



**Office of Surface Mining Reclamation and Enforcement**

**Annual Evaluation Report for the Regulatory Program Administered  
by the Department of Environmental Quality – Land Quality Division  
of WYOMING**

**For Evaluation Year 2015  
July 1, 2014 to June 30, 2015  
Prepared by the Denver Field Division**

**August 2015**



## **Executive Summary**

The following is a summary of the Evaluation Year (EY) 2015 Oversight Report of the Wyoming Department of Environmental Quality, Land Quality Division (LQD). This report covers the period of July 1, 2014 to June 30, 2015. Based on the oversight topics evaluated for EY 2015, the LQD continues to operate an effective program with no major regulatory problems or issues.

### **Overview of the Public Participation and Outreach Efforts**

The LQD's outreach efforts include, but are not limited to: LQD Advisory Board meetings, Environmental Quality Council hearings, public notices, and public meetings. The LQD met with special interest groups such as the Powder River Basin Resource Council (PRBRC), the Wyoming Outdoor Council (WOC), and the Wyoming Mining Association (WMA), to discuss their concerns. In addition, the LQD has hosted several technical forums for the public addressing current issues. The LQD operates on an open door policy with all its permit files and documentation available to the public as needed.

### **Major Accomplishments and Innovations**

The LQD continues to administer a rigorous and effective Title V reclamation program for the largest coal producing region in the country. The LQD's permitting, compliance and inspection and enforcement programs are meeting all requirements expected of it by the Office of Surface Mining Reclamation and Enforcement (OSMRE).

The LQD, with attendance from Industry representatives and the OSMRE, continues to show initiative by holding monthly Coal Working Group meetings. During the Evaluation Year, the Coal Working Group finalized revisions to the LQD Coal Annual Report Format (CARF), and continued to work on revisions to other LQD Guidelines, including Guideline 8 (Hydrology), Guideline 1A (Topsoil and Subsoil), and Guideline 1B (Geology, Overburden and Spoil).

The OSM purchased a GIS work station for the Land Quality Division field staff's use to create a GIS database for bond release on coal mines. The work station is now functional and Wyoming LQD is currently building the GIS database. This database will track all phases of bond release for every disturbed acre in Wyoming coal mines, and allow for very precise tracking of all bond release activities in the state.

The first phase of the LQD electronic permitting project was completed on December 31<sup>st</sup>, 2014. All elements of electronic permitting are in place, and preliminary epermitting and testing is under way. The electronic inspection application went into full production in July of 2014, and has been successfully utilized by all LQD staff for the last year.

The LQD selected Cloud Peak Energy's Cordero Rojo Mine to receive the 2015 State of Wyoming Reclamation Award in recognition for the mine's work in redirecting the Belle Fourche River. First diverted in 1996 to ensure quality and availability for downstream users, the river was diverted back to a reconstructed section at the end of 2011 following stream channel stabilization.

### **Off-Site Impacts**

One hundred percent of the thirty-four inspectable units were free of negative off-site impacts during the evaluation year. Accordingly, no negative off-site impacts were recorded.

### **Reclamation Success**

The OSMRE Directive REG-8 uses acres of phased bond release as a measurement for successful reclamation. Bond release information is collected to measure program performance in the following areas: 1) land form/ approximate original contour, 2) land capability (post-mine land use), 3) hydrologic reclamation, and 4) contemporaneous reclamation. According to the Wyoming Coal Rules and Regulations, phased bond release is defined as:

**Phase I** – When the permittee completes the backfilling, regrading, topsoil replacement, recontouring and drainage control of a bonded area.

**Phase II** – When the permittee has established vegetation whose species composition is commensurate with that of the seed mix(es) of the approved reclamation plan.

**Phase III** – The remaining portion of the bond may be released after the permittee has successfully completed all surface coal mining and reclamation activities (vegetation success, hydrology supports post mining land use, etc.).

In Wyoming, the following figures address the cumulative totals for bond release by phase:

Phase I – 69,175 ac. or 38.9% of total disturbance,

Phase II – 27,330 ac. or 15.3% of total disturbance,

Phase III – 16,141 ac. or 9.0% of total disturbance.

Of note is the fact that the LQD approved seven separate Phase III bond release requests during the Evaluation Year, which totaled 4,485 acres. Putting this acreage into perspective, this represents a 39% increase in cumulative Phase III bond release statewide, and is roughly equal to the previous five Evaluation Years combined. The LQD Administrator also approved Termination of Jurisdiction for two permits (Rosebud (376-T6) and Seminoe I (378-T6)), which totaled 8,594 acres.

The Denver Field Division (DFD) also reviewed Phase III bond release trends in Wyoming over the last seventeen evaluation years and found that cumulative Phase III bond release averaged 419 acres per year from EY 1999 – EY 2007, and averaged 1,165 acres per year from EY 2008 – EY 2015.

### **Contemporaneous Reclamation**

Currently in Wyoming, 177,719 acres (38%) of 462,850 permitted acres have been disturbed by mining activity. Of these disturbed acres, approximately 86,928 acres have been backfilled, graded, topsoiled and seeded; or 49% of the lands disturbed have been reclaimed to the point of establishing vegetation. This ratio of disturbed vs. reclaimed (seeded) acres is a measure of how contemporaneous (timely) the State's mines are reclaiming acres to the point of establishing vegetation. Once the revegetated acres have fulfilled their 10 year liability period and met other requirements, they may be available for Phase III or final bond release. Approximately 22% of the cumulative disturbed lands on Wyoming coal mines consist of facilities, such as buildings, ponds, haul roads, soil and overburden stockpiles and other long-term disturbances. These disturbances are necessary in the operation of the mine until mining operations are completed. The total current size of all Wyoming coal facilities is reported as 38,240 acres. When subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.60. Therefore, 60% of the cumulative acres disturbed (minus coal facilities) in Wyoming have been reclaimed to the point of being backfilled, graded and seeded.

### **Customer Service**

The DFD evaluated the LQD's customer service by monitoring responses to complaints, requests for inspections, and request for assistance and services by permittees as well as the public or other agencies. The DFD also evaluated the LQD's customer service activities related to public participation and coordination with other governmental agencies in the permitting and bond release processes. During the evaluation year, the LQD received five complaints, all of which pertained to blasting. In all cases, the LQD followed up with prompt investigation. Monitoring and record (shot reports) review was also conducted and indicated that for four of the five complaints, the shots were in compliance (the investigation into the fifth case was still open as of the date of this report). The LQD also offers and maintains an up-to-date webpage, accessed here: <http://deq.wyoming.gov/lqd/>, which contains information and documents for coal permittees, the public, and other interested parties. The LQD provides for public participation and also involves other governmental agencies during permitting and bond release processes. The LQD also responds to permit applicants in a timely and thorough manner, and interacts well with members of the public or other agencies when assistance or services are requested.

## General Oversight and Specific Topic Reviews

### Contemporaneous Reclamation

The DFD evaluated reclamation plans of five approved permits during oversight inspections and determined that all permits evaluated were in compliance with contemporaneous reclamation requirements as defined within the approved permit.

### Maintenance of the Approved Program

During the previous evaluation year, the LQD proposed rules to revise Ownership and Control, Valid and Existing Rights, and periodic monitoring of blasting. These proposed rules were approved by Wyoming Governor Meade on September 23, 2014, and a formal program amendment is currently in review by the OSMRE. The LQD continues to improve the Wyoming program by reviewing supporting guidance documents to ensure they are updated with the best available science-based recommendations to aid in the administration of the LQD program.

### Oversight Inspections

The DFD conducted three complete oversight inspections, seven partial oversight inspections, thirteen bond release inspections, and three mine site visits in Wyoming during the evaluation year. All three complete oversight inspections were joint inspections with the LQD. One of the three complete oversight inspections was an independent complete oversight inspection in which the LQD opted to accompany the DFD. The DFD did not issue any Ten Day Notices (TDNs) during EY 2015. Overall, the lack of TDNs is indicative of the effectiveness of the LQD enforcement program.

