

**OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Report  
for the  
Regulatory Program**

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



**Evaluation Year 2011**

**(July 1, 2010 to June 30, 2011)**

**Prepared By**

**Casper Field Office  
August 2011**

## Executive Summary

The following is a summary of the EY2011 Oversight Report of the Wyoming Department of Environmental Quality, Land Quality Division (LQD). This report covers the period of July 1, 2010 to June 30, 2011. Overall, Wyoming has an effective program with one identified issue that needs corrective action.

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

Wyoming's outreach efforts include, but are not limited to LQD Advisory Board meetings, and Environmental Quality Council hearings, public notices, and public meetings. LQD has met on several occasions with the special interest groups (Powder River Basin Resource Council, Wyoming Outdoor Council (WOC), and the Wyoming Mining Association (WMA)) to discuss their concerns. In addition, 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, Wyoming makes every effort to operate openly and include the public in all of its actions.

### **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. Wyoming's permitting, compliance and inspection and enforcement program are meeting all requirements expected of it by OSM. Wyoming is following the corrective action plan developed to address its program rule changes and these issues should be completed in the 2012 evaluation period. The LQD is also making great strides in its development of an electronic permitting process and increased Geographic Information Systems (GIS) capabilities

### **Off-Site Impacts**

The State of Wyoming has a total of 36 inspectable units. Of these 36, there was 1 associated with an off-site impact. Accordingly, 35 of the inspectable units (97 percent) were free of off-site impacts.

The off-site impact consisted of NO<sub>x</sub> fumes (cloud) that impacted a resident approximately 11.5 miles from the site of two large blasts that were used to loosen/displace earth covering a coal seam. The blasts occurred on May 18, 2011. LQD subsequently issued a Notice of Violation (NOV) with associated remedial actions. A second NOV regarding this event was also issued to another operator shortly after the close of the 2011 Evaluation Year.

### **Reclamation Success**

OSM's Reg-8 uses acres of phased bond release as a measurement for successful reclamation. Specifically, how many acres have achieved return to land form/ approximate original contour, land capability (post-mine land use), hydrologic reclamation, and contemporaneous (timely) reclamation. In Wyoming, the following figures address the cumulative totals for bond release by phase:

Phase I – 46,401 ac. or 28% of total disturbance,  
Phase II – 10,375 ac. or 6% of total disturbance,  
Phase III – 5,752 ac. or 3% of total disturbance.

Currently in Wyoming a total of 442,348 acres have been permitted, with approximately 166,009 acres (38%), disturbed by mining activity to date. Of these disturbed acres, approximately 75,065 acres have been backfilled, graded, topsoiled and seeded; or approximately 45% 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 contemporaneously (timely) the State's mines are reclaiming and is also a subset of reclamation success. Once the revegetated acres have fulfilled their 10 year liability period, they are available for Phase III or final bond release.

### **Customer Service**

During this evaluation period, Wyoming received twelve citizen complaints (all regarding blasting). In all cases, Wyoming followed up with prompt investigation and long-term seismic monitoring. Monitoring and record (shot reports) review indicated that the mines were in compliance, however, one NOV was written to address issues regarding NOx gas from blasting.

### **General Oversight and Specific Topic Reviews**

#### Program Amendments

During this evaluation period, Wyoming continued to make substantial progress in addressing its outstanding program deficiencies. OSM approved one amendment package (1-S Reveg) on June 14, 2011, announced the receipt of another formal amendment package (1-BZ mine waste, Valid Existing Rights, and civil penalties) on May 2, 2011, and has a commitment from Wyoming for the delivery of the last amendment package (ownership and control) by late 2011 as required in the corrective action plan developed in 2010 to address these issues.

#### Clean Water Act Coordination

As part of OSM's "Immediate Stream Protection Measures," OSM held an interagency coordination meeting with the LQD and the State/Federal regulatory agencies responsible for implementing provisions of the Clean Water Act (CWA) to ensure the best protocols and procedures are in place for coordinating issuance of the various permits and authorizations required under SMCRA and the CWA. The LQD properly conducts the SMCRA/CWA coordination processes and has a history of implementing pre-permitting application stakeholder outreach and meetings in the field with Federal agencies, local governmental agencies, and surface and mineral landowners, as necessary for SMCRA permit coordination.

#### Oversight Inspections

The Casper Field Office conducted three complete oversight inspections, eleven partial oversight inspections and seven other inspections or site visits and bond release actions in Wyoming during this evaluation year,

including one independent complete oversight inspection. The CFO had no enforcement actions during EY 2011. The lack of OSM enforcement actions despite the increased inspection frequency is indicative of the effectiveness of the LQD enforcement program.

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

During this evaluation period, OSM and LQD jointly agreed in a performance agreement to review a previously identified issue regarding how LQD was implementing that part of its approved program regarding the design, construction and certification of primary roads on Wyoming permits. The review indicated that there are deficiencies and inconsistencies with regard to what is being required of the State's operators to fully comply with the Wyoming program. As a corrective action, the CFO is proposing that the LQD send out a directive to the State's permittees requesting permit revisions detailing the specific information, data and certifications necessary to meet compliance with the Wyoming program. These revisions should be completed and submitted to the LQD within 180 days of receipt of the directive by the permittee. The CFO and LQD have developed a performance agreement for the 2012 evaluation year that will address the issues identified during the 2011 evaluation period.

### **OSM Assistance**

Wyoming's Administration and Enforcement (A&E) grant from OSM for this evaluation period was \$2,265,571 and funded approximately 83% of Wyoming's reclamation program costs.

The CFO also continues to coordinate the National Historic Preservation Act, Section 106 cultural resource compliance for the State of Wyoming. The CFO cultural resource coordinator works closely with the OSM Archaeologist in OSM's Western Regional Office, 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.

