

**Office of Surface Mining
Reclamation and Enforcement**

**Annual Evaluation Summary Report
for the
Regulatory Program**

Administered By

**The
Wyoming
Department of Environmental Quality**

**Evaluation Year 2008
(July 1, 2007 to June 30, 2008)**

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(Cover photo: Reclamation at the EDC Mine near Hanna)

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, 2007 to June 30, 2008. 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 acronyms are used in this report:

BLM	Bureau of Land Management
CFO	Casper Field Office - OSM
CO	Cessation Order
DEQ	Wyoming Department of Environmental Quality
EQC	Environmental Quality Council
EY08	Evaluation Year 2008
LQD	Wyoming Land Quality Division
NOV	Notice of Violation
OSM	Office of Surface Mining Reclamation and Enforcement
OTT	Office of Technology Transfer
PRBRC	Powder River Basin Resource Council
SHPO	State Historic Preservation Officer
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day-Notice
TIPS	Technical Information Processing System
USFS	United States Forest Service
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 37% of the country's coal needs. Table 1 shows the past 3 years' coal production for Wyoming. 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 is mined in the Powder River Basin surrounding 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 41 percent of the State's total land area. The coal mining industry currently employs approximately 5,345 people and also provides substantial income and secondary employment in the State. Approximately 97 percent of all coal produced in Wyoming is used for electrical generation facilities spread throughout 32 states.

Wyoming's annual production continues to increase and is up 1.35 percent (6 mtpy) in the last year (see Table 1) and is up over 39 percent (127 mtpy) in this century alone.

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

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

A. OSM Outreach Efforts

The Casper Field Office has contacted special interest groups such as the Wyoming Outdoor Council, Powder River Resource Council and the Wyoming Mining Association 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. 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 there were written comments concerning oversight topics and regarding proposed rule changes through out the evaluation year. Comments concerning oversight were incorporated in the oversight evaluation Performance Agreement, and comments on proposed rule changes were logged into the Administrative Record and addressed in the final decision published in the Federal Register.

B. Wyoming LQD Outreach Efforts

The Land Quality Division Advisory Board provides recommendations to the Land Quality Division

through public forums. The Environmental Quality Council (EQC) rules on regulatory matters for all divisions within the Department (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 hosted several technical forums for the public addressing current issues.

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 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.

CFO monitors DEQ's hearings, meetings and outreach efforts and has found the State does an excellent job interacting with citizens and special interest groups.

IV. Major Accomplishments/Issues/Innovations in the Wyoming Program

Wyoming continues to administer a rigorous Title V program, even with the challenge of increasing coal production, and increasing permit sizes and disturbance areas. LQD actively works to improve the program at every opportunity. The Department of Environmental Quality (DEQ) has implemented an electronic initiative that will convert most Departmental business to an electronic format. As a division of DEQ, the Land Quality Division (LQD) has been involved with this program from its inception. LQD is currently working on developing detailed business processes to enable submittal of online permits, amendments, revisions, transfers, and exploration licenses to be implemented in early 2009. The next phase, to be conducted FY09, will develop a system for submittal of electronic annual reports.

In addition to the electronic initiative, LQD is developing a GIS database that will support electronic inspection reports. Use of mobile computing, GPS units, and the GIS database will increase inspection effectiveness and improve efficiency. The LQD also initiated development of a class with TIPS specifically targeted to LQD staff and development of their GIS and GPS skills. This class, a collaborative effort between LQD and TIPS, and was conducted in March of 2008, with nearly 100% attendance by LQD technical staff.

The low number of bond released acres for coal mines is an issue across the U.S. 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 second component is developing and revising guidance documents and schedules that will facilitate applications for successful bond release. These two elements will allow the LQD to identify acres that are eligible and then facilitate applications for bond release through effective guidance documents.

The Land Quality Division (LQD) is diligently addressing outstanding OSM required program

amendments (these are changes to Wyoming's program required by OSM in response to court decisions, changes in OSM rules and necessary clarifications). During FY 2008, LQD prepared three rule packages addressing 22 outstanding program issues. Rule making has been initiated for all three rule packages, and approval of these proposed rules by the Wyoming Environmental Quality Council is anticipated during FY 2009. Of the 20 remaining issues, 17 of these must be defined further by OSM, and Advisory Board hearings for the remaining three required program changes are scheduled for November 2008. In addition to OSM program amendment requirements, there are two state initiative regulation revisions in process. A revision of the blasting rules is under state review, and revisions to the self-bonding rules have completed the state rulemaking process and are in OSM review.

V. Success in Achieving the Purposes of SMCRA as Determined by Measuring and Reporting End Results

To further the concept of reporting end-results and on-the-ground success, the Casper Field Office, using the guidance set forth below, will prepare findings from performance standard evaluations, which OSM will report nationally. These evaluations will 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. Individual topic reports will be developed to provide specific information on how these measurements were carried out and reported.

A. Off-Site Impacts:

For the purpose of oversight, an 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 and be 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 DEQ 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, and special studies. 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 were conducted during routine inspections by DEQ. CFO conducted one complete random sample inspection and two partial inspections. Off-site impacts were not identified during the reporting period (see Table 4).

B. Reclamation Success as Measured by Bond Release:

OSM evaluates the effectiveness of State programs in achieving reclamation success based on the number of acres that meet bond release standards and have been through the bond release process. During this evaluation year information was also collected to measure program performance in the area

of contemporaneous reclamation. Although not an on-the-ground measure of reclamation success as reported in Table 5, Appendix A, contemporaneous reclamation is one of the important aspect of SMCRA, “to assure that adequate procedures are undertaken to reclaim surface areas as contemporaneously as possible with the surface coal mining operations.” Contemporaneous reclamation provides an overall perspective of how successfully reclamation is staying current with mining in the State.