### Termination of Jurisdiction

As part of EY 2015 oversight, the OSMRE conducted an evaluation of Termination of Jurisdiction (TOJ) in Wyoming. The OSMRE evaluated all Wyoming permits that have applied for and received Phase III bond release to determine whether jurisdiction has been terminated on those same acres by the LQD Administrator. Specifically, OSMRE evaluated and reported on:

- the total number of Phase III bond release acres in Wyoming;
- the total number of acres in Wyoming where jurisdiction has been terminated;
- the total number of acres released from Phase III but still under permittee jurisdiction (acres have been Phase III bond released but TOJ has not been granted);
- any reason(s) for the LQD granting Phase III bond released but not TOJ; any reason(s) for the permittee not wanting jurisdiction terminated on Phase III bond released acres, and;
- how TOJ (or lack thereof) could potentially affect LQD's future Administration and Enforcement Grants (Fiscal Year (FY) 2016 and beyond).

The permits chosen for review included all permits (14 total) that had applied for and received Phase III bond release (portions or permit-wide). Wyoming Coal

Rules and Regulations at Chapter 15, include requirements for Phase I, II, and III bond release. Additional Chapter 15 rules, at Section 7 (a), state that the LQD Administrator may terminate jurisdiction over the reclaimed site of a completed surface coal mining and reclamation operation, or increment thereof, when the Administrator determines in writing that all requirements imposed under the Rules and Regulations and Environmental Quality Act have been successfully completed and the Administrator has made a final decision in accordance with Chapters 4 and 15 to release the performance bond fully.

Based on the OSMRE's evaluation, having acres of Phase III release that remain under permittee jurisdiction could affect Wyoming's regulatory grant, albeit minimally. On the one hand, the argument could be made that the LQD is being provided Federal dollars to regulate coal mining on lands that have received Phase III bond release; these acres, by definition, have been successfully reclaimed and are in compliance with the reclamation requirements of the Act, regulations, and permit. On the other hand, LQD would likely still be conducting some sort of inspection and enforcement activities on these lands that have received Phase III bond release but still remain under permittee jurisdiction. OSMRE is comfortable with the fact that LQD would still likely be monitoring areas that have received Phase III bond release for any minor and unforeseen future issues with reclamation or erosion.

#### State-Federal Cooperative Agreement

In EY 2014, the Western Region of OSMRE proposed to conduct a special oversight study on the Implementation of State-Federal Cooperative Agreements. Due to unanticipated staffing issues coupled with increased litigation, OSMRE was not able to complete this oversight study in EY 2014 or EY 2015. The OSMRE National Office has scheduled an Internal Control Review (ICR) regarding Implementation of State-Federal Cooperative Agreements for Fiscal Year 2016.

#### Bond Release in Wyoming - Coal Working Group

The Coal Working Group was formed by the LQD in EY 2012 with the intention of examining and improving the bond release process in Wyoming. The LQD hosts the monthly meetings in Casper, Wyoming, with attendance from Industry representatives, the OSMRE, the Wyoming Mining Association (WMA), and in some cases based on the discussion topic, interested citizen groups such as local grazing associations. The main goal of the Coal Working Group was to clarify and streamline the guidelines for bond release, and also develop transparent processes for reclamation evaluation and bond release in Wyoming. During EY 2014, the Coal Working Group completed revisions and finalized the LQD Guidelines (20, 21, 22, 23, and 25) for bond release, which can now be accessed here: <http://deq.wyoming.gov/lqd/> During EY 2015, the LQD Coal Annual Report Format (CARF) was revised and finalized, and can also be accessed from the above link. Also during EY 2015, the Coal Working Group continued to work on revisions to other LQD Guidelines, including Guideline 8 (Hydrology), Guideline 1A (Topsoil and Subsoil), and Guideline 1B (Geology, Overburden and Spoil).

### Self-Bonding in Wyoming

During the Evaluation Year, the OSMRE conducted an informed review of LQD's implementation of their self-bonding program, to determine compliance the requirements set forth in the Wyoming Coal Rules and Regulations, at Chapter 11. The OSMRE found that the LQD implements their self-bonding program in full compliance with their self-bonding rules.

### **Regulatory Program Problems and Issues**

During the previous evaluation year, the LQD proposed rules to revise Ownership and Control, Valid and Existing Rights, and periodic monitoring of blasting. These proposed rules were approved by Wyoming Governor Meade on September 23, 2014, and a formal program amendment is currently in review by the OSMRE. The LQD continues to improve the Wyoming program by reviewing supporting guidance documents to ensure they are updated with the best available science-based recommendations to aid in the administration of the LQD program. During the EY2015, a collaborative working group revised the LQD requirements for annual reports and a hydrology guideline. Guidelines on soils, overburden, and permitting are currently under revision.

### **OSMRE Assistance**

Wyoming's Administration and Enforcement (A&E) grant from the OSMRE for this evaluation year was \$2,224,023.00 and funded 88.51% of Wyoming's reclamation program costs.

The DFD also continues to coordinate the National Historic Preservation Act, Section 106 cultural resource compliance for the State of Wyoming. The DFD cultural resource coordinator works closely with the OSMRE Archaeologist in the OSMRE's Western Regional Office, the LQD, the Bureau of Land Management (BLM), the Wyoming State Historic Preservation Office (SHPO), the U.S. Forest Service (USFS), and the affected mining companies to process cultural resource clearances on new mining lands and previously permitted areas that have not been surveyed for cultural resources.

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(Cover photo of a Phase III bond release at the Seminoe I Mine in the Hanna Basin. The LQD also approved permit-wide Termination of Jurisdiction during EY 2015 for the Seminoe I Mine.)



## I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the OSMRE within the Department of the Interior. SMCRA provides authority to the OSMRE to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by the OSMRE as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Wyoming program and the effectiveness of the Wyoming program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of July 1, 2014 to June 30, 2015. Detailed background information and comprehensive reports for the program elements evaluated during the period are available on the following website: <http://odocs.osmre.gov/> or are available for review and copying at the OSMRE Denver Field Division (DFD), Casper Area Office (CAO), 150 East “B” Street, Casper, WY, 307-261-6555, or by contacting Jeffrey Fleischman: [jfleischman@osmre.gov](mailto:jfleischman@osmre.gov).

The following is a list of acronyms that may be used in this report:

AOC	Approximate Original Contour
ASCM	Alternative Sediment Control Measures
BLM	Bureau of Land Management
CAO	Casper Area Office
CARF	Coal Annual Report Format (LQD)
CWA	Clean Water Act
DEQ	Department of Environmental Quality
DFD	Denver Field Division
EQC	Wyoming Environmental Quality Council
GIS	Geographic Information System
IMCC	Interstate Mining Compact Commission
LQD	Land Quality Division
NOx/NO2	Nitrogen Oxide/Dioxide (gas)
OSMRE	Office of Surface Mining Reclamation and Enforcement
PRBRC	Powder River Basin Resource Council
SHPO	State Historic Preservation Office
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WR	Western Region (OSMRE)
WMA	Wyoming Mining Association
WOC	Wyoming Outdoor Council
WQD	Water Quality Division

## II. Overview of the Wyoming Coal Mining Industry

Wyoming is the top coal producing state in the nation and supplies roughly forty percent of the country's coal needs. Table 1 of Appendix 1 shows the past three years coal production for Wyoming. Wyoming singularly produces more coal than the next five top coal producing states in the nation. Roughly ninety-nine percent of current coal production in Wyoming is from surface coal mines and approximately ninety percent of all coal produced in Wyoming comes from the large surface mines in the Powder River Basin near Gillette, Wyoming. Until 1954, underground mines in the state out produced the surface mines, but since then, surface coal mines have dominated the State's production. By the late 1970's, surface coal mining production in the Powder River Basin became a major contributor to the nation's total coal production. Coal-bearing formations underlie more than 40,000 square miles in Wyoming, equal to forty one percent of the State's total land area. The coal mining industry currently employs over 6000 people and provides substantial income and secondary employment in the State. In 2014, Wyoming coal generated over one billion dollars in revenue for state and local governments. Approximately ninety seven percent of all coal produced in Wyoming is used for electrical generation facilities spread throughout thirty-seven states.