Overall, the CFO believes that the Wyoming LQD is doing an effective job of running its approved Title V reclamation program.

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(Cover photo: Curious antelope on North Antelope Rochelle Mine reclamation)

## **I. Introduction**

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM 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, 2010 to June 30, 2011. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSM Casper Field Office (CFO).

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

AOC	Approximate Original Contour
BLM	Bureau of Land Management
CFO	Casper Field Office
CWA	Clean Water Act
DEQ	Wyoming Department of Environmental Quality
EQC	Wyoming Environmental Quality Council
GIS	Geographic Information System
LQD	Land Quality Division, WYDEQ
NOx	Nitrous Oxide (gas)
OSMRE/OSM	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. Forrest Service
WR	OSM Western Region – Denver, CO
WMA	Wyoming Mining Association
WOC	Wyoming Outdoor Council

## **II. Overview of the Wyoming Coal Mining Industry**

Wyoming is the top coal producing state in the nation and supplies nearly forty percent of the country's coal needs. Table 1 of Appendix 1, shows the past 4 years coal production for Wyoming. Wyoming singularly produces more coal than the next six, top coal producing states in the nation. Over ninety-nine percent of current coal production in Wyoming is from surface coal mines and ninety-two 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 approximately 6,800 people and provides substantial income and secondary employment in the State. In 2008, Wyoming coal generated \$1.15 billion in revenue for the state and the Federal government in the form of royalties, taxes and other payments. Approximately ninety seven percent of all coal produced in Wyoming is used for electrical generation facilities spread throughout 38states.

Wyoming's annual production continued to increase until 2009, when production dropped by approximately 39 million tons or 8.3% of the 2008 production high (see Table 1). During the 2009 reporting period, Wyoming and other western and midwestern states experienced several severe weather events that delayed rail transport of coal out of the Powder River Basin and affected production levels at the mines. Production for 2010 is again creeping up at a rate approximately 3.5% of the 2009 production value.

The Wyoming Geological Survey estimates the quantity of Wyoming coal reserves available for surface mining is in excess of 26.3 billion tons; and an additional 38.3 billion tons of coal reserves are estimated to be recoverable by underground mining methods. 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 high 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-six active coal mining operations permitted: thirty-three surface mining operations, one underground mining operation, one permit for a dragline move from one mine site to another, and one in-situ operation. The dragline move and in-situ operations are listed as "other facilities" in Table 2 of this report.

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

The OSM Casper Field Office (CFO) provides for transparency in the oversight process by conducting outreach to stakeholders and encouraging public participation throughout CFO's annual oversight activities. The public can find oversight guidance documents and Wyoming's Performance Agreement relating to OSM's oversight of Wyoming's program on the following OSM website: <http://www.wrcc.osmre.gov/programs/oversight/Wyoming.shtm>. Each evaluation year the CFO solicits input from the public and interested parties to comment on oversight and provide suggestions for potential oversight evaluation topics.

#### **A. OSM Outreach Efforts:**

The Casper Field Office contacts special interest groups such as the Wyoming Outdoor Council (WOC), Powder River Basin Resource Council (PRBRC) and the Wyoming Mining Association (WMA) during the evaluation period to obtain input and suggestions concerning oversight topics for evaluating the Wyoming Coal Regulatory Program. 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 Wyoming Department of Environmental Quality (DEQ). Citizens and groups were given the opportunity for a hearing or meeting with OSM to discuss any concern or issues of interest to them. No one requested any hearings or meetings, however, comments concerning oversight were incorporated in the oversight evaluation Performance Agreement.

#### **B. Wyoming Land Quality Division Outreach Efforts:**

Within the Wyoming Department of Environmental Quality, the Land Quality Division Advisory Board provides recommendations to the Land Quality Division (LQD) through public forums. The Environmental Quality Council (EQC) rules on regulatory matters for all divisions within 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. Wyoming's outreach efforts include, but are not limited to LQD Advisory Board meetings, and Environmental Quality Council hearings, public notices, and public meetings. LQD has met on several occasions with the special interest groups (PRBRC, WOC, and WMA) to discuss their concerns. In addition, LQD has in the past, hosted several technical forums for the public addressing current issues.

LDQ 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 LQD is highly receptive to the concerns of the public, industry and citizen groups. DEQ also has an internet website at <http://deq.state.wy.us/> with information for the public on permits, current rules, proposed rule changes and contact information.

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

Wyoming coal mining accounts for 40% of the nation's coal production (Coal Outlook, August 2011), and the sheer size and dynamism of coal operations in Wyoming present a challenge. The LQD continues to administer a rigorous Title V program regulating this very large and dynamic industry, even considering the formidable challenges of increasing coal production, increasing permit sizes, and increasing disturbance acres. The LQD program includes commitments to review and approve permit actions, conduct inspections, ensure that operators are in compliance with permit commitments and regulations, and address required program amendments. LQD met inspection requirements, approved 178 permit

actions, and addressed the remainder of the required program amendments this year.

### Electronic Permitting

LQD is developing an electronic permitting process; which includes electronic permits, LQD workflow, electronic records management, and a database. Electronic permitting will enable applicants to submit online permits, permit revisions, and other actions associated with coal mining (e.g. bonding, exploration, bond release). Electronic permits include text, tables, and GIS data. Electronic submissions will facilitate faster and easier submittals, and more efficient and effective reviews by LQD and other agencies such as OSM and the U.S. Fish and Wildlife Service. This project was initiated several years ago, was delayed for a while, and is now back on course for design completion and project development. The project will be implemented in three phases, with the first phase scheduled to roll out in the third quarter of 2012.