Timeliness of reclamation is measured by evaluating the timeliness of Phase I, Phase II and Phase III bond releases. The intent of this measurement is to provide an overall general picture of how successfully reclamation is staying current with mining in the State.

As part of the evaluation of reclamation success, OSM will adhere to the guidelines as contained in OSM Directive REG-8 and as identified in Table 5 for each of the four areas. They are:

a. Landform/Approximate Original Contour (AOC)

MEASUREMENT: AOC achievement will be measured by the acres of Phase I bond released. Acreage disturbed by mining activities that have been released under Phase I bond liability will be documented as having achieved AOC.

b. Land Capability

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

MEASUREMENT: Proper replacement of soil resources will be measured by acres of Phase II bond release, where soil replacement is a Phase I reclamation activity, this measurement will be Phase I bond release.

MEASUREMENT: Vegetation stability will be measured by acres of Phase II bond release, acreage released from Phase II bond liability can be documented as having achieved erosion stability.

MEASUREMENT: Achievement of postmining land uses will be measured by acres of Phase III bond release. Land capability is demonstrated by the acres for which the approved post mining land uses have been achieved. The acreage released from Phase III bond liability can be documented as having achieved the approved post mining land uses.

MEASUREMENT: Successful revegetation will be measured by acres of Phase III bond release. Land capability is demonstrated by the acres for which revegetation success has been successfully demonstrated for the land use at the time of Phase III bond release.

c. Hydrologic Reclamation

There are several measurements that may be conducted to demonstrate the reestablishment of the hydrologic balance and successful hydrologic reclamation on mined areas.

MEASUREMENT: Achievement of surface water quality and quantity restoration can be measured by acres of Phase III bond release. Surface water quality and quantity restoration may be measured in terms of acres released from bond liability. Bond release will document that water quality meets surface water quality standards and water quantity is adequate for its intended use.

MEASUREMENT: Achievement of groundwater recharge capacity and ground water quantity and quality restoration can be measured by acres of Phase III bond release. Groundwater recharge, quality and quantity will be measured in terms of acreage released from Phase III bond liability.

MEASUREMENT: 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. Phase III bond liability can be considered as having achieved restoration of this aspect of surface water quality and quantity.

d. Contemporaneous Reclamation

MEASUREMENT: Timeliness of reclamation may be measured by evaluating the timeliness of Phase I, Phase II, and Phase III bond release.

The intent of this measurement is to provide an overall general picture of how successfully reclamation is staying current with mining in the State. It is recognized that some States may not have the capability to collect data that provides a complete status of the timing of mining and reclamation at this time. In order to collect this data, a system to collect a baseline of the number of acres affected by mining activities and released from bond each year is needed.

Currently in Wyoming, a total of 393,735 acres are permitted with approximately 146,532 acres disturbed by mining activity to date. Of these disturbed acres, 50,530 acres have received Phase I bond release, 19,358 acres meet Phase II bond release criteria and 18,663 acres have completed Phase III or final bond release. The number of acres released from Phase III bond is small compared to the number of acres actually regraded, topsoiled, and seeded.

The CFO believes this measure alone may not capture the total effectiveness of the Wyoming program due to the type of mining operations, the large size of western mining operations, company policies (not to apply for release until large management units are eligible for final bond release), and the fact that there are no statutory requirements for operators to request bond release. Therefore, the number of acres released from bond is relatively small in Wyoming when compared to those acres that have been regraded, topsoiled and seeded. Contemporaneous reclamation will be discussed in more detail in Section VII of this report.

The Wyoming coal regulatory program also has an approved alternative bonding system that differs slightly from Federal and other State coal regulatory programs. Wyoming's bonding system consists of an "area bond" and an "incremental bond." The area bond moves each year with the pit progression, which is adjusted through the submission and review of the permit annual report. The incremental bond covers the entire permit area.

There were no bond forfeitures during the past year. There have been only two bond forfeitures since

the approval of the Wyoming program in 1981. Those two bond forfeitures were for two underground mines. None of the large surface coal mines have experienced any bond forfeitures.

C. Customer Service

The LQD demonstrates its “customer service” attributes in many aspects of their program, both through 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, going beyond the requirements of the Act or rules.

LQD has been working with OSM and the Wyoming Mining Association to revise the revegetation standards as they apply to performance standards needed for final bond release. These revisions are currently going through Wyoming’s program amendment process and are expected to be approved in early 2009.

During this evaluation period, Wyoming received ten citizen complaints. In all cases, Wyoming followed up with prompt inspections. Where blasting issues were involved, Wyoming also responded with long-term seismic monitoring. Monitoring indicated that the mines were in compliance and no violations were issued.

VI. OSM Assistance

A. Technical Innovation & Professional Services (TIPS)

LQD continues to partner with the TIPS and Technology Transfer Program in an effort to gain permitting efficiencies in a highly active regulatory environment. Wyoming Program staff reported several technical challenges with transfer and use of electronic information between mobile computing equipment and OSM TIPS software, and when utilizing electronic information submitted from the mine operator. The TIPS and Technology Transfer Program worked closely with Wyoming DEQ managers to target specific technical challenges and conduct focused onsite training to overcome the technical challenges. An employee survey of the technical challenges culminated in the offering of the Wyoming E-Tools Workshop. The E-Tools Workshop focused on GIS, Mobile Computing, and AutoCAD topics of interest. The E-Tools Workshop was attended by 23 (90 percent) permitting program staff from the Cheyenne, Lander, and Sheridan offices, as well as program managers from the Wyoming permitting offices. The feedback was strongly positive, and staff consistently attributed the success of the class to the focused nature and response to specific problem areas identified from the pre-Workshop survey.