Wyoming's annual calendar year coal production has steadily decreased since 2010, when production was 442.2 million short tons. Annual calendar year coal production in 2014 was 395.3 million short tons, with 2.8 million short tons coming from underground sources.

The Wyoming Geological Survey estimates that the quantity of Wyoming coal reserves that are economically recoverable, at today's coal prices, is greater than 20 billion tons. The main coal seams mined, the Wasatch formation and underlying Fort Union formation, can exceed 100 feet in thickness with 30 to 60 foot seams being common. In a few places, 220 foot thick seams have been uncovered. Wyoming coal ranges from lignite to highly volatile A bituminous in rank, with the majority of the coal produced being sub-bituminous. Wyoming has the largest reserves of "compliance coal" in the nation; that is coal of such quality that utility companies can burn the coal in power plants without expensive scrubbers to remove the sulfur dioxide emissions.

Wyoming currently has thirty-four active coal mining operations permitted: twenty-nine surface mining operations, one underground mining operation, one permit for a dragline move from one mine site to another, and two in-situ operations. The dragline move and in-situ operations are listed as "other facilities" in Appendix 1, Table 2 of this report.

### **III. Public Participation and Outreach Efforts**

The OSMRE-DFD provides for transparency in the oversight process by conducting outreach to stakeholders and encouraging public participation throughout the DFD's annual oversight activities. The public can find oversight guidance documents and Wyoming's Performance Agreement relating to the OSMRE's oversight of Wyoming's program on the following OSMRE website: <http://odocs.osmre.gov/>. Each evaluation year the DFD solicits input from the public and interested parties to comment on oversight and provide suggestions for potential oversight evaluation topics.

#### **A. Wyoming Land Quality Division Outreach Efforts**

The LQD's outreach efforts include, but are not limited to: LQD Advisory Board meetings, Environmental Quality Council (EQC) hearings, public notices, and public meetings. The LQD has, in the past, met with special interest groups such as the Powder River Basin Resource Council (PRBRC), the Wyoming Outdoor Council (WOC), and the Wyoming Mining Association (WMA), to discuss their concerns. In addition, the LQD has, in the past, hosted several technical forums for the public addressing current issues. The LQD operates on an open door policy with all its permit files and documentation available to the public as needed. In general, the LQD makes every effort to operate openly and include the public in all of its actions. Within the Wyoming DEQ, the LQD Advisory Board provides recommendations to the LQD through public forums. The EQC rules on regulatory matters for all divisions within the DEQ (including LQD) and also serves as the administrative hearings board for all divisions (i.e., Land Quality, Air Quality and Water Quality Divisions) in the DEQ.

The LQD also includes its own public participation program during their permitting, bond release, and enforcement processes. During the permitting and bond release processes, notices are published in local newspapers and comments are solicited. Citizen complaints are investigated as part of the enforcement process. Previous oversight reviews have found that the LQD is highly receptive to the concerns of the public, industry and citizen groups. The LQD's website, found at <http://deq.wyoming.gov/lqd/> contains permit information, current rules, proposed rule changes and contact information.

#### **B. OSMRE Outreach Efforts**

The DFD contacts special interest groups such as the Western Organization of Resource Councils (WORC), the Sierra Club, the Northern Plains Resource Council (NPRC), and the Powder River Basin Resources Council (PRBRC) during the evaluation period to obtain input and suggestions concerning oversight topics for evaluating the Wyoming Coal Regulatory Program. Comments received concerning oversight are often times incorporated in the oversight evaluation Performance Agreement between the OSMRE and the LQD. In a

continuing effort to involve the public and special interest groups, comments were solicited through direct mail, e-mails, and announcements in the Federal Register concerning proposed rule changes submitted by the LQD. Citizens and groups were given the opportunity for a hearing or meeting with the OSMRE to discuss any concern or issues of interest to them. No one requested any hearings or meetings; however, the OSMRE did meet with the WORC, the NPRC, and the PRBRC during the evaluation year.

#### **IV. Major Accomplishments and Innovations**

Wyoming coal mining accounts for approximately forty percent of the nation's coal production, and the sheer size and engineering requirements of coal operations in Wyoming present a challenge. The Wyoming program regulates the two largest coal-producing mines in the world, and nine of the top ten producing mines in the nation. The LQD program includes commitments to review and approve permit actions, conduct inspections, ensure that operators are in compliance with permit requirements and LQD regulations, and address required program amendments. The LQD met all inspection requirements and approved 145 permit actions. Through the annual report review process, the LQD found all coal permittees to be in compliance with their permit commitments.

##### State Program Amendments

The LQD regulatory program is in compliance with OSMRE and has no programmatic deficiencies. During the previous evaluation year, the LQD proposed rules to revise Ownership and Control, Valid and Existing Rights, and periodic monitoring of blasting. These proposed rules were approved by Wyoming Governor Meade on September 23, 2014, and a formal program amendment is currently in review by the OSMRE. The LQD continues to improve the Wyoming program by reviewing supporting guidance documents to ensure they are updated with the best available science-based recommendations to aid in the administration of the LQD program. During the EY2015, a collaborative working group revised the LQD requirements for annual reports and a hydrology guideline. Guidelines on soils, overburden, and permitting are currently under revision.

##### Inspection and Enforcement

The LQD is required to inspect all active coal mines monthly. One inspection per quarter is required to be a complete inspection. Therefore, each active coal mine is inspected twelve times per year, with eight monthly/partial inspections and three quarterly/complete inspections and one annual inspection. Inactive coal mines are inspected quarterly, with no monthly inspection requirements. LQD inspected twenty-two active mines and thirteen inactive mines, and met all OSM requirements for mine and records inspections.

### Reclamation and Bond Release

OSMRE evaluates the effectiveness of the Wyoming program in achieving reclamation success using acres of land that have been bond released. This is not the only way to evaluate reclamation success, and it is important to distinguish the different approaches. Final (Phase III) bond release occurs a minimum of 10 years after seeding and is the standard OSMRE uses to evaluate reclamation success. This is the most restrictive measure available and should be interpreted accordingly. There are many more reclaimed acres than are actually phase III bond released. During this evaluation year, Wyoming coal mines reported a total of 76,494 acres of reclaimed land with only 5,053 of these acres phase III bond released. While these areas have not been fully bond released, approximately 38,000 acres are in agricultural production through grazing programs and hay production. All of these reclaimed areas are available as wildlife habitat. In addition, two coal mines were terminated during the EY2015, with a total of 8534 acres of successful reclamation through phase III bond release.