### *ESRI Achievement Award*

The Wyoming Department of Environmental Quality received a Special Achievement in Geographic Information Systems (GIS) award at the Environmental Systems Research Institute (ESRI) User Conference in July, 2010 for the design of the web-based GIS application for mine permit applications. The ArcGIS Advanced Server is the backbone of the DEQ-wide permitting system. There are approximately 130 individual feature classes and multiple image server services. The system will include a full web editing function, which will allow the operator to add spatial data directly to an outward facing replica of the LQD geodatabase, which can be brought across the firewall and incorporated into the approved electronic permit, once the features are approved.

### *Streamlining and Improving LQD Processes*

The LQD conducted two week-long workshops in March and April with the objective of improving the permitting process. The workshops used the Kaizen approach to identify inefficiencies and redundancies in the permitting process, with the objectives of reducing rounds of comment and response, and ultimately, reducing the time it takes to approve an application without reducing program effectiveness. The first workshop focused on refining a pre-application process with the objective of ensuring that applications are submitted with all of the required contents. The results of this workshop were officially rolled out in July. The second workshop evaluated the LQD permit application review process, and developed a system for prompt and effective completeness reviews. This second workshop was also intended to improve consistency among LQD reviewers, particularly among the different field offices within Wyoming.

In addition to the two workshops discussed above, the LQD conducted a Kaizen streamlining workshop for coal annual reports in the fall of 2009. The results have not been finalized, but work continues on this effort. This format will ensure that the correct data are collected for OSM, and will also form a template for an online electronic annual report submittal and review process.

## Reclamation and Bond Release

Both LQD and OSM are concerned with the small amount of bond release in Wyoming. The LQD is addressing this issue using two complimentary approaches. The first approach is to develop a GIS database for all coal mines that tracks land disturbance and reclamation status. This database will allow LQD to determine when lands are eligible for bond release. The framework for this database is being built as part of the electronic permitting process. Additional features will be incorporated through the electronic annual reporting process. LQD acknowledges that the bond release process could be easier and more transparent. The second component will use the Kaizen streamlining approach to evaluate and improve the current bond release process, scheduled for the fall of 2011. This effort will also include developing and revising guidance documents that will facilitate applications for successful bond release, and creating a web page dedicated to coal bond release. These elements will allow the LQD to identify acres that are eligible and facilitate applications for bond release.

## State Program Amendments

The LQD has made significant progress towards reducing the number of outstanding program deficiencies identified by the OSM during the evaluation period. As further addressed in Section VI of this report, OSM and LQD anticipate completion of the action plan developed to address these issues in the next evaluation period.

In addition to the submittals discussed above the LQD continues to work on improving the Wyoming program. The LQD has recently completed a review of all of the coal rules that focused on looking for areas which can be clarified, updated, and/or made more efficient. This review will serve as the basis for making future program amendments to the OSM. In addition to the rules review, the LQD has also reviewed supporting policy and guidelines that the LQD uses to aid in the administration of its program. These documents will also be revised and updated as necessary.

## Inspection and Enforcement

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

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

OSM Directive REG-8 (REG-8) dictates that OSM 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 OSM 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 CFO and DEQ agreed to further evaluate reclamation success 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 compare and evaluate the number of acres reclaimed (seeded) to the number of acres mined (disturbed). Based on the results of the following evaluation criteria, CFO finds that the Wyoming program is being carried out in an overall effective manner.

#### **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 people, land, water, or structures outside the permit area. The State program must regulate or control either the mining or reclamation activity, or the resulting off-site impact. In addition, the impact on the resource must be substantiated as being related to mining and reclamation activity. It must be outside the area authorized by the permit for conducting mining and reclamation activities. As a part of this oversight, LQD and CFO developed an oversight work plan to evaluate and document the effectiveness of the Wyoming program in protecting the environment and the 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: State and OSM 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 LQD and CFO.

The State of Wyoming has a total of 36 inspectable units. Of these 36, there was 1 associated with an off-site impact. Accordingly, 35 of the inspectable units (97 percent) were free of off-site impacts.

The one off-site impact consisted of NO<sub>x</sub> fumes (cloud) impacting a resident approximately 11.5 miles from the site of two large cast blasts and was reported to LQD as a citizen complaint by the impacted resident. The blasts occurred on May 18, 2011 and the LQD subsequently issued a Notice of Violation (NOV) to the mine, which describes the nature of the violation as follows: "The mine had two cast blasts on May 18, 2011 at 2:13 PM and 2:19 PM that produced a large

NOx cloud that drifted off-site and settled over a citizen's house approximately 11.5 miles to the southeast of the mine. The citizen could smell the NOx gas and had irritation in her nose and throat. The citizen submitted pictures to LQD showing the intensity of the NOx fumes in and around her house." An additional NOV was issued by LQD in EY 2012 to another operator regarding this issue.

As a result of the incident, the Remedial Action Required (as described in the NOV) was that the mine was required to submit a plan that would be used in the future to prevent NOx from blasts impacting people both on the permit and off the permit. In addition, the mine was required to submit a permit revision that incorporates the operational controls used for preventing NOx fumes from blasts impacting people into the permit blasting plan. LQD approval of the operational control plans was required before they were submitted as a permit revision.

More detailed information concerning this off-site impact is available in the LQD Notice of Violation report filed for May 18, 2011 and the CFO evaluation file for 2011.

## **B. Reclamation Success:**

Reclamation success may be determined based on the number of acres that meet the bond release standards. In addition to the nationwide information reported, Field Offices and States may conduct specific evaluations. 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 will be measured by the acres of Phase I bond released. Approximately 28% (46,401 ac.) of Wyoming's disturbed lands (166,009ac.) 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.

