

**OFFICE OF SURFACE MINING RECLAMATION AND  
ENFORCEMENT**

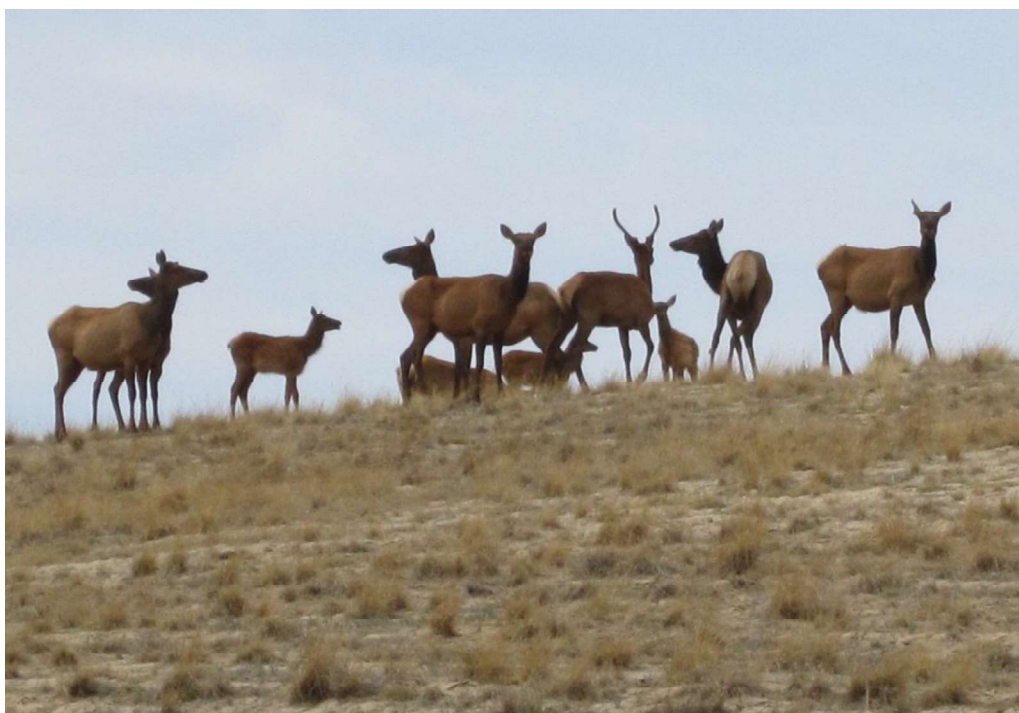
Exhibit 68

**Annual Evaluation Report  
for the  
Regulatory Program**

**Administered by the Wyoming Department of Environmental  
Quality  
Land Quality Division**

**of**

**WYOMING**



**Evaluation Year 2013**

**(July 1, 2012 to June 30, 2013)**

**Prepared By**

**Denver Field Division  
October 2013**

## **Blasting**

As part of EY2013 oversight and as a result of suggestions and concerns from the public and interested parties, OSM and LQD agreed to evaluate a number of Wyoming coal mine permits regarding current approved blasting plans to determine compliance with the requirements of the Wyoming Coal Rules and Regulations. The topic of blasting was chosen for this evaluation year in response to suggestions and concerns raised by the public and interested parties, and a formal citizen's complaint that OSM received in EY2012 regarding fumes from blasting, specifically oxides of nitrogen (NO<sub>x</sub>) gas clouds. In addition to reviewing blasting plans to determine compliance with Wyoming Coal Rules and Regulations, it was also agreed that OSM would evaluate LQD's method of checking for permittee compliance with the blast plans in the field. Additionally, OSM and LQD would conduct an outreach/educational stakeholder meeting to discuss and convey current laws, regulations, the science behind blasting, and current procedures—including what to do if a citizen experiences a negative impact (damages/injury) from blasting, or NO<sub>x</sub> gas. Wyoming Coal Rules and Regulations applicable to blasting are found in Chapter 2, Section 5(a)(vii), and Chapter 6.

### **Permit Review**

The current blasting plans contained in the following permits were evaluated to determine compliance with the requirements of the Wyoming Coal Rules and Regulations.

- Thunder Basin Coal Company's Black Thunder Mine (Permit # 233-T8)
- Peabody's Caballo Mine (Permit # 433-T6)
- Thunder Basin Coal Company's Coal Creek Mine (Permit # 483-T6)
- Cloud Peak Energy's Cordero Rojo Mine (Permit # 237-T8)
- Bridger Coal Company's Jim Bridger Mine (Permit # 338-T6)

### **Permittee Compliance**

OSM also evaluated LQD's method of checking for permittee compliance with Wyoming Coal Rules and Regulations regarding blasting. To ensure permittee compliance with the Wyoming Coal Rules and Regulations regarding blasting, the LQD inspects shot reports at each mine during quarterly inspections and also inspects shot reports at the mine or mines in question whenever LQD investigates a blasting complaint. The LQD uses seismographs to monitor shots at complainant's houses and periodically monitors shots on the mine permit to gather vibration and air blast data. The LQD has two semi-permanent seismograph stations set-up, one on the east side of the Wyodak permit, and the other on the southwest side of the Rawhide permit. These two units are set-up with a marine battery, solar panel charger, and are connected to a modem so the LQD can contact them at any time. LQD staff writes monthly reports that are provided to the LQD Administrator, Wyodak Mine, Rawhide Mine, and the Eagle Butte Mine. These written reports have given LQD a large database of vibration

and airblast records near the public that live east of Wyodak's Clovis Pit and in Rawhide Village between Rawhide and Eagle Butte mines. The LQD also conducts periodic blasting oversight inspections at mines in addition to the regular monthly mine inspections.