The TIPS and Technology Transfer Program also worked closely with the Wyoming Program on the acquisition of satellite imagery for the entire Powder River Basin. The imagery was provided by leveraging an OSM TIPS partnership and resulted in the delivery of \$300,000 worth of imagery to the Wyoming Program at no cost.

In an effort to support the continued advances of the Wyoming Programs mobile computing efforts, TIPS and Technology Transfer supplied the Program with a TopCon GMS-2 mobile computing device and training for five staff, as seeding technology. The device will provide superior accuracy for

programs in the northern latitudes, and was provided to the Wyoming Program to promote and support TIPS innovative and emerging technology efforts. The device was provided at no cost, and is a \$5,000 value to the Program.

TIPS and Technology Transfer worked with Wyoming personnel on the acquisition of a downhole video camera for evaluating the quality and source of collected hydrology field data. The Wyoming Program has utilized the downhole camera multiple times, and would not be able to use this type of technology in the field without the support from the TIPS and Technology Transfer Program.

The partnership with the Wyoming Program and TIPS and Technology Transfer is reciprocated by providing instruction support of the OSM training classes. The Wyoming Program provides instruction in Groundwater Vistas and the development of pilot class for Natural Regrade with Carlson Software.

The Wyoming Program sent twenty three representatives to the OSM TIPS Geospatial Conference, and has representation on the Western Region Technology Transfer Team. Continued involvement in these technical conferences and teams will foster additional partnerships and innovative approaches to resolve technical challenges. During this evaluation period, LQD staff attended 10 TIPS classes.

Multiple service manager visits was conducted with the Title V Program during development of the Wyoming E-Tools Workshop. Additionally, a service manager visit was conducted at the Wyoming Program Sheridan office to better understand the programs needs, and to identify opportunities where Technology Transfer can better partner with Wyoming personnel as we work to implement regulatory solutions.

B. National Technical Training Program

Employees from the Wyoming Department of Environmental Quality are provided the opportunity to attend various technological training sessions and workshops throughout the fiscal year. During this evaluation period, four employees from the Title V Program and two employees from the Title IV (AML) Program took advantage of these opportunities and attended various national technology training classes. Wyoming also provided an instructor to teach one NTTP class.

C. 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, DEQ, 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.

VII. General Oversight Topic Reviews

A. State Program Amendments

Wyoming's Coal Regulatory Program contains several unresolved program issues as identified in OSM's letters issued pursuant to 30 CFR 732.17 and subsequent required program amendments and disapprovals identified under 30 CFR 950.

During last year's evaluation period (EY07), the CFO met with LQD on several occasions to jointly review the status of these unresolved issues and discuss a schedule for their resolution and submission to OSM for formal review and approval. LQD developed several amendment packages and has submitted these packages to their Advisory Board for review and approval during this evaluation period. The LQD was able to present an amendment package each quarter during the current evaluation period to the Advisory Board. This action is significant in that only four packages went before the Board during all the 1990's.

Once a proposed program amendment is approved by the Land Quality Advisory Board it is then submitted before the Wyoming Environmental Quality Council for their approval and submission to the Secretary of State for final program approval. While the LQD has not yet presented any of the amendment packages approved by the Advisory Board to the EQC, they hope to be on the EQC schedule for October, 2008.

The following is a list of the program amendment packages developed by the LQD, a brief description of what the package is addressing, and the approximate schedule for resolution:

Package 1-S, Vegetation - Contains 12 issues addressing success standards, sampling techniques, postmine practices, husbandry, and fish and wildlife enhancements.

Status: Currently awaiting scheduling for Environmental Quality Council (EQC) hearing date.

Land Quality Advisory Board – 1/07/08 Environmental Quality Council – 10/08 est.

Submit to OSM – 75 days after EQC approval, 12/15/08 est.

Package 1-Y, Miscellaneous Issues - Contains 5 unrelated issues addressing cultural and historic resources, prime farmland, siltation structures, and operator information.

Status: Currently awaiting scheduling for EQC hearing date. Wyoming is considering the possibility of submitting this package to the EQC with Package 1-S.

Land Quality Advisory Board – 04/21/08 Environmental Quality Council – 10/08 est.

Submit to OSM – 75 days after EQC approval, 12/08 est.

Package 1-B, Non-Coal Waste - Contains 5 issues concerning solid waste jurisdiction, onsite disposal, waste terminology, and performance standards.

Status: Package being prepared for Land Quality Advisory Board.

Land Quality Advisory Board – 07/21/2008 Environmental Quality Council – 03/09 est.

Submit to OSM – 75 days after EQC approval, 09/09 est.

Package 1-Z, O&C - There are 17 issues identified under O&C addressing definitions, penalties, violations, permitting, updating, CO's, and permit rescission.

Status: OSM is currently developing an outreach program to address these requirements. After this outreach effort, OSM will be contacting the states to identify program revisions necessary for specific states.

Land Quality Advisory Board – 12/08 est. Environmental Quality Council – 09/09 est.

Submit to OSM – 75 days after EQC approval, 02/10 est.