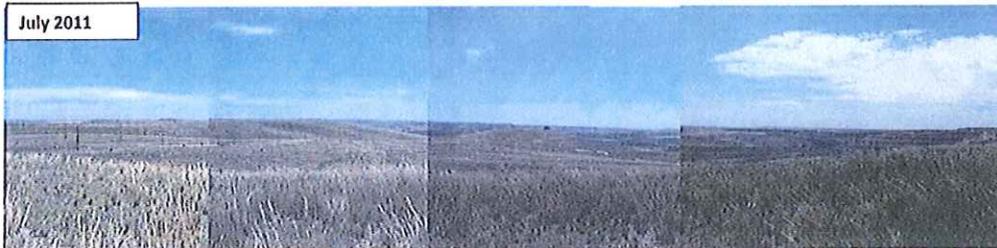
- 1.) Proper replacement of soil resources will be measured by acres of Phase II bond release. Approximately 6.2% (10,375 ac.) of the disturbed lands (166,009 ac.) have received Phase II Bond Release.
- 2.) Vegetation stability will be measured by acres of Phase II bond release. Approximately 6.2% (10,375 ac.) of the disturbed lands (166,009 ac.) have received Phase II Bond Release.
- 3.) Achievement of postmining land uses will be measured by acres of Phase III bond release. Approximately 3.4% (5,752 ac.) of the disturbed lands (166,009 ac.) have received Phase III Bond Release.
- 4.) Successful revegetation will be measured by acres of Phase III bond release. Approximately 3.4% (5,752 ac.) of the disturbed lands (166,009 ac.) 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 3.4% (5,752 ac.) of the disturbed lands (166,009 ac.) 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 3.4% (5,752 ac.) of the disturbed lands (166,009 ac.) have received Phase III Bond Release.

According to the above measurements used in REG-8, the data shows that the State program may not be fully effective in its goal of having all disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible. Both State and Federal regulations do not require that an operator file for bond release at any prescribed time. Therefore, operators typically 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, soiled and seeded. It should also be noted that these REG-8 measurements are not the only measurements that can be used to determine reclamation success. When the number of acres soiled and seeded compared to acres disturbed is considered, the CFO concludes that the State program is effective in its reclamation efforts. The following section of this report further explores this concept.

## Time Lapse Reclamation



The photo sequence above is indicative of the progression of reclamation at a large Wyoming surface mine. Photos were taken over time from the same approximate location, following disturbance through backfilling to AOC, soiling, seeding and establishment of vegetation over a six year time span.

Currently in Wyoming a total of 442,348 acres are permitted, with approximately 166,009 acres (38%), disturbed by mining activity to date. Of these disturbed acres, approximately 75,065 acres have been backfilled, graded, topsoiled and seeded; or approximately 45% of the lands disturbed have been reclaimed to the point of establishing vegetation.

**d. Contemporaneous Reclamation:**

According to the measurements used in REG-8 and reviews of current reclamation plans, our 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. Contemporaneous reclamation specifically refers to the timeliness that reclamation is occurring. Neither State or Federal regulations require that an operator file for bond release at any prescribed time. Therefore, operators typically do not file for final bond release until large blocks of land have completed both mining and reclamation activities. As a result, the number of acres released from Phase III bond is small compared to the number of acres actually regraded, soiled and seeded. It should also be noted that these REG-8 measurements are not the only measurements that can be used to determine how contemporaneous reclamation is occurring

CFO believes 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 the 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.

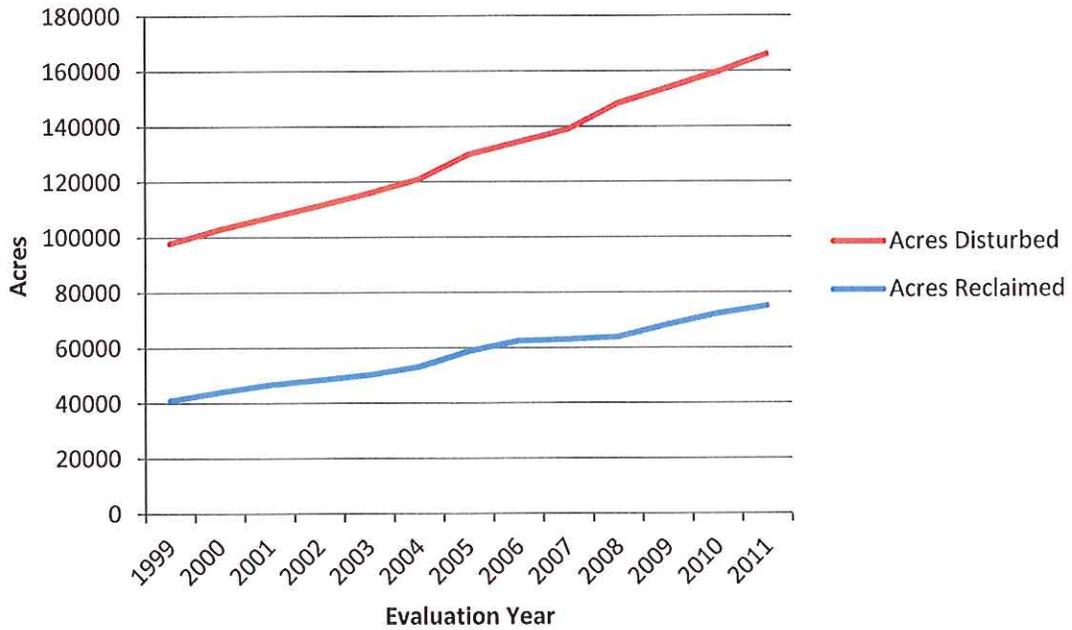
Chart 1

WYOMING RECLAMATION SUMMARY

EVAL YEAR	ACRES DISTURBED in the current year	Cumulative Acres Disturbed	ACRES RECLAIMED in the current year	Cumulative Acres Reclaimed	RATIO OF RECLAIM VS DISTURBED in the current year	Cumulative RATIO OF RECLAIMED VS DISTURB
1999	3491	97846	2972	41107	0.85	0.42
2000	5082	102928	2953	44060	0.58	0.43
2001	4281	107209	2629	46689	0.61	0.44
2002	4174	111383	1729	48418	0.41	0.43
2003	4502	115885	1882	50300	0.42	0.43
2004	5138	121023	2822	53122	0.55	0.44
2005	8768	129791	5665	58787	0.65	0.45
2006	4520	134311	3705	62492	0.82	0.47
2007	4658	138969	579	63071	0.12	0.45
2008	9264	148233	781	63852	0.08	0.43
2009	5715	153948	4471	68323	0.78	0.44
2010	5565	159513	3965	72288	0.71	0.45
2011	6496	166009	2777	75065	0.43	0.45

