassified Kim-me-ni-oli Valley Tributary in Segment No. 20.6.4.97 *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC*), thence to Chaco River, a tributary of San Juan River of the San Juan River Basin. East of NM 502 and the Continental Divide, discharges are to unclassified Inditos Drawin in Segment 20.6.4.97 NMAC, thence to Voght Draw, thence to Arroyo Chico, thence to Rio Puerco (East), thence to the Rio Grande.

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. Additional information was obtained from http://www.peabodyenergy.com.

Upon arrival at the Lee Ranch Mine at approximately 1130 hours on the day of this inspection, the inspector made introductions, presented credentials and explained the purpose of the inspection to Mark Hiles, Environmental Systems Manager, Peabody Natural Resources. The inspector, Mr. Hiles and Ryan Hummel, Environmental Engineer, Peabody Natural Resources toured portions of the facility. The inspector left Lee Ranch Mine at approximately 1515 hours and traveled to the El Segundo Mine and was met by Mr. Hiles. The inspector and Mr. Hiles toured portions of the El Segundo Mine. An exit interview to discuss preliminary findings for both Lee Ranch Coal Company Lee Ranch Mine and El Segundo Mine was conducted with Mr. Hiles on site at the El Segundo Mine following the tour. The inspector left the El Segundo Mine at approximately 1815 hours on the day of this inspection.

Facility Description/Treatment Scheme

El Segundo Mine, located in Northwest New Mexico adjacent to Lee Ranch Mine, opened in 2008. A workforce of approximately 200 uses dozers, shovels, and trucks to uncover between two and five coal seams ranging from 2.5- to 16-feet thick. Coal loading takes place daily and is done with the aid of end loaders. The coal is transferred to its customers via the Burlington Northern Santa Fe Railway.

There are 29 permitted outfalls at this facility some of which are associated with coal preparation areas, some of which are associated with mine drainage, and one of which is from a sanitary waste treatment plant. Reclamation has not commenced at this facility according to the Permittee on-site representative.

The Permittee submitted an application to add outfalls dated February 13, 2012 and requested permit language to allow revisions to ponds or outfall locations that are consistent with, and fall within, the mining area boundary. A permit modification has not been issued as of the date of this report. Some of the impoundments associated with the new outfalls have been constructed.

There has been no reported discharge since the permit effective date of February 1, 2009. There has been no discharge from the new impoundments described in the 2012 application according to the Permittee on-site representative.

Section F – Laboratory – Overall Rating of "M = Marginal"

Permit Requirements for Laboratory

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 Laboratory

Written on-site standard operating procedures for calibrating the pH meter and collecting storm water were provided for review during this inspection. If there was a discharge, then TRC (Outfalls 018) & pH monitoring would need to be conducted on site under this permit. Other samples would be sent to an off-site laboratory for analysis. Sample collection and analytical quality control procedures would need to be developed and/or updated prior to discharge (e.g., essential quality control elements, approved methods, procedures to ensure proper preservation techniques, etc).

Reviewed on-site procedures state, *"After all the samples are collected, chill the cooler."* Table II of 40 CFR 136.3 requires some samples to be cooled to 6 deg C. Preservation Footnote 2 of Table II states, *"…preserve each grab sample within 15 minutes of collection…."*

Effective June 18, 2012, USEPA added new quality assurance and quality control language at 40 CFR 136.7 to specify twelve essential quality control elements that must be in the laboratory's documented quality system unless a written rationale is provided to explain why these quality control elements are inappropriate for a specific analytical method or application.