Valid Existing Rights – This required program amendment contains one issue regarding Wyoming's definition of "Valid Existing Rights", that affects other areas of the Wyoming program (permitting, determinations, exploration, procedures). Status: On February 13, 2008, OSM contacted Wyoming to notify them that the court decision affecting these rules had been upheld and that OSM's letter of April 2, 2001, was again valid and required a response from the State. The State responded on April 11, 2008, recognizing the needed changes to their program but had questions regarding the deficiencies and the processes involved. No timeline for submission was given, however Wyoming anticipates that a VER package would be developed and submitted with the O&C package after some of the current packages have been processed (veg, non-coal waste, misc.amend.), see O&C schedule above.

There are two other outstanding issues addressing civil penalties and major/minor violations that don't logically fit into the other packages. Wyoming is currently proposing these be submitted with the O&C package. All identified issues (required program amendments) should then be addressed; however, the state may propose other state initiated rule changes that could be mixed into this schedule later.

The Casper Field Office is encouraged by all 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. Inspection and Enforcement

The LQD continues to conduct frequent and thorough inspections. LQD conducted 143 complete inspections and 262 partial inspections during the evaluation period. These figures indicate that the LQD has exceeded the minimum number of required inspections for the evaluation period.

LQD performed more than the minimum required inspections for the Wyoming Program. All LQD performance standards were reviewed and documented during complete inspections and the reports contain a discussion of the current mine status.

The Casper Field Office conducted a total of five inspections. One inspection was a complete oversight inspection, two were partial oversight inspections, one bond release inspection and one site visit.

LQD maintains an inspectable units list and an inspection database sufficient to meet its program requirements. LQD has made this database available to the CFO.

LQD issued 9 Notices of Violation that contained 11 violations. No patterns of violation exist and no show cause hearings / alternative enforcement actions (bond forfeiture) were initiated during this evaluation period.

The CFO did not issue any Ten-Day-Notices (TDNs) during this review period.

During (EY07) it was discovered that WYDEQ and the CFO disagree on interpretation of the LQD regulations, specifically, requirements for the design and construction of primary roads with respect to drainage systems. While the designs did show road side ditches and culverts, CFO could not find a supporting demonstration for the design of those items. The DEQ regulations at Chapter 4, Section (j) (vii) (I) requires the drainage system to be designed to pass the peak runoff from a 10 year, 6 hour precipitation event, or greater event, as specified by the Administrator. LQD and OSM will follow up on this matter further in EY09.

C. Contemporaneous Reclamation

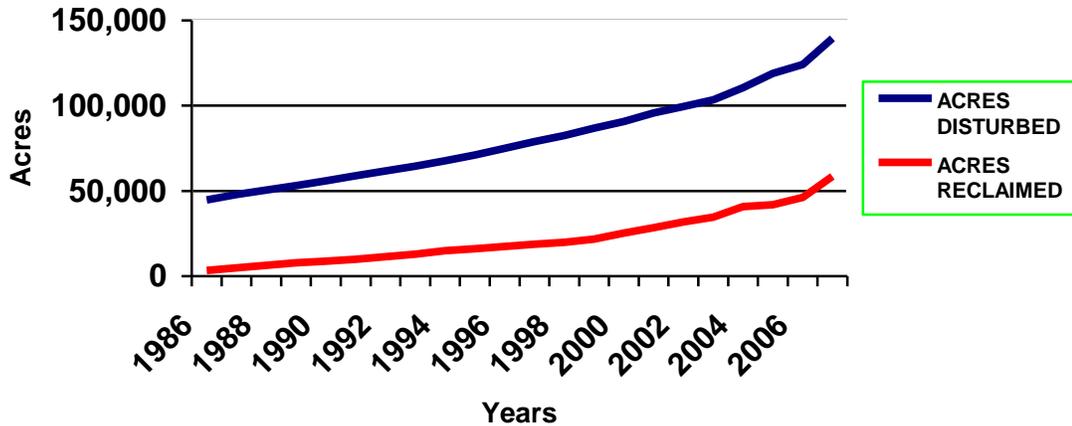
The intent of contemporaneous reclamation evaluation is to provide an overall general picture of how successfully reclamation is staying current with mining in the State. Wyoming's regulations on contemporaneous reclamation found at Chapter 4, Section 2 (k) require, "Reclamation must begin as soon as possible after mining commences and must continue concurrently until such time that the mining operation is terminated and all of the affected land is reclaimed. If conditions are such that final reclamation procedures cannot begin until the mining operation is completed, this must be explained in the reclamation plan. A detailed time schedule for the mining and reclamation progression must be included in the reclamation plan."

Reclamation activity has and is occurring in Wyoming. The CFO believes that, in addition to bond released acres, the ratio between permanently reclaimed (seeded) acres to disturbed acres can also be used as a measure of contemporaneous reclamation. Seeded acres include lands that have obtained Phase II bond release status, lands that have obtained Phase III bond release status, and lands for which Phase II bond release have not yet been sought.

The following charts are used to show the rate at which lands are being permanently reclaimed (seeded) compared to the rate of disturbance. The charts show that reclamation may not be as contemporaneous as possible. This 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.