Source: 2011 Government Performance Reporting Act (GPRA) data collected from WY-DEQ

**Graph 1. Cumulative Disturbed VS. Cumulative Reclaimed Acreages (1999-2011)**



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

### **C. Customer Service:**

The LQD demonstrates its customer service attributes throughout their program. LQD goes beyond the requirements of the Federal Act or rules 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.

During this evaluation period, Wyoming received twelve citizen complaints (all regarding blasting). In all cases, Wyoming followed up with prompt investigation and long-term seismic monitoring. Monitoring and record (shot reports) review indicated that the mines were in compliance, however, one NOV was written to address issues regarding NOx gas from blasting.

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

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

General Oversight Topics for 2011 include:

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

During this evaluation period, Wyoming continued to make substantial progress in addressing its outstanding program deficiencies. During the evaluation year, OSM completed its review and approval process on Wyoming's 1-S (reveg) amendment package. The final approval for this amendment was published in the Federal Register on June 14, 2011. This package was a major rulemaking effort that has encompassed extensive rewriting of Wyoming's program regarding vegetation success standards, husbandry practices, wildlife enhancement, prime farmlands, siltation structures and other topics.

Wyoming submitted another amendment package to OSM for formal review on May 2, 2011. This package (1-BZ), addresses changes to the Wyoming rules regarding mine waste, valid existing rights and civil penalties. The proposed rule notice announcing the availability for public review of this amendment was published in the Federal Register June 21, 2011. OSM is currently reviewing this amendment package and processing it through our approval process.

The last of Wyoming's outstanding program issues deal with ownership and control definitions, permit information, and permit rescissions. These issues are currently working their way through Wyoming's internal rule making process and were presented before the Environmental Quality Council on June 6, 2011. OSM

can expect to see this package and four additional issues identified from the I-S package in a formal submittal in late 2011.

Wyoming has been diligently following the schedule in the corrective action plan established in EY2010 for addressing and submitting program amendment issues for review and approval by OSM. The Casper Field Office 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. Clean Water Act Coordination**

As part of OSM's "Immediate Stream Protection Measures," OSM held an interagency coordination meeting with DEQ and the State/Federal regulatory agencies responsible for implementing provisions of the Clean Water Act (CWA) to ensure the best protocols and procedures are in place for coordinating issuance of the various permits and authorizations required under SMCRA and the CWA. The DEQ properly conducts the SMCRA/CWA coordination processes with their Bureaus; and DEQ has a history of implementing pre-permitting application stakeholder outreach and meetings in the field with Federal agencies, local governmental agencies, and surface and mineral landowners, as necessary for SMCRA permit coordination.

## **C. Oversight Inspections**

The Casper Field Office conducted a total of 21 oversight inspections and site visits of coal mining operations in Wyoming during this evaluation year. The breakdown is as follows:

- Two complete oversight inspections
- One independent complete inspection
- Six partial oversight inspections
- Five partial oversight inspections which included review of Federal Lands bond release applications
- Three Federal Lands bond release application inspections
- Four site visits to review applications for Excellence in Surface Mining Awards

During EY 2011, the CFO did not issue any enforcement actions (i.e., NOVs or COs), or Ten-Day Notices (TDNs). The lack of enforcement actions required, despite the increased inspection frequency helps to illustrate the effectiveness of Wyoming's Regulatory Program.

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

During a routine oversight inspection with the Wyoming LQD, an issue was raised regarding the implementation of Wyoming's approved reclamation program with respect to the design and construction of drainage systems for primary roads on Wyoming permits. For the EY2011 evaluation period

performance agreement, OSM and LQD agreed to review this topic further. The issue in question was how the requirements of Chapter 2, Section 5 (a)(xvi) Road Systems and Chapter 4, Section 2 (j) Roads, of the Wyoming coal rules were being implemented.

There are three general aspects that OSM evaluated regarding Wyoming's implementation of its rules relating to the design, construction, and certification of primary road drainage systems. These are: 1) permitting/design documentation, 2) evaluation of processes for design, construction and certification, and 3) field verification that mine operators are following the approved design, construction, and certification requirements.

The CFO and LQD reviewed five permits throughout the State during the evaluation period to determine:

- 1) If there is an agreement between the regulatory authority and OSM as to the requirements of the approved State program (i.e. Do OSM and LQD interpret the requirements of the program the same?),
- 2) The State's method to check the operator's compliance with Wyoming's rules and the approved permit,
- 3) If the State routinely uses these verification methods,
- 4) If there are sufficient cross-sections, maps and designs in the permit to properly evaluate compliance with the approved permit and rules, and
- 5) If the State processes for evaluating design, construction, and certification of primary road drainage systems is consistent with the approved State program.

OSM and LQD evaluated the design, construction, and certification of primary road drainage systems for the selected permits by conducting field verification during oversight inspections.