### Results

OSM's evaluation of the blasting plans contained within the five permits above found minor discrepancies in three of five blasting plans that will require revisions in order to be in compliance with the requirements of the Wyoming Coal Rules and Regulations. Specifically, two of the blasting plans (Black Thunder and Coal Creek) need revised language relating to ground-vibration standards. Additionally, the Black Thunder blasting plan lacked a sample copy of the required public notice as required by Wyoming Coal Rules and Regulations. The third blasting plan (Cordero Rojo) also lacked a sample copy of the required public notice. The fourth and fifth blasting plans (Caballo and Bridger) were found to meet or exceed the requirements of the Wyoming Coal Rules and Regulations.

Regarding permittee compliance, OSM feels that the LQD is adequately administering the current Wyoming Rules and Regulations regarding blasting. The LQD is engaged in a proactive effort of blast monitoring, shot report inspections, seismograph installation and maintenance, and blast data collection and dissemination in an effort to ensure permittee compliance with Wyoming Coal Rules and Regulations regarding blasting.

### Corrective Action Taken by LQD

Since notifying LQD of the blasting plan deficiencies, the LQD has taken corrective action. On June 13<sup>th</sup>, 2013, the LQD Blasting Program Principle provided written notification to the mine permittees detailing the deficiencies in their respective blasting plans. The LQD also requested prompt submittal of permit revisions to correct the deficiencies. As of July 9<sup>th</sup>, 2013, two of the mines were preparing permit revisions to be submitted to LQD; the third mine submitted a permit revision revising the blasting plan language in the permit.

### Wyoming Coal Rules and Regulations

In comparing the Wyoming Coal Rules and Regulations regarding blasting to current blasting plans of approved permits, OSM also found that Wyoming's Coal Rules and Regulations regarding blasting at Chapter 6, Section 4, (b)(i)(A), are less effective than the counterpart Federal regulations at 30 CFR 816.67(b)(2)(i) which require periodic monitoring to ensure compliance with airblast standards. The LQD agrees with OSM's finding and will initiate a program amendment to address the rule deficiency. The program amendment will be initiated no later than March 30, 2014.

More detailed information concerning blasting is available in a topic specific oversight report available in the annual evaluation file. The evaluation file is

available for review at the DFD or online at the OSM website:  
<http://www.wrcc.osmre.gov/programs/oversight/Wyoming.shtm>

### **Bond Release-Coal Working Group**

As part of EY2013 oversight, OSM and LQD agreed to report on the progress of the Coal Working Group monthly meetings and to also evaluate bond release in Wyoming to make a general determination as to why more Phase II and Phase III bond release is not applied for. The Coal Working Group was formed by LQD in EY2012 with the intention of examining and improving the bond release process in Wyoming. LQD hosts the monthly meetings in Casper, Wyoming with attendance from Industry representatives, OSM, and in some cases, other groups such as local grazing associations based on specific topics of discussion during particular monthly meetings. The main goal of the Coal Working Group is to clarify and streamline the guidelines for bond release, and develop transparent processes for reclamation evaluation and bond release in Wyoming.

### **Current LQD Bond Release Request Processing**

Wyoming Coal Rules and Regulations, at Chapter 15, outline administrative procedures for coal mine permittees requesting bond release. Chapter 15 outlines the information required in a specific bond release package. LQD also has a series of Guidelines, found here: <http://deq.state.wy.us/lqd/guidelines.asp>, which were developed for mine permittees with the intent of providing permittees with guidance in the preparation of permits and reports, and to aid in the interpretation of LQD rules, regulations, policies, and statutes. LQD Guidelines specific to bond release are:

- Guideline 20 - Bond release procedures for coal operations
- Guideline 21 - Rough Backfill Verification and Area Bond for Coal Mines
- Guideline 22 - Verification and Compliance Standards for Phase I Partial Incremental Bond Release
- Guideline 23 - Verification and Compliance Standards for Phase 2 Bond Release on Coal Mines

Many reasons exist as to why permittees do not file for bond release. Neither State nor Federal regulations require that a permittee file for bond release at any prescribed time. Therefore, permittees typically do not file for Final bond release until it is economically advantageous for them to do so. Permittees tend to wait until large tracts of land are eligible for bond release and then apply for them. A comparable amount of effort and expense is required to develop a bond release package for a small plot of land as for a large one. It is also not a requirement for permittees to achieve Phase I or II bond release incrementally, prior to achieving final bond release. So, it is often more cost effective for permittees to wait until large areas of land are eligible for release until developing and submitting a bond release application. And those applications often bypass earlier incremental bond