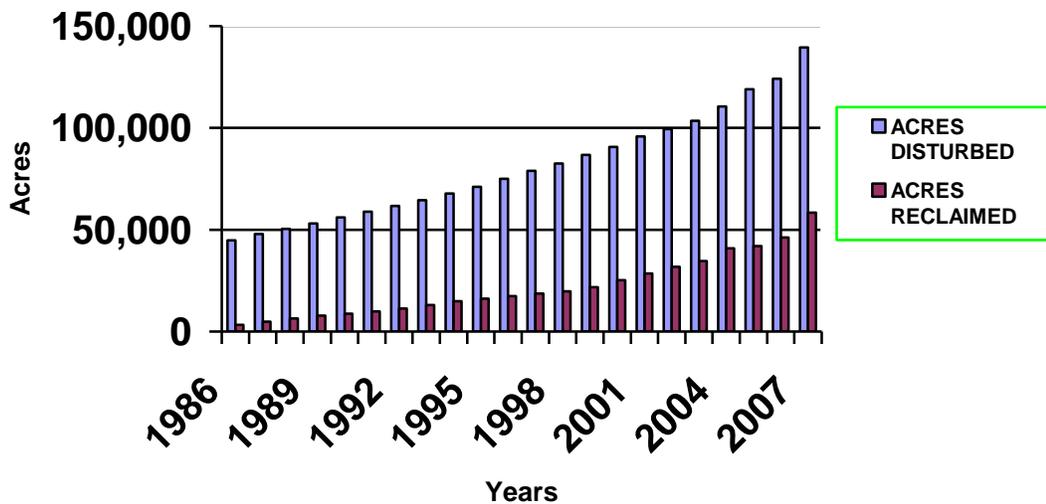
Charts 1 and 2 illustrate the overall mining and reclamation activities for the Wyoming coal mines since 1986. Chart 1 and Chart 2 provide the actual acres disturbed and reclaimed annually for all mines, and they illustrate the cumulative disturbance and reclamation for the aggregate of all mines for the same time frame. Note that the lines are progressively diverging each year, indicating a disproportionate increase of disturbed lands over the reclaimed lands each year.

Chart 1
Cumulative Disturbed vs Cumulative Reclaimed Acreage



Source of data: 2008 Government Performance Reporting Act (GPR) data collected from WY-DEQ

Chart 2
Cumulative Disturbed vs Cumulative Reclaimed Acreage



Source of data: 2008 Government Performance Reporting Act (GPR) data collected from WY-DEQ

Chart 3
WYOMING STATEWIDE RECLAMATION SUMMARY

YEAR	ACRES DISTURBED Year	Cumulative Acres Dist. All Years	ACRES RECLAIMED Year	Cumulative Acres Recl. All Years	RATIO OF RECLAM VS DISTURB Year	Cumulative RATIO OF RECLAM VS DISTURB All Years
1986	3152	44,742	1456	3,335	.46	.075
1987	2521	47,894	1630	4,791	.65	.100
1988	2610	50,415	1355	6,421	.52	.127
1989	2967	53,025	994	7,776	.34	.147
1990	2833	55,992	1068	8,770	.38	.157
1991	2807	58,825	1517	9,838	.54	.167
1992	2919	61,632	1641	11,355	.56	.184
1993	3173	64,551	1888	12,996	.60	.201
1994	3327	67,724	1219	14,884	.37	.220
1995	3873	71,051	1234	16,103	.31	.227
1996	3954	74,924	1311	17,337	.33	.231
1997	3613	78,878	1098	18,648	.30	.236
1998	4303	82491	1973	19,746	.43	.239
1999	3868	86,794	3541	21,719	.97	.250
2000	5185	90,662	3174	25,260	.62	.279
2001	3564	95,847	3295	28,434	.92	.297
2002	4067	99,411	2857	31,729	.70	.319
2003	5459	103,478	2924	34,653	.54	.335
2004	5062	110,578	3843	40,826	.76	.392

YEAR	ACRES DISTURBED Year	Cumulative Acres Dist. All Years	ACRES RECLAIMED Year	Cumulative Acres Recl. All Years	RATIO OF RECLAM VS DISTURB Year	Cumulative RATIO OF RECLAM VS DISTURB All Years
2005	5983	119,001	3501	41,891	.58	.35
2006	5146	124,147	4308	46,199	.84	.37
2007	15,321	139,468	12,258	58,457	.80	.41

Source of data: 2008 Government Performance Reporting Act (GPRA) data collected from WY-DEQ

Currently the cumulative reclamation to disturbance ratio for 2007 is 0.80 to 1.00. This ratio indicates the situation has improved during the evaluation year compared to the previous seven years. It appears, based on the data this year, that the gap between the acres disturbed verses acres reclaimed is increasing at a slower rate. As indicated in Chart 3 the cumulative acres disturbed equals 139,468 and total acres reclaimed equals 58,457 for a ratio of .41 to 1.0 on a statewide basis.

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. Reclamation and disturbance at individual mining operations will be examined during the next evaluation year to determine if mines are diligently conducting reclamation efforts.

While contemporaneous reclamation may not be completely reflected by bond release data as depicted in Table 5, it is the intent of SMCRA to assure that adequate procedures are undertaken to reclaim surface mines as contemporaneously as possible. Table 5 provides an overall general perspective of the relationship between disturbance and reclamation and is one source for this measurement.

During an aerial overflight of the Wyoming mines during EY08, it was noted that several of the mines appeared to be lagging in their backfilling and reclamation activities. Based on these observations, the CFO selected a couple of mines (one from the Powder River Basin and one from the western part of the State) for further evaluation.

Mining and reclamation schedules from the permits for the Black Butte and Black Thunder mines were reviewed and compared to corresponding maps from the most recent annual reports for these mines. A couple of issues were immediately apparent from this review: 1) the standards for “contemporaneous” as stated in the permits are fairly open and not clearly defined or readily measurable, 2) the annual report maps used to identify reclamation blocks and progress were not readily available to OSM and in some cases were two or more years behind schedule.