**PERMITS SELECTED FOR REVIEW:**

- 1) Black Thunder Mine (Permit No. 233)
- 2) Jacobs Ranch Mine (Permit No. 271)
- 3) North Rochelle (Permit No. 550)
- 4) Antelope Mine (Permit No. 525)
- 5) Black Butte Mine (Permit No. 467)

**PERMITS SELECTED FOR OVERSIGHT INSPECTION:**

- 1) Black Thunder Mine (Permit No. 233)
- 2) Jacobs Ranch Mine (Permit No. 271)
- 3) North Rochelle (Permit No. 550)
- 4) Carbon Basin Mine (Permit No. 730)
- 5) Rawhide Mine (Permit No. 240)
- 6) Buckskin Mine (Permit No. 500)
- 7) Coal Creek Mine (Permit No. 483)

**FINDINGS:** After conducting the permit reviews and field inspections, the CFO has the following findings:

1) There is no specific written agreement between OSM and the LQD other than the plain reading of the Wyoming rules in Chapters 2 and 4 of the Coal Rules and Regulations, regarding the requirements for certification of primary roads. The LQD has an Instructional Memorandum (IM 25), that addresses the certification of impoundments and roads. IM 25 Section III (C) (ii) states that if runoff from a road passes into an approved sedimentation control structure the certification of the sedimentation control structure eliminates the need to also certify the road. The issue of whether or not road drainage is directed into the pit or sediment control structures is not the only consideration when certifying primary roads. The requirement (Chap. 4, Sect.2(j)(vii)) to adequately design, construct, maintain and reclaim primary roads is also necessary to ensure that the roads are sized and designed to allow the large mine vehicles and equipment that use them to operate in a safe manner. In short, all primary roads must be certified as adequate for their intended use.

There also appears to be differences between the LQD district offices and the mine operators in how the rules are interpreted and implemented. Wyoming's program (Chapter 2, Section 5 (xvi)) specifies that an applicant submit plans and drawings for primary roads that have been certified as meeting the requirements of the program to the LQD. OSM's review of the selected permits did not find such plans, designs, or certifications for primary roads on file with the LQD for all the sample mines reviewed. LQD staff indicated that these plans, while not submitted to the Administrator, were on file at the mines and available for review during on-site inspections. However, during field verification inspections, some of the mines could not readily produce this information.

2) When the LQD reviews and approves the permits, they approve a "typical" road design that addresses the basics (width, surfacing material, and side slopes, etc.) for road construction, but does not address the specifics for design and construction (drainage area, soil type, slope, cover, etc.) of drainage controls to protect the road.

3) Each of the three LQD district offices approach review and approval of drainage control for primary roads a little differently and the level of compliance from the mine operators is also inconsistent. Some mines do a good job of providing enough information in the permit to evaluate the mine roads program, while others do not. While LQD policy has never been to support poor design or incorrect sizing of culverts and ditches related to road construction, permit documentation to verify the adequacy of such structures is inconsistent in the permits reviewed.

4) As mentioned above, our review indicated that some permits were better than others at providing the necessary data to determine the correct sizing of drainage structures for primary roads. It should also be noted that some permits have gone

through an evolutionary process and are submitting improved documentation to the LQD on the more recent road designs. Other permits are currently going through a major revision that will incorporate changes to the roads issues identified by this review.

5) The state's process for evaluating the design, construction, and certification of primary road drainage systems appears to be inconsistent with its approved program in various ways. Some of the mine operators appear to be in compliance while others are not.

6) During this evaluation period, no roads related problems were identified during oversight inspections and historically, few roads issues have been raised.

#### **CORRECTIVE ACTION:**

Due to the deficiencies and inconsistencies found in the implementation of the Wyoming program regarding permit requirements for road plans, OSM recommends that the LQD send a directive to all the Wyoming coal mine operators and its district offices. This directive should delineate the requirements of the Wyoming rules with specific instructions as to what information, data and certifications are necessary to meet compliance with the program. The LQD should issue the directive and complete all required permit revisions within 180 days of receipt of the directive by the permittee. If LQD anticipates that the corrective action will exceed the 180 days, OSM and LQD will develop a formal corrective action plan to address the issue.

### **VIII. OSM Assistance**

The primary mode of OSM's assistance to Wyoming 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 OSM for this evaluation period was \$2,265,571 and funded approximately 83% of Wyoming's reclamation program costs (Table 9).

In addition to their program-funding grant from OSM, Wyoming also received assistance from OSM in the form of training and cultural resource assistance.

#### **A. Training and Technical Assistance**

During this evaluation period, OSM assisted Dr. Ania Waitkus (soil scientist with the Wyoming LQD) with her participation as a presenter for the bond release workshop at the 2011 ASMR annual meeting in Bismarck, North Dakota.

The National Technical Training Program (NTTP) was not able to provide records pertaining to attendance of Wyoming LQD staff at NTTP training courses during the evaluation period.

## **B. Cultural Resources**

The CFO continues to coordinate the National Historic Preservation Act, Section 106 cultural resource compliance for the State of Wyoming. The CFO cultural resource coordinator works closely with the OSM Archaeologist in OSM's Western Regional Office, 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 Wyoming DEQ does not have a qualified archaeologist on staff; and therefore, the SHPO would not accept cultural resource recommendations from LQD. Currently, OSM, LQD, BLM, USFS, and 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 CFO and other agencies as appropriate. CFO reviews the submitted materials and make recommendations for National Register of Historic Place eligibilities to LQD who in turn consults with the SHPO, or in the case of the finding of effect and development of Memorandum of Agreement, CFO consults directly with SHPO and then confers back to LQD. The LQD is currently in the process of revising their guidance documents and will consult with CFO and SHPO prior to implementing those documents. SHPO is observing the process closely as a trial period prior to developing a formal protocol for LQD to consult procedurally with the SHPO.

## **IX. Summary Conclusion**

Overall, the CFO believes that the Wyoming LQD is doing an effective job of running its approved Title V reclamation program. Wyoming has demonstrated an effective use of Federal funding through the application of its annual Administration and Enforcement grant. The LQD staff are very cooperative and show a willingness to work through issues and problems in an effective and efficient manner. The CFO and LQD have developed a performance agreement for the 2012 evaluation year that will address the issues identified during this evaluation period and expect to get them addressed in a timely manner.