### State of Wyoming Reclamation Award

The Wyoming DEQ announced that Cloud Peak Energy's Cordero Rojo Mine was selected to receive the 2015 State of Wyoming Reclamation Award. This award recognizes successful restoration of a portion of the Belle Fourche River. Through design and reconstruction, the Cordero Rojo Mine relocated a portion of the Belle Fourche River and reclaimed the stream channel to provide approximately the same conditions as existed before mining. The reclaimed stream channel is stable from erosion with abundant grass cover, and the aquatic life has been established with macro invertebrates and invertebrates. These reclamation efforts demonstrate Cloud Peak Energy's commitment to environmental stewardship.<sup>1</sup>

<sup>1</sup> Wyoming Business Report – June 19, 2015 Press Release

## **V. Success in Achieving the Purposes of SMCRA**

The OSMRE's Directive REG-8 (REG-8) dictates that OSMRE oversight of State programs will focus on the "on-the-ground/end-result" success of the State programs in achieving the purposes of SMCRA. To further the concept of reporting end-results and on-the-ground success, each OSMRE field office is required by REG-8 to prepare findings from performance standard evaluations of: 1) off-site impacts, 2) reclamation success, and 3) customer service. These evaluations are required to report the number and degree of off-site impacts, the number and percentage of inspectable units free of off-site impacts; the number of acres that meet the bond release requirements and have been released by the State

for the various phases of reclamation; and the effectiveness of customer service provided by the State.

In addition to this required information, the DFD and the LQD agreed to further evaluate contemporaneous reclamation with specific evaluations, as allowed in REG-8 and as addressed in the Regulatory Performance Agreement in effect for the evaluation year. Specific evaluations were conducted to: 1) compare and evaluate the number of acres reclaimed (seeded) to the number of acres mined (disturbed), and, 2) compare Phase III bond release trends in Wyoming over the last seventeen evaluation years.

### **A. Off- Site Impacts**

For the purpose of oversight, a negative off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, structures) where that impact is intended to be minimized or prevented by SMCRA or the Wyoming program. In addition, the impact on the resource must be substantiated as being related to a mining and reclamation activity and must be outside the area authorized by the permit for conducting mining and reclamation activities. As a part of this oversight, the OSMRE and the LQD develop an annual Performance Agreement to evaluate and document the effectiveness of Wyoming's program in protecting the environment and public from negative off-site impacts resulting from surface and underground mining operations in Wyoming.

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: LQD and OSMRE inspection reports, enforcement actions, civil penalty assessments, citizens' complaints, special studies and information from other environmental agencies. If an off-site impact is identified, the sources of information and the basis used to identify and report these impacts will be clearly recorded. Field evaluations for off-site impacts are conducted during routine inspections (or in response to citizen complaints) by the LQD and the OSMRE.

The State of Wyoming has a total of thirty-four inspectable units. Of these thirty-four, there were none associated with a negative off-site impact. Accordingly, thirty-four of the inspectable units (100 percent) were compliant and free of negative off-site impacts.

### **B. Reclamation Success**

According to REG-8, the OSMRE will evaluate and report on the effectiveness of state programs in ensuring successful reclamation on lands affected by surface coal mining operations. Success will be determined based on the number of acres that meet the bond release standards and have been released by the state.

According to the LQD Coal Rules and Regulations, phased bond release is defined as:

**Phase I** – When the permittee completes the backfilling, regrading, topsoil replacement, recontouring and drainage control of a bonded area.

**Phase II** – When the permittee has established vegetation whose species composition is commensurate with that of the seed mix(es) of the approved reclamation plan.

**Phase III** – The remaining portion of the bond may be released after the permittee has successfully completed all surface coal mining and reclamation activities (vegetation success, hydrology supports post mining land use, etc.).

In addition to the nationwide information reported, offices and states may conduct specific evaluations and report on individual performance standards. Appendix 1, Table 6 catalogues the acreage of land released from bond for Phase I, II, and III. The information collected to measure Reclamation Success is listed below for the following areas:

**a. Land form/approximate original contour (AOC)**

- 1.) AOC achievement is measured by the acres of Phase I bond released. Approximately 39% (69,175 acres) of Wyoming's disturbed lands (177,719 acres) have received Phase I Bond Release.

**b. Land capability**

There are several measurements that may be conducted to demonstrate the reestablishment of land capability on mined areas.

- 1.) Proper replacement of soil resources is measured by acres of Phase I bond release. Approximately 39% (69,175 acres) of the disturbed lands (177,719 acres) have received Phase I Bond Release.
- 2.) Vegetation stability is measured by acres of Phase II bond release. Approximately 15% (27,330 acres) of the disturbed lands (177,719 acres) have received Phase II Bond Release.
- 3.) Achievement of postmining land uses is measured by acres of Phase III bond release. Approximately 9% (16,141 acres) of the disturbed lands (177,719 acres) have received Phase III Bond Release.
- 4.) Successful revegetation is measured by acres of Phase III bond release. Approximately 9% (16,141 acres) of the disturbed lands (177,719 acres) have received Phase III Bond Release.

### **c. Hydrologic reclamation**

- 1.) Achievement of surface water quality and quantity restoration can be measured by acres of Phase III bond release. Bond release will document that the water quality and quantity leaving the mine site meets the applicable standards and is comparable to or better than the pre-mining quality and quantity. Because it has been established and documented by inspection, the acreage released from Phase III bond liability can be considered as having achieved restoration of this aspect of surface water quality and quantity. Approximately 9% (16,141 acres) of the disturbed lands (177,719 acres) have received Phase III Bond Release.
- 2.) Achievement of groundwater recharge capacity and ground water quantity and quality restoration can be measured by acres of Phase III bond release. Approximately 9% (16,141 acres) of the disturbed lands (177,719 acres) have received Phase III Bond Release.

It should be noted that both State and Federal regulations do not require that a permittee file for bond release at any prescribed time. Therefore, only using bond release statistics to evaluate reclamation success can be misleading. Typically, permittees do not file for Phase II or Phase III bond release until completion of the entire mining operation. As a result, the number of acres released from Phase II and Phase III bond in Wyoming is relatively small compared to the number of acres actually regraded, topsoiled and seeded. To Wyoming's credit, the LQD initiated the Coal Working Group to help address this issue.

### **C. Contemporaneous Reclamation**

Contemporaneous reclamation specifically refers to the timeliness in which reclamation is occurring. To date in Wyoming, a total of 462,850 acres have been permitted, with approximately 177,719 acres (38%), disturbed by mining activity. Of those disturbed acres, approximately 86,928 acres have been backfilled, graded, topsoiled and seeded; or approximately 49% of the lands disturbed have been reclaimed to the point of establishing vegetation. The DFD's analysis shows that the State program is effective in achieving its goal of having disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible.

The standard for determining if mines are meeting their contemporaneous reclamation obligations is determined by compliance with permit commitments. This evaluation is conducted annually, and all coal mines evaluated were found to be in compliance this evaluation year.

Another general measurement for contemporaneous reclamation is a comparison of the rate at which lands are being permanently reclaimed (seeded) to the rate of disturbance. The following Chart (1) and Graph (1) are used to show the rate at



which lands are being permanently reclaimed (seeded) compared to the rate of disturbance. Differences in the ratios of disturbance vs. reclamation could be due to the nature of the mining operations in Wyoming, or there could be delays in backfilling and grading or permanent seeding operations due to the mines' operational emphasis on coal production over reclamation. Lands in these charts are considered permanently reclaimed when they are seeded with permanent vegetation consisting of species as prescribed in the reclamation plan of the approved permit. These permanently reclaimed (seeded) lands include lands that have obtained Phase II bond release status, lands that have obtained Phase III bond release status and permanently reclaimed (seeded) lands for which Phase II bond release has not yet been sought.

Low ratios of reclamation to disturbance indicate that reclamation is not progressing at the same rate as mining, resulting in an increasing acreage of disturbed lands. Conversely, high ratios of reclamation to disturbance indicate that reclamation is occurring faster than disturbance.

Chart 1 and Graph 1 illustrate the overall mining and reclamation activities for Wyoming coal mines since 1999. Note that the lines in Graph 1 are progressively diverging slightly each year, indicating an increase of disturbed lands over the reclaimed lands each year because of engineering requirements for pit safety as the depth of coal increases as mining continues to move west.