During a joint inspection by LQD and CFO of the Black Butte Mine during the evaluation period, it was discovered that the current permit has not been updated to include recent revisions regarding when and where proposed highwall mining was to occur in some parts of the mine. Consequently, it was not possible to verify during the inspection whether or not Black Butte was operating in a contemporaneous manner and in compliance with their approved permit. After a more thorough review of the permit

reclamation requirements (by the LQD Lander District), it was determined that while the mine is generally in compliance with its reclamation schedule, it appears that the possibility of proposed highwall mining is being used to delay reclamation of thousands of acres currently available for reclamation activity.

This permit is due for renewal in July, 2008, and the State is proposing that the mine must include revised mining and reclamation schedules, including definitive annual reclamation commitments prior to that renewal. The issue of whether or not highwall mining will occur and a clear schedule for backfilling these pits will also need to be addressed at this time.

Staff from the LQD-Sheridan office and CFO also reviewed the Black Thunder permit and annual reports to determine where Black Thunder was in its reclamation schedule. During this review, it was discovered that a 2006 permit revision that has not yet been approved by LQD has had the contemporaneous reclamation section of its permit (RP2.2) revised. These revisions and the annual reports since 2005 have not yet been available to OSM for review. LQD does not release the reports until they have been reviewed by LQD staff and deemed complete. The completeness review process, which includes multiple rounds of LQD review and operator response, can and has taken a year or more to complete in some cases. However, even with the updated permit and the latest annual report submittal (January 2008) from the LQD files for the mine, it was very difficult to determine where the mine was in its reclamation sequence. The maps provided by the mine were difficult to read and do not clearly indicate where or what level of reclamation has been completed.

Mine inspections completed since the summer of 2007 by the LQD staff indicated that Black Thunder did substantial backfilling and grading during the winter months and that the mine was generally in compliance with its reclamation schedule for most of the mine. However, reclamation in the South Pit area will be delayed until ownership and reclamation responsibility of this area has been resolved.

Reclamation in the South Pit area has been delayed due to a pending transfer of ownership and the eventual dissolution of the North Rochelle Mine. Black Thunder (Arch Minerals) and West Roundup Resources (Peabody Coal) are in the process of trading ownership and division of the North Rochelle Mine properties in anticipation of the development of the School Creek Mine complex by West Roundup Resources Inc. The North Rochelle Mine is currently between the Black Thunder Mine and the proposed School Creek Mine permit area. Approval of the School Creek Mine permit is expected from LQD by early 2009. At that time, both permits will have been required to update the legal documents in their respective permits to reflect responsibilities for reclamation of the split up North Rochelle properties.

OSM has continued to review and evaluate the contemporaneous reclamation provisions of the Wyoming program for more than a decade. Each review has raised some general concern that contemporaneous reclamation and movement of reclaimed acres towards eventual bond release is not fully consistent with the intent of the State's reclamation program.

APPENDIX A

Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration

These tables present data pertinent to mining operations and State and Federal regulatory activities within Wyoming. They also summarize funding provided by OSM and Wyoming staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of Wyoming's performance is available for review in the evaluation files maintained by the Casper Field Office.

When OSM's Directive REG-8, Oversight of State Programs, was revised in December 2006, the reporting period for coal production on Table 1 was changed from a calendar year basis to an evaluation year basis. The change was effective for the 2007 evaluation year. However, with Change Notice REG-8-1, effective July 1, 2008, the calendar year reporting period in Table 1 for coal produced for sale, transfer or use was reestablished and is effective for the 2008 evaluation year. In addition, for the 2008 evaluation report, coal production for the two prior years reported on Table 1 was recalculated on a calendar year basis so that all three years of production reported in the table are directly comparable. This difference in reporting periods should be noted when attempting to compare coal production figures from annual evaluation reports originating both before and after the December 2006 revision to the reporting period.

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

(Millions of Short Tons)

Period	Surface Mines	Underground Mines	Total
Coal production^A for entire State:			
EY 2006	421.525	0.282	421.807
EY 2007	444.245	1.125	445.370
EY 2008	448.727	2.638	451.365

A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used, or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). 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 States or other sources due to varying methods of determining and reporting coal production. **Provide production information for the latest three full evaluation years to include the last full evaluation year for which data is available.**

TABLE 2

Inspectable Units

As of June 30, 2008

Coal mines and related facilities	Number and Status of Permits										Permitted Acreage ⁸ (100's of acres)				
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals		Nbr. of Insp. Units ^A	Federal Lands		State/Private Land		All Lands	
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	IP	PP	Total	
	LANDS FOR WHICH THE STATE IS THE REGULATORY AUTHORITY														
Surface mines	0	31	1	0	0	0	0	32	32	0.0	1022.9	0.0	2840.5	3863.4	
Underground mines	0	1	0	0	0	0	0	1	1	0.0	16.9	0.0	35.8	52.65	
Other facilities	0	0	2	0	0	0	0	2	2	0.0	0.0	0.0	21.3	21.3	
Total	0	32	3	0	0	0	0	35	35	0.0	1039.9	0.0	2897.5	3937.3	
Total number of permits:											35				
Average number of permits per inspectable unit (excluding exploration sites):											1.00				
Average number of acres per inspectable unit (excluding exploration sites):											11,249.6				
Number of exploration permits on State and private lands:									0	On Federallands ^C :		3			
Number of exploration notices on State and private lands:									0	On Federallands ^C :		0			
<p>IP: Initial regulatory program sites</p> <p>PP: Permanent regulatory program sites</p> <p>A Inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.</p> <p>B When a single inspectable unit contains both Federal lands and State/Private lands, enter the permitted acreage for each land type in the appropriate category.</p> <p>C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.</p>															

TABLE 3**State Permitting Activity****As of June 30, 2008**

Type of Application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	A Acres	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New Permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	4	1		1	0		0	0		5	1	
Transfers, sales, and assignments of Permit rights	1	3		0	0		0	0		1	3	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										3	2	
Exploration notices B											0	
Revisions (exclusive of incidental boundary revisions)		71			2			0			73	
Revisions (adding acreage but are not incidental boundary revisions)	4	1	1005.1	0	0	0	0	0	0	4	1	1005.1
Incidental boundary revisions	4	5	438.8	0	0	0	0	0	0	4	5	438.8
Totals	13	81	1443.9	1	2	0	0	0	0	17	85	1443.9

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions: 0

A Includes only the number of acres of proposed surface disturbance.

B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

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 AND TOTAL	Blasting	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
	Hydrology	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF EACH TYPE	Encroachment	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	1	0	0	0	0	0	0	0	0	0	0
	Total	0	1	0	0	0	0	0	0	0	0	0	0
Total number of inspectable units (excluding bond forfeiture sites):					35								
Inspectable units free of off-site impacts:					35								
Inspectable units with off-site impacts:					0								
OFF-SITE IMPACTS ON 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 AND TOTAL	Blasting	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
	Hydrology	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF EACH TYPE	Encroachment	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
	Total	0	0	0	0	0	0	0	0	0	0	0	0
Total number of inspectable units (only bond forfeiture sites):					0								
Inspectable units free of off-site impacts:					0								
Inspectable units with off-site impacts:					0								

TABLE 5**Annual State Mining and Reclamation Results**

Bond release phase	Applicable performance standard	During this Evaluation Year		
		Total acreage released	Acreage also released under Phase I	Acreage also released under Phase II
A	B	C	E	
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	13.2		
Phase II	- Surface stability - Establishment of vegetation	1433.9	0	
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	192.2	0	0
Bonded Acreage ^A		Acres during this evaluation year		
Total number of new acres bonded during this evaluation year		1444		
Number of acres bonded during this evaluation year that are considered remaining, if available		0		
Number of acres where bond was forfeited during this evaluation year		0		
Bonded Acreage Status		Cumulative Acres		
Total number of acres bonded as of the end of last review period (June 30, 2007) B		399,687		
Total number of acres bonded as of the end of this review period (June 30, 2008) B		393,735		
Sum of acres bonded that are between Phase I bond release and Phase II bond release as of June 30, 2007 B		0		
Sum of acres bonded that are between Phase II bond release and Phase III bond release as of June 30, 2007 B		0		
Disturbed Acreage		Acres		
Number of Acres Disturbed during this evaluation year		4943.5		
Number of Acres Disturbed at the end of the evaluation year (cumulative)		146,531.6		
A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.				
B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).				

Brief explanation of columns D & E. The States will enter the total acreage under each of the three phases (column C). The additional columns (D & E) will "break-out" the acreage among Phase II and/or Phase III. Bond release under Phase II can be a combination of Phase I and II acreage, and Phase III acreage can be a combination of Phase I, II, and III. See "Instructions for Completion of Specific Tables," Table 5 for example.

TABLE 6

State Bond Forfeiture Activity
(Permanent Program Permits)

Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2006 (end of previous evaluation year) A	0		0
Sites with bonds forfeited and collected during Evaluation Year 2007 current evaluation year)	0	\$ 0	0
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2007 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2007 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2007 (end of current evaluation year)A	0		0
Sites with bonds forfeited but uncollected as of June 30, 2007 (end of current evaluation year)	0		0
Surety/Other Reclamation (In Lieu of Forfeiture)			
Sites being reclaimed by surety/other party as of June 30, 2006 (end of previous evaluation year) B	0		0
Sites where surety/other party agreed to do reclamation during Evaluation Year 2007 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2007 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2007 (current evaluation year) C	0		0
Sites being reclaimed by surety/other party as of June 30, 2007 (current evaluation year) B	0		0

A Includes data only for those forfeiture sites not fully reclaimed as of this date

B Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date

C This number also is reported in Table 5 as Phase III bond release has been granted on these sites

TABLE 7	
State Staffing	
(Full-time equivalents at end of evaluation year)	
Function	EY 2008
Regulatory Program	
Permit Review	10.83
Inspection	10.26
Other (administrative, fiscal, personnel, etc.)	6.41
Regulatory Program Total	27.50
AML Program Total	14.30
Total	41.80

TABLE 8**Funds Granted To Wyoming****BY OSM**

(During the Current Evaluation Year)

(Actual Dollars, Rounded to the Nearest Dollar)

Type of Funding	Federal Funds Awarded During Current Evaluation Year	Federal Funding as a Percentage of Total Program Costs
Regulatory Funding		
Administration and Enforcement Grant	\$ 2,361,462	87.4 %
Other Regulatory Funding, if applicable	\$ 0	0.00 %
Subtotal	\$ 2,361,462	
Small Operator Assistance Program	\$ 0	100 %
Abandoned Mine Land Reclamation Funding A	\$ 82,700,759	100 %
Totals	\$ 84,962,221	

A Includes funding for AML Grants, the Clean Streams Initiative and the Watershed Cooperative Agreement Program.

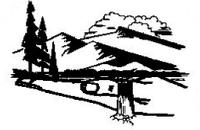
TABLE 9

State Inspection Activity		
During Current Evaluation Year		
Inspectable Unit	Number of Inspections Conducted	
	Complete	Partial
Active A	119	259
Inactive A	24	3
Abandoned A	0	0
Total	143	262
Exploration	0	0
A Use terms as defined by the approved State program.		

TABLE 10		
State Enforcement Activity		
During Current Evaluation Year		
Type of Enforcement Action	Number of Actions ^A	Number of Violations ^A
Notice of Violation	9	11
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0
A Do not include those violations that were vacated.		

TABLE 11

Lands Unsuitable Activity		
During Current Evaluation Year		
	Number	Acreage
Number Petitions Received	0	
Number Petitions Accepted	0	
Number Petitions Rejected	0	
Number Decisions Declaring Lands Unsuitable	0	0
Number Decisions Denying Lands Unsuitable	0	0



APPENDIX B

Dave Freudenthal,
Governor

Department of Environmental Quality

John Corra, Director

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Mr. Jeffery Fleischman, Director
Casper Field Office
Office of Surface Mining
150 East "B" Street, Rm 1018
Casper WY 82601

RE: OSM draft evaluation report for EY 2008

Dear Mr. Fleischman:

I have reviewed the draft report and have several comments noted below.

Section V. B. Reclamation Success

In previous reports, this section was titled "Reclamation Success as Measured by Bond Release". It is important that this title be retained to make it clear to the reader that the section describes a specific approach to evaluating reclamation success. Wyoming requests the section title be revised accordingly.

This section evaluates the effectiveness of the Wyoming program in achieving reclamation success using acres of land that have been bond released. It is important to put bond released acres into context, and to distinguish the different approaches to evaluating successful reclamation that are discussed in this section.

Bond-released acres is the ultimate regulatory measure of reclamation success. Until an area has achieved bond release, the quality of the reclamation is unproven. Bond release occurs a minimum of 10 years after seeding, and is a measure of successful vegetation establishment, surficial stability, and reclamation of drainages (plus other factors). There is no federal or state requirement that operators submit a bond release request for any or all eligible acres, and there are many reasons why operators might choose to delay requests for bond release. As a consequence, there are many more acres eligible for bond release than are actually released. Therefore, it is important to realize that evaluating reclamation success using bond release is the most restrictive measure available and should be interpreted accordingly.

Another term used in this section is contemporaneous reclamation. Contemporaneous reclamation describes the process of reclamation occurring concurrently with mining disturbance, and assesses

how diligently operators are reclaiming lands once mining disturbance is completed and the area is available for reclamation. It includes backfilling the pit to a specific topography, replacing topsoil, and final seeding of the reclaimed area. It is a measure of the process of reclamation, whereas bond release is a measure of the success of reclamation ten years later. On an annual basis, many fewer acres are bond released than are reclaimed. For example, in 2007, 192.7 acres were approved for phase III bond release, while 12, 258 acres were reclaimed to final seeding (Chart 3). Using bond-released acres as a measure of contemporaneous reclamation severely underestimates the acres of reclaimed land on Wyoming coal mines, and results in invalid conclusions regarding contemporaneous reclamation in Wyoming.

Therefore, the Land Quality Division (LQD) disagrees with the conclusion that Wyoming is “moderately effective” in contemporaneous reclamation because the basis of the conclusion is not valid. LQD requests that discussion of contemporaneous reclamation evaluation using bond-released acres be removed, and that this section be limited to discussion of reclamation success.

Section VII. A. State Program Amendments

The CFO has been very diligent in attending all of the Land Quality Advisory Board meetings. Wyoming is very appreciative of their continued support and technical contributions to these meetings.

Section VII. B. Inspection and Enforcement

The last paragraph on inspection and enforcement discusses LQD requirements for design and construction of primary roads. The basis of this comment is a disagreement between LQD and OSM on the intent and interpretation of the LQD rules cited in the paragraph. LQD is in agreement that this issue needs to be resolved, but not in agreement with the implication that LQD is incorrect in administration and/or enforcement of the LQD Rules. LQD is committed to meeting with OSM to resolve the issue.

Section VII. C. Contemporaneous Reclamation

The information in Charts 1 and 2 appear to be exactly the same numbers, the only difference being bar chart vs. line graphs. As far as we can determine, these charts do not present different information, and only one of them should be used to demonstrate the point that OSM is making.

Wyoming agrees that contemporaneous reclamation is very important and bears close scrutiny. We welcome the oversight and use of information in the graph and Chart 3 to evaluate contemporaneous reclamation. We basically concur with the conclusions and agree with the goal of evaluating contemporaneous reclamation on an individual mine basis.

However, Wyoming does not agree with using Table 5 data for evaluating contemporaneous reclamation, for the same reasons discussed in the comments above. That is reclamation success, not contemporaneous reclamation. Wyoming does not agree with the statement that the information in Table 5 is a valid assessment if reclamation is “keeping step” with mining progression and that it (Table 5) should be considered a source for this measurement (page 16, 4th paragraph).

Page 16, paragraph discussing the review of Black Butte and Black Thunder mines:

Wyoming disputes Item 2, which states that the annual report maps were not available to OSM and were two or more years behind schedule. The annual reports are available in the LQD Cheyenne office, the LQD office which oversees the mine, and at the offices of the mine operation itself. Copies of the annual reports are not distributed further until the contents of the report are accepted by LQD as being accurate and complete. This is dependent on responsiveness of the mine operators to annual report comments, and may take some time. The annual reports are not behind schedule. They have been submitted in a timely manner; it is