# Wyoming Annual Evaluation Report

Evaluation Year 2011

## 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 OSM in its evaluation of Wyoming's performance is available for review in the evaluation file maintained by the Casper Field Office.

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.

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Table 1	Coal Produced for Sale, Transfer, or Use
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**TABLE 1**

**COAL PRODUCED FOR SALE, TRANSFER, OR USE**

<b>Calendar Year</b>	<b>Surface Mines</b>	<b>Underground Mines</b>	<b>Total</b>
2007	448.727	2.638	451.365
2008	462.623	3.570	466.193
2009	423.960	3.435	427.395
2010	438.330	3.820	442.150

<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.

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION																
Numbers of Permanent Program Permits and Initial Program Sites										Area <sup>B</sup> Rounded to nearest 10 Acres						
Permanent Program Permits					Initial Program Sites					Initial Program Sites						
Mines and Other Facilities	Active		Inactive		Abandoned	Total	Active	Inactive	Abandoned	Total	Insp. <sup>A</sup> Units	Permanent Program Permits (Permit Area)				
	Inactive	Active	Inactive	Active								Federal Lands	State/Tribal and Private Lands	Federal Lands	State/Tribal and Private Lands	Total Acres
Surface Mines	24	9	0	33	0	0	0	0	0	0	33	11925	30860	0	0	42785
Underground Mines	0	1	0	1	0	0	0	0	0	0	1	169	358	0	0	527
Other Facilities	0	2	0	2	0	0	0	0	0	0	2	0	213	0	0	213
<b>Total</b>	<b>24</b>	<b>12</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>12094</b>	<b>31431</b>	<b>0</b>	<b>0</b>	<b>43525</b>
Permanent Program Permits and Initial Program Sites:										Total Number:	36	Average Acres per Site: 12090.00				
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):											1.00	Average Acres per IU: 12090.00				
Permanent Program Permits in Temporary Cessation										Total Number:	0	Number More than 3 years: 0				
Exploration Sites										Total number of permit sites:	0	Sites with Federal Lands <sup>C</sup> : 0				
Number of Exploration Sites with Notices:										Total number of notice sites:	0	Sites with Federal Lands <sup>C</sup> : 0				

<sup>A</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 with a Permanent Program Permit.

<sup>B</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>C</sup> The Number of Exploration Sites with 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

Wyoming EY2011

<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>Number 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	8
Auger Mining	785.20(c)	0	4
Coal preparation plants not located at a mine site	785.21(e)	0	0
In-situ Processing	785.22(c)	0	1
Remining	773.15(m) and 785.25	0	3
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	0

PERMITTING ACTIVITY														
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals				
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres <sup>A</sup>	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres		
New Permits	1	0	0	0	0	0	0	0	0	1	0	0		
Renewals	4	12		0	0		0	0		4	12			
Transfers, sales and assignment of permit rights	6	5		0	0		0	0		6	5			
Small Operator Assistance	0	0		0	0		0	0		0	0			
Exploration Permits														
Exploration Notices <sup>B</sup>														
Revisions that do not add acreage to the permit area		86			0			0			86			
Revision that add acreage to the permit area, but are not incidental boundary revisions	6	5	5766	0	0	0	0	0	0	6	5	5766		
Incidental boundary revisions	3	4	185	0	0	0	0	0	0	3	4	185		
Totals	20	112	5951	0	0	0	0	0	0	24	112	5951		
Permits terminated for failure to initiate operations:											Number:	0	Acres:	0.00
Acres of Phase III bond release (Areas no longer considered to be disturbed):														217.00
Permits in temporary cessation:											Notices received:	0	Terminations:	0
Midterm permit reviews completed that are not reported as revisions:											Number:	61		

<sup>A</sup> Include only the number of acres of proposed surface disturbance.

<sup>B</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	1	1	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
Total	1	1	0	0	0	0	0	0	0	0	0	0	0
Total number of Inspectable Units <sup>B</sup> :		36											
Inspectable Units with one or more off-site impacts:		1											
Inspectable Units free of off-site impacts:		35											
% of Inspectable Units free of off-site impacts <sup>A</sup> : 97%													
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	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total number of Inspectable Units <sup>B</sup> :		0											
Inspectable Units with one or more off-site impacts:		0											
Inspectable Units free of off-site impacts:		0											
% of Inspectable Units free of off-site impacts <sup>A</sup> : #DIV/0!													

TABLE 5  
(continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED	People			Land			Water			Structures			
	DEGREE OF IMPACT	minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
<b>TYPE OF IMPACT EVENT</b>	<b>NUMBER OF EVENTS</b>												
Blasting	1	1	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
Total	1	1	0	0	0	0	0	0	0	0	0	0	0

Total number of Inspectable Units<sup>B</sup>: 36

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

Inspectable Units free of off-site impacts: 35 % of Inspectable Units free of off-site impacts<sup>A</sup>: 97%

<sup>A</sup> % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units at the end of the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.

<sup>B</sup> Total number of Inspectable Units is (1) the number of Inspectable Units at the end of the Evaluation Year and (2) the number of permanent program permits terminated under Phase III bond release during the Evaluation Year and (3) the number of Initial Program Sites with jurisdiction terminated during the Evaluation Year and (4) the number of bond forfeiture sites that were reclaimed during the Evaluation Year.