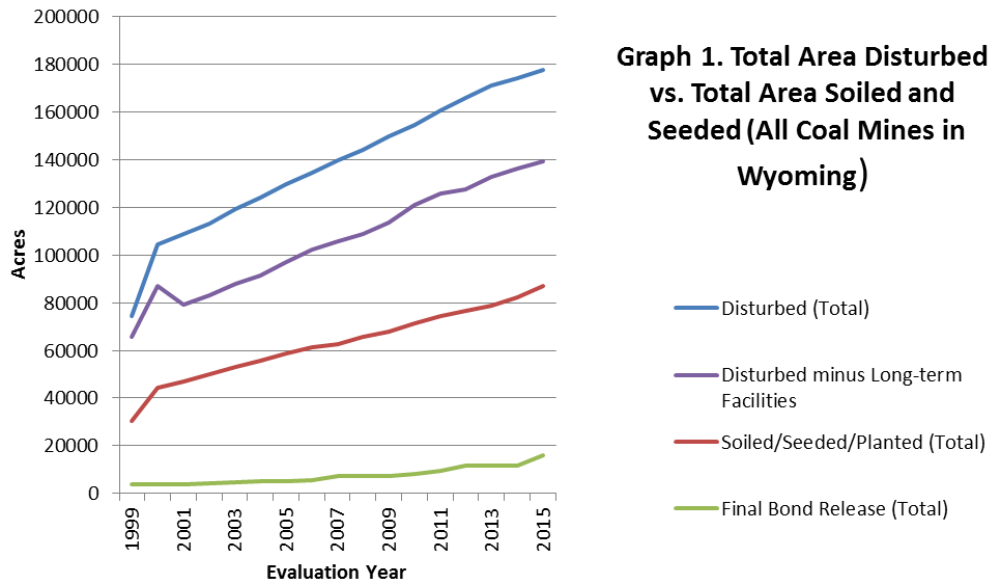
Chart 1

WYOMING RECLAMATION SUMMARY

EVAL YEAR	ACRES DISTURBED in the current year	Cumulative Acres Disturbed	ACRES RECLAIMED in the current year	Cumulative Acres Reclaimed	ANNUAL RATIO OF RECLAIM VS DISTURBED in the current year	Cumulative RATIO OF RECLAIMED VS DISTURB
1999	2173	74365	2029	30427	0.93	0.41
2000	7671	104511	3178	44235	0.41	0.42
2001	3882	108905	2450	46875	0.63	0.43
2002	4118	113052	2852	49972	0.69	0.44
2003	5665	119380	3047	52961	0.54	0.44
2004	5255	124223	2655	55615	0.51	0.45
2005	5543	129593	3135	58751	0.57	0.45
2006	4877	134329	2787	61537	0.57	0.46
2007	5444	139573	1305	62816	0.24	0.45
2008	4434	144017	2422	65513	0.55	0.45
2009	5943	149768	2349	67926	0.40	0.45
2010	4954	154761	3760	71197	0.76	0.46
2011	5763	160524	3085	74224	0.54	0.46
2012	7413	165792	3060	76616	0.41	0.46
2013	5373	171293	2785	78939	0.52	0.46
2014	3426	174035	3584	82108	1.05	0.47
2015	3867	177719	4666	86928	1.21	0.49

Source: Government Performance Reporting Act (GPRA) data collected from LQD; evaluation year data represents data for the calendar year preceding each evaluation year. The verification effort conducted in Wyoming during EY2012 refined existing data.

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The data in Chart 1 and Graph 1 was supplied by Wyoming coal mine permittees. Although this data is as accurate as possible, slight error is inherent due to the number, size, and scale of coal mines in Wyoming. Historic survey methods, positional error of Global Position Systems (GPS) and user differences, categorical definition changes of acreage reporting through time, staff turnover, mine mergers/consolidations, acreage overlap and double reporting of acreage, pre-SMCRA data collection inconsistencies, and the sheer number of mine staff collecting/reporting data all contribute to any error in Chart 1 and Graph 1 acreage. However, the OSMRE and the LQD remain confident that the reported acreage numbers are the most accurate portrait of coal mine disturbance and permanently reclaimed (seeded) lands in Wyoming.

The cumulative reclamation to disturbance ratio has remained steady over the last four evaluation years and is currently at 0.47, as indicated in Chart 1. This ratio indicates that the rate of reclamation is remaining constant in Wyoming and also indicates that 47% of the cumulative acres disturbed in Wyoming have been reclaimed to the point of being backfilled, graded and seeded. Approximately 22% of the cumulative disturbed lands on Wyoming coal mines consist of facilities, such as buildings, ponds, haul roads, soil and overburden stockpiles and other long-term disturbances. These disturbances are necessary in the operation of the mine until mining operations are completed. The total current size of all Wyoming coal facilities is reported as 38,240 acres. When subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.60. Thus 60% of the cumulative acres disturbed (minus coal facilities) in Wyoming have been reclaimed to the point of being backfilled, graded, and seeded.

When looking at Phase III bond release trends in Wyoming over the last seventeen evaluation years, the DFD totaled the acres of Phase III bond release from EY 1999 - EY 2007 (3,772 acres), and then totaled the acres of Phase III bond release from EY 2008 - EY 2015 (8,823 acres). Over the last eight evaluation years, cumulative Phase III bond release has increased from an average of 419 acres per year (EY 1999 - EY 2007), to an average of 1,165 acres per year (EY 2008 - EY 2015).

More detailed information concerning reclamation success 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 OSMRE website: <http://odocs.osmre.gov/>.

#### **D. Customer Service**

The DFD evaluated the LQD's customer service by monitoring responses to complaints, requests for inspections, and requests for assistance and services by permittees as well as the public or other agencies. The DFD also evaluated the LQD's customer service activities related to public participation and coordination with other governmental agencies in the permitting and bond release processes. During the evaluation year, the LQD received five complaints, all of which pertained to blasting. In all cases, the LQD followed up with prompt investigation as part of their enforcement process. Monitoring and record (shot reports) review was also conducted and indicated that for four of the five complaints, the shots were in compliance (the investigation into the fifth case was still open as of the date of this report). The LQD also offers and maintains an up-to-date webpage, accessed here: <http://deq.wyoming.gov/lqd/>, which contains information and documents for coal permittees, the public, and other interested parties.

The LQD demonstrates its customer service attributes throughout their program, and is highly receptive to the concerns of the public, industry and citizen groups. The LQD is meeting the requirements of Wyoming Statute and the LQD Coal Rules and Regulations when addressing required regulatory program functions such as public notices, meetings and hearings as well as one-on-one interactions with the public, industry and other State and Federal agencies. The LQD also includes its own public participation program during their permitting, bond release, and enforcement processes. During the permitting and bond release processes, notices are published in local newspapers and comments are solicited. The LQD also responds to permit applicants in a timely and thorough manner, and interacts well with members of the public or other agencies when assistance or services are requested.

## **VI. National Priority and General Oversight Topic Reviews**

No National Priority Topics were selected for review this evaluation year.

General Oversight Topics for EY 2015 include:

### **A. State Program Amendments**

During the previous evaluation year, the LQD proposed rules to revise Ownership and Control, Valid and Existing Rights, and periodic monitoring of blasting. These proposed rules were approved by Wyoming Governor Meade on September 23, 2014, and a formal program amendment is currently in review by the OSMRE. The LQD continues to improve the Wyoming program by reviewing supporting guidance documents to ensure they are updated with the best available science-based recommendations to aid in the administration of the LQD program. During the EY2015, a collaborative working group revised the LQD requirements for annual reports and a hydrology guideline. Guidelines on soils, overburden, and permitting are currently under revision.

In addition to the submittal discussed above, the LQD continues to work on improving the Wyoming program. The LQD has continued to work with the DFD to identify areas of the amendment process which can be streamlined in order to more efficiently process rules for formal amendments to Wyoming's program.

The DFD is encouraged by the progress Wyoming has made addressing their outstanding programmatic issues during this evaluation period and will continue to assist them at every opportunity until all issues have been resolved.

### **B. Oversight Inspections**

The DFD conducted a total of twenty-three oversight inspections of coal mining operations in Wyoming during this evaluation year. The inspection breakdown is as follows:

- Three complete oversight inspections
- Seven partial oversight inspections
- Thirteen bond release inspections

The DFD also conducted three site visits during the evaluation year, which evaluated nominations for the OSMRE Excellence in Surface Mining Award.

## C. Special Study Oversight Topics

### Termination of Jurisdiction

As part of Evaluation Year (EY) 2015 oversight, the OSMRE and LQD agreed to evaluate and report on the topic of Termination of Jurisdiction (TOJ) in Wyoming. The OSMRE developed a detailed work plan for this topic early in the evaluation year. Pursuant to the work plan, the OSMRE would evaluate permits that have received Phase III bond release (portions or permit-wide) to determine whether termination of jurisdiction had also occurred on those approved Phase III bond release acres. Specifically, the OSMRE will evaluate and report on:

- the total number of Phase III bond release acres in Wyoming;
- the total number of acres in Wyoming where jurisdiction has been terminated;
- the total number of acres released from Phase III but still under permittee jurisdiction (acres have been Phase III bond released but TOJ has not been granted);
- any reason(s) for the LQD granting Phase III bond released but not TOJ;
- any reason(s) for the permittee not wanting jurisdiction terminated on Phase III bond released acres, and;
- how TOJ (or lack thereof) could affect LQD's future Administration and Enforcement Grants (Fiscal Year (FY) 2016 and beyond).

In conducting the evaluation, OSMRE used available permit data, data from LQD's MIDAS database, OSMRE's Reclamation Status Table data, and data from LQD's FY 2015 Administration and Enforcement grant.

#### Permit Review

Fourteen permits in Wyoming (shown below) have portions or permit-wide Phase III bond release.

- |                       |                     |
|-----------------------|---------------------|
| 1) Big Horn 213       | 8) Rosebud 376      |
| 2) Belle Ayr 214      | 9) Seminoe II 377   |
| 3) Black Thunder 233  | 10) Seminoe I 378   |
| 4) Cordero Rojo 237   | 11) Kemmerer 379    |
| 5) Rawhide 240        | 12) Eagle Butte 428 |
| 6) Dave Johnston 291  | 13) Buckskin 500    |
| 7) EDC / Vanguard 334 | 14) Dry Fork 599    |

The remainder of this section hinges on some data gaps that we need from LQD...

More detailed information concerning TOJ is available in a topic specific oversight report available in the annual evaluation file. The evaluation file is available for review at the DFD-CAO or online at the OSMRE website: <http://odocs.osmre.gov/>.

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

As part of EY 2015 oversight, the OSMRE continues to report on the progress of the Coal Working Group monthly meetings. The Coal Working Group was formed by the LQD in EY 2012 with the intention of examining and improving the bond release process in Wyoming. The LQD hosts the monthly meetings in Casper, Wyoming with attendance from Industry representatives, the OSMRE, and in some cases based on specific topics of discussion, other groups such as local grazing associations. The main goal of the Coal Working Group was to clarify and streamline the guidelines for bond release, and develop transparent processes for reclamation evaluation and bond release in Wyoming.

During EY 2012 and EY 2013, many of the meeting discussions were centered on the various (internal to the LQD) draft bond release guidance documents (i.e. informal bond release guidelines, bond release processes, and bond release verifications/performance standards checklists), and revisions to formal LQD Guidelines for bond release. During EY 2014, the Coal Working Group completed and finalized revisions to existing LQD Guidelines for bond release and created a new LQD Guideline for bond release that addresses Phase III bond release application procedures. These and other LQD Guidelines can be accessed here: <http://deq.wyoming.gov/lqd/resources/guidelines/>. Additionally, the Coal Working Group held a bonding workshop that covered calculating bonds using LQD's Guideline 12.

During EY 2015, the LQD Coal Annual Report Format (CARF) was revised and finalized, and Coal Working Group initiated work on revisions to other LQD Guidelines, including Guideline 8 (Hydrology), Guideline 1A (Topsoil and Subsoil), and Guideline 1B (Geology, Overburden and Spoil).

### **Next Steps**

Monthly meetings and discussions are ongoing with the Coal Working Group, and future discussion topics may include contemporaneous reclamation, revisions to guideline 6A (Coal Permit Applications, Amendments, and Revisions), grazing concerns on Forest Service lands, backfill wells, and discussions about reclamation in general.

### **State-Federal Cooperative Agreement**

In EY 2014, the Western Region of OSMRE proposed to conduct a special oversight study on the Implementation of State-Federal Cooperative

Agreements. Due to unanticipated staffing issues coupled with increased litigation, OSMRE was not able to complete this oversight study in EY 2014 or EY 2015. The OSMRE National Office has scheduled an Internal Control Review (ICR) regarding Implementation of State-Federal Cooperative Agreements for Fiscal Year 2016.

## **VII. Regulatory Program Problems and Issues**

During this evaluation year, the LQD made significant progress in addressing its required outstanding program deficiencies with the submittal of one formal program amendment, WY-046-FOR, which includes proposed changes to the LQD's Coal Rules and Regulations concerning O&C, VER, and periodic monitoring of blasting. The OSMRE is currently processing this formal program amendment.

## **VIII. OSMRE Assistance**

The primary mode of the OSMRE's assistance to the LQD consists of an annual grant funding for the administration and enforcement of Wyoming's coal mining and reclamation program. Wyoming's Administration and Enforcement (A&E) grant from the OSMRE for this evaluation year was \$2,224,023.00 and funded 88.51% of Wyoming's reclamation program costs (Appendix 1, Table 9).

In addition to the LQD's program-funding grant from the OSMRE, the LQD also received assistance from the OSMRE in the form of training and cultural resource assistance.

### **A. National Technical Training Program (NTTP)**

During the evaluation year, three LQD staff members attended three NTTP courses, shown in Chart 2, below.

### **B. Technical Innovation and Professional Services (TIPS)**

During the evaluation year, five LQD staff members attended four TIPS courses, shown in Chart 2, below. In addition, one LQD staff member participated in updating and also teaching a TIPS course.

Chart 2. NTTP and TIPS training attended by LQD staff in EY 2015

Program	Course	Number of Attendees
NTTP	Geology and Geochemistry of Acid-Forming Materials	1
NTTP	Historic and Archeological Resources	1
NTTP	Wetlands Awareness	1
TIPS	Introduction to GIS - Online Virtual Class	1
TIPS	Hydrologic Engineering - Center-River Analysis System (HEC-RAS)	2
TIPS	ARCGIS Spatial Analyst:For Mining and Reclamation	1
TIPS	SEDCAD Applications and Extensions for Mine Permitting and Reclamation	1

### C. Cultural Resources

The DFD continues to coordinate the National Historic Preservation Act, Section 106 cultural resource compliance for the State of Wyoming. The DFD cultural resource coordinator works closely with the OSMRE Archaeologist in the OSMRE’s Western Regional Office, the LQD, Bureau of Land Management (BLM), Wyoming State Historic Preservation Office (SHPO), U. S. Forest Service (USFS) and the affected mining companies to process cultural resource clearances on new mining lands and previously permitted areas that have not been surveyed for cultural resources. In the past, this detailed involvement was necessary because the LQD does not have a qualified archaeologist on staff; and therefore, the SHPO would not accept cultural resource recommendations from LQD. Currently, the OSMRE, LQD, BLM, USFS, and the SHPO are working to develop a combined Section 106 procedure for coal leasing and mine permitting undertakings. Once completed, the process will serve to reduce the workload of each individual agency, yet satisfy the National Historic Preservation Act responsibilities of all parties concerned.

Wyoming has dedicated a ¼ time person to conduct the cultural resource management and liaison work. Currently, that individual receives all submittals from the mining companies and forwards the materials to the DFD and other agencies as appropriate. The DFD reviews the submitted materials and makes recommendations for National Register of Historic Place eligibilities to the LQD who in turn consults with the SHPO, or in the case of the finding of effect and development of Memorandum of Agreement, the DFD consults directly with the SHPO and then confers back to the LQD. The LQD is currently in the process of revising their guidance documents and will consult with the DFD and the SHPO prior to implementing those documents. The SHPO is observing the process closely as a trial period prior to developing a formal protocol for the LQD to consult procedurally with the SHPO.

### D. OSMRE Western Region Library

During EY 2015, the OSMRE Western Region Librarian filled four reference requests for LQD staff members.



## **IX. Summary Conclusion**

Based on the oversight topics evaluated for EY 2015, the DFD believes that the LQD is doing an effective job of administering its approved Title V reclamation program. The LQD has demonstrated an effective use of Federal funding through the application of its annual A&E grant. The LQD staff is very cooperative and continues to demonstrate willingness to work through issues and problems in an effective and efficient manner. The DFD and the LQD have developed a performance agreement for EY 2016, which can be viewed here: <http://odocs.osmre.gov/>.

# Wyoming Annual Evaluation Report

## Evaluation Year 2015

### Appendix 1

#### Summary of Core Data to Characterize the Regulatory Program

The following tables present summary data pertinent to mining operations and regulatory activities under the Wyoming regulatory program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by the OSMRE in its evaluation of Wyoming's performance is available for review in the evaluation file maintained by the DFD.

Because of the enormous variations from state to state and tribe to tribe in the number, size and type of coal mining operations and the differences between state and tribal programs, the summary data should not be used to compare one state or tribe to another.

#### List of Tables

Table 1	Coal Produced for Sale, Transfer, or Use
Table 2	Permanent Program Permits, Initial Program Sites, Inspectable Units, and Exploration
Table 3	Permits Allowing Special Categories of Mining
Table 4	Permitting Activity
Table 5	Off-Site Impacts
Table 6	Surface Coal Mining and Reclamation Activity
Table 7	Bond Forfeiture Activity
Table 8	Regulatory and AML Program Staffing
Table 9	Funds Granted to State or Tribe by OSMRE
Table 10	State or Tribal Inspection Activity
Table 11	State or Tribal Enforcement Activity
Table 12	Lands Unsuitable Activity
Table 13	OSMRE Oversight Activity
Table 14	Status of Action Plans
Table 15	Land Use Acreage (Optional)

**TABLE 1**

<b>COAL PRODUCED FOR SALE , TRANSFER, OR USE <sup>A</sup></b> (Millions of short tons)			
<b>Calendar Year</b>	<b>Surface Mines</b>	<b>Underground Mines</b>	<b>Total</b>
2011	435.7	2.4	438.1
2012	396.6	4.7	401.3
2013	383.5	4.6	388.1
2014	392.5	2.9	395.4

<sup>A</sup> Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

TABLE 2

<b>PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION</b>														
<b>Mines and Other Facilities</b>	<b>Numbers of Permanent Program Permits and Initial Program Sites</b>								<b>Insp. Units<sup>1 2</sup></b>	<b>Area in Acres<sup>3</sup></b>				<b>Total Area</b>
	<b>Permanent Program Permits</b>				<b>Initial Program Sites</b>					<b>Permanent Program Permits (Permit Area)</b>		<b>Initial Program Sites</b>		
	<b>Active</b>	<b>Inactive</b>	<b>Abandoned</b>	<b>Total</b>	<b>Active</b>	<b>Inactive</b>	<b>Abandoned</b>	<b>Total</b>		<b>Federal Lands</b>	<b>State/Tribal and Private Lands</b>	<b>Federal Lands</b>	<b>State/Tribal and Private Lands</b>	
<b>Surface Mines</b>	22	8	0	30	0	0	0	0	30	114,447	322,092	0	0	436,539
<b>Underground Mines</b>	0	1	0	1	0	0	0	0	1	1,688	3,577	0	0	5,265
<b>Other Facilities</b>	0	3	0	3	0	0	0	0	3	8,049	12,966	0	0	21,015
<b>Total</b>	22	12	0	34	0	0	0	0	34	124,184	338,635	0	0	462,819
<b>Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)</b>				<b>Total Number:</b>		34		<b>Average Acres per Site:</b>				13,612.32		
<b>Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):</b>				<b>Total Number:</b>		1.00		<b>Average Acres per IU:</b>				13,612.32		
<b>Permanent Program Permits in Temporary Cessation:</b>				<b>Total Number:</b>		2		<b>Number More than 3 Years:</b>				1		
<b>EXPLORATION SITES</b>				<b>Total Number of Sites</b>				<b>Sites on Federal Lands<sup>4</sup></b>				<b>Exploration Inspectable Units</b>		
<b>Exploration Sites with Permits:</b>				0				0				0		
<b>Exploration Sites with Notices:</b>				0				0				0		
<sup>1</sup> An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.														
<sup>2</sup> Total Inspectable Units calculation includes Exploration Sites Inspectable Units														
<sup>3</sup> When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.														
<sup>4</sup> The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management														

TABLE 3

<b>PERMITS ALLOWING SPECIAL CATEGORIES OF MINING</b>			
<b>Special Category of Mining</b>	<b>30 CFR Citation Defining Permits Allowing Special Mining Practices</b>	<b>Numbers of Permits</b>	
		<b>Issued During EY</b>	<b>Total Active and Inactive Permits</b>
Experimental Practice	785.13(d)	0	0
Mountaintop Removal Mining	785.14(c)(5)	0	0
Steep Slope Mining	785.15(c)	0	0
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	0
Prime Farmlands Historically Used for Cropland	785.17(e)	0	0
Contemporaneous Reclamation Variances	785.18(c)(9)	0	0
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	12
Auger Mining	785.20(c)	0	0
Coal Preparation Plants Not Located at a Mine Site	785.21(c)	0	0
In-Situ Processing	785.22(c)	0	1
Remining	773.15(m) and 785.25	0	1
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	0	13

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres <sup>1</sup>	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	6	7		0	0		3	2		9	9	
Transfers, sales, and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices <sup>2</sup>											0	
Revisions that do not add acreage to the permit area	58	51		0	0		2	0		60	51	
Revisions that add acreage to the permit area but are not incidental boundary revisions	2	2	13,966	0	0	0	0	0	0	2	2	13,966
Incidental boundary revisions	2	2	123	0	0	0	0	0	0	2	2	123
<b>Totals</b>	<b>68</b>	<b>62</b>	<b>14,089</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>73</b>	<b>64</b>	<b>14,089</b>
Permits terminated for failure to initiate operations:									Number:	0	Acres:	0.0
Acres of Phase III bond releases (Areas no longer considered to be disturbed):											Acres:	4,485.0
Permits in temporary cessation									Notices received:	0	Terminations:	0
Midterm permit reviews completed									Number:	34		
<sup>1</sup> Includes only the number of acres of proposed surface disturbance												
<sup>2</sup> State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 5

**OFF-SITE IMPACTS  
EXCLUDING BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>1</sup>: 36

Inspectable Units with one or more off-site impacts: 0

Exploration Inspectable Units with one or more off-site impacts<sup>2</sup>: 0

Inspectable Units free of off-site impacts: 36 % of Inspectable Units free of off-site impacts<sup>4</sup>: 100

<sup>1</sup> Total number of Inspectable Units is (1) the number of active and inactive inspectable units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year

<sup>2</sup> Exploration Inspectable Units with one or more off-site impacts is a subset of Inspectable Units with one or more off-site impacts

**OFF-SITE IMPACTS AT BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	0	0	0	1	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>3</sup>: 1

Inspectable Units with one or more off-site impacts: 1

Inspectable Units free of off-site impacts: 0 % of Inspectable Units free of off-site impacts<sup>4</sup>: 0

<sup>3</sup> Total number of Inspectable Units is (1) the number of bond forfeiture sites that were reclaimed during the Evaluation Year and (2) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year

**TABLE 5  
(Continued)**

<b>TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES</b>													
<b>RESOURCES AFFECTED</b>		<b>People</b>			<b>Land</b>			<b>Water</b>			<b>Structures</b>		
<b>DEGREE OF IMPACT</b>		<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
<b>TYPE OF IMPACT EVENT</b>	<b>NUMBER OF EVENTS</b>												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	0	0	0	1	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total Number of Inspectable Units <sup>5</sup> :				37									
Inspectable Units with one or more off-site impacts:				1									
Exploration Inspectable Units with one or more off-site impacts:				0									
Inspectable Units free of off-site impacts:				36					% of Inspectable Units free of off-site impacts <sup>4</sup> :			97	
<sup>4</sup> % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.													
<sup>5</sup> Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													



TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases  Total Acres Released in Approved Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
6,114		0			0	Phase I	6,114
	5,868			0		Phase II	5,868
			4,485			Phase III	4,485
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					2	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	0
Number of Inspectable Units Removed					2	Bond Forfeiture	10
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			12,583
Total Area Bonded for Disturbance	461,892	469,990	8,098
Area Bonded for Disturbance without Phase I Bond Release	373,766	373,485	(281)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	63,320	69,175	5,855
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	24,806	27,330	2,524
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0
Area Bonded for Remining	0	0	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	173,914	177,719	3,805

TABLE 7

<b>BOND FORFEITURE ACTIVITY (Permanent Program Permits)</b>			
<b>Bond Forfeiture and Reclamation Activity</b>	<b>Number of Sites</b>	<b>Dollars</b>	<b>Acres</b>
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e, end of previous Evaluation Year) <sup>1</sup>	1		13
Sites with bonds forfeited and collected during the current Evaluation Year	0	0	0
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	1		10
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year <sup>1</sup>	0		3
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
<b>Forfeiture Sites with Long-Term Water Pollution</b>			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
<b>Surety/Other Reclamation Activity In Lieu of Forfeiture</b>			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) <sup>2</sup>	0		0
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0
Sites with reclamation completed by surety/other party during the current Evaluation Year <sup>3</sup>	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year <sup>2</sup>	0		0
<sup>1</sup> Includes data only for those forfeiture sites not fully reclaimed. <sup>2</sup> Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. <sup>3</sup> These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

TABLE 8

<b>REGULATORY AND AML PROGRAMS STAFFING</b>	
<b>Function</b>	<b>Number of FTEs</b>
<b>Regulatory Program</b>	
Permit Review and Maintenance	6.62
Inspection	7.24
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	4.34
<b>Regulatory Program Total</b>	18.20
<b>AML Program Total</b>	10.87
<b>TOTAL</b>	29.07

TABLE 9

<b>FUNDS GRANTED TO STATE OR TRIBE BY OSM</b> <b>(Actual Dollars Rounded to the Nearest Dollar)</b>			
<b>Type of Funding</b>	<b>Federal Funds Awarded</b>	<b>Total Program Cost</b>	<b>Federal Funds Awarded as a Percentage of Total Program Costs</b>
<b>Regulatory Funding</b>			
Administration and Enforcement Grant	2,224,023		
Other Regulatory Funding, if applicable	0		
<b>Subtotal (Regulatory Funding)</b>	2,224,023	2,512,735	89
<b>Small Operator Assistance Program Grant Funding</b>	0	0	
<b>Abandoned Mine Land Reclamation Funding</b>	26,920,000	0	
<b>Watershed Cooperative Agreement Program</b>	0	0	
<b>TOTAL</b>	29,144,023		

TABLE 10

**STATE INSPECTION ACTIVITY  
INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN  
INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS <sup>1</sup>**

Inspectable Units (IUs)	Total number of inspectable units <sup>2</sup>	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
<b>COAL MINES AND FACILITIES</b>												
Active	22	88	176	93	192	22	100	22	100	22	22	100
Inactive	12	48	0	40	12	12	100	0	0	12	12	100
Abandoned	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS <sup>3</sup></b>	34	136	176	133	204	34	100	22	65	34	34	100
<b>Coal Exploration Activities <sup>4</sup></b>		<b>Complete Inspections</b>						<b>Partial Inspections</b>				
Exploration sites with permits		0						0				
Exploration sites with notices		0						0				

<sup>1</sup> Calculated on a site-specific basis.

<sup>2</sup> Total number includes both permanent program permits and initial program sites.

<sup>3</sup> OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites

<sup>4</sup> Includes all valid notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.

<sup>5</sup> NA - Not Available

TABLE 11

<b>STATE OR TRIBAL ENFORCEMENT ACTIVITY</b>		
<b>Type of Enforcement Action</b>	<b>Number of Actions <sup>1</sup></b>	<b>Number of Violations <sup>1</sup></b>
Notice of Violation	3	3
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0

<sup>1</sup> Does not include actions and violations that were vacated.

TABLE 12

<b>LANDS UNSUITABLE ACTIVITY</b>		
<b>Activity</b>	<b>Number</b>	<b>Acres</b>
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0
Decisions Terminating Unsuitable Designations	0	0

TABLE 13

<b>OSM OVERSIGHT ACTIVITY</b>					
<b>Oversight Inspections and Site Visits</b>					
	<b>Complete</b>		<b>Partial</b>		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	3	0	7	0	10
	Technical Assistance		Other		Total
Site Visits	0		3		3
<b>Violations Observed by OSM and Citizen Requests for Inspection<sup>1</sup></b>					
<b>Type of Action</b>				<b>Total number of each action</b>	
How many violations were observed by OSM on oversight inspections?				0	
Of the violations observed, how many did OSM defer to State action during inspections?				0	
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? <sup>2</sup>				0	
How many Ten-Day Notices did OSM Issue for observed violations? <sup>3</sup>				0	
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?				0	
How many Notices of Violation did OSM issue?				0	
How many Failure-to-Abate Cessation Orders did OSM issue?				0	
How many Imminent Harm Cessation Orders did OSM issue?				0	
<b>OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees</b>					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
<sup>1</sup> This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table. <sup>2</sup> Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. <sup>3</sup> Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					



TABLE 14

## STATUS OF ACTION PLANS

Action Plan ID	Problem Type <sup>1</sup>	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						
<sup>1</sup> Problem Type: "PA" indicates a required Program change under subchapter T or 732 "RP" indicates a Regulatory Program implementation or administrative problem						

**TABLE 15**  
**(Optional)**

<b>POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)</b>	
<b>Land Use<sup>1</sup></b>	<b>Acres Released</b>
Cropland	0.00
Pasture/Hayland	0.00
Grazingland	7,410.89
Forestry	0.00
Residential	0.00
Industrial/Commercial	43.94
Recreation	0.00
Fish & Wildlife Habitat	0.00
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
<b>Sub-Total Other</b>	0.00
<b>Total</b>	<b>7,454.83</b>

<sup>1</sup> Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program

# **Wyoming Annual Evaluation Report**

**Evaluation Year 2015**

## **Appendix 2**

### LQD Comments on the Report

The LQD sent an email to the OSMRE-CAO on September 3rd, 2015 stating that they had no comments on or edits to the Draft EY 2015 Wyoming Annual Oversight Report.