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II and III Releases During the Evaluation Year (EY)							
Phase I Releases		Phase II Releases			Phase III Releases		
Total Acres Released in Approved Phase I Releases	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	Total Acres Released During the EY	
2631.00	0.00	0.00	217.00	217.00	0.00	Phase I Phase II Phase III	
						2631.00 217.00 217.00	
Cumulative Total Acres Release under All Bond Release Phases at the End of the Evaluation Year							3065.00
Number of Permanent Program Permits Terminated under Phase III Bond Release and Initial Program Sites with Jurisdiction Terminated During the Evaluation Year							0
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							
New Area and Cumulative Area Bonded for Disturbance		Total Acres at Start of EY			Total Acres at End of EY		Change in Acres During EY
Area Bonded for Disturbance without Phase I Bond Release		0.00			442348.00		12991.00
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved		0.00			442348.00		442348.00
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved		0.00			44574.00		44574.00
Total Area Bonded for Disturbance		0.00			6145.00		6145.00
Area Bonded for Remining		0.00			493067.00		493067.00
Disturbed Area		159513.00			166009.00		6496.00

TABLE 7

Wyoming EY2011

<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>A</sup>	1		10.00
Sites with bonds forfeited and collected during the current Evaluation Year	0		0.00
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0.00
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	0		0.00
Sites with bonds forfeited and collected that were un-reclaimed during the current Evaluation Year <sup>A</sup>	2		180.00
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0.00
<b>Forfeiture Sites with Lon-Term Water Pollution</b>			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, land 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>B</sup>	0		0.00
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0.00
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0.00
Sites with reclamation completed by surety/other party during the current Evaluation Year <sup>C</sup>	0		0.00
Sites being reclaimed by surety/other part at the end of the current Evaluation Year <sup>B</sup>	0		0.00
<sup>A</sup> Includes data only for those forfeiture sites not fully reclaimed.			
<sup>B</sup> Includes all sites where surety or other party has agreed to complete reclamation, and the site is not fully reclaimed.			
<sup>C</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	10.00
Inspection	6.00
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	5.00
<b>Regulatory Program Total</b>	<b>21.00</b>
<b>AML Program Total</b>	<b>11.00</b>
<b>TOTAL</b>	<b>32.00</b>

TABLE 9

<b>FUNDS GRANTED TO STATE OR TRIBE BY OSM</b> (Actual Dollars Rounded to the Nearest Dollar)			
<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	2,265,571		
Other Regulatory Funding, if applicable	0		
<b>Subtotal (Regulatory Funding)</b>	2,265,571	2,732,105	83
<b>Small Operator Assistance Program Grant Funding</b>	0	0	
<b>Abandoned Mine Land Reclamation Funding</b>	133,062,524	133,061,765	100
<b>Watershed Cooperative Agreement Program</b>	0	0	
<b>TOTAL</b>	135,328,095		

STATE OR TRIBAL INSPECTION ACTIVITY							
Permits and Sites		Complete Inspections			Partial Inspections		
Activity Status	Number of Permits and Sites	Inspections Required Annually	Approximate Number of Required Inspections <sup>A</sup>	Number of Complete Inspections Conducted	Inspections Required Annually	Approximate Number of Required Inspections <sup>A</sup>	Number of Partial Inspections Conducted
Approximate Number of Required Inspections of Permanent Program Permits							
Active	24	4	96		8	192	
Inactive	12	4	48		0	0	
Abandoned	0	0	0		0	0	
Approximate Number of Required Inspections of Initial Program Sites							
Active	0		0		0	0	
Inactive	0		0		0	0	
Abandoned	0		0		0	0	
Inspections Conducted and Approximate Number Required on All Permanent Program Permits and Initial Program Sites							
Total Active	24		96	96		192	200
Total Inactive	12		48	48		0	
Total Abandoned	0		0	0		0	
<b>Total</b>	<b>36</b>		<b>144</b>	<b>144</b>		<b>192</b>	<b>208</b>
Exploration Sites with Permits and with Notices							
All Exploration	0			0			0

<sup>A</sup> The number of required inspections are approximations because part way through the Evaluation Year Sites may change "activity status" or become eliminated because final Phase III bond release was approved or the regulatory authority terminated its jurisdiction under the Initial Program. Likewise, as new permits are issued throughout the Evaluation Year, the number of Permanent Program Permits would increase, but only some of the "Inspections Required per Site Annually" would be required for those sites permitted part way through the year. Additionally, some Sites may be consolidated into one inspectable unit, thus one inspection may cover multiple Sites.

TABLE 11

Wyoming EY2011

<b>STATE OR TRIBAL ENFORCEMENT ACTIVITY</b>		
<b>Type of Enforcement Action</b>	<b>Number of Actions<sup>A</sup></b>	<b>Number of Violations<sup>A</sup></b>
Notice of Violation	2	2
Failure to Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0

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

TABLE 12

Wyoming EY2011

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Activity	Number	Acres
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0.00
Decisions Terminating Unsuitable Designations	0	0.00

TABLE 13

<b>OSM OVERSIGHT ACTIVITY</b>					
<b>Oversight Inspections and Site Visits</b>					
	<b>Complete</b>		<b>Partial</b>		<b>Total</b>
	<b>Joint</b>	<b>Non-Joint</b>	<b>Joint</b>	<b>Non-Joint</b>	
Oversight Inspections	2	1	11	0	14
Site Visits	Technical Assistance		Other		Total
	0		4		4
<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?				20	
Of the violations observed, how many did OSM defer to State action during inspections?				20	
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

<sup>1</sup> Problem Type "PA" indicates a required Program change under subchapter T or 732  
"RP" indicates a Regulatory Program implementation or administration problem

**TABLE 15  
 (Optional)**

**POST-MINING LAND USE ACREAGE  
 OF SITES FULLY RECLAIMED  
 (Phase III bond release or termination of jurisdiction under the Initial Program)**

Land Use <sup>1</sup>	Acres Released
Cropland	0.00
Pasture/Hayland	0.00
Grazingland	0.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	3.00
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 -	214.00
Other -	0.00
<b>Sub-Total Other</b>	214.00
<b>Total</b>	217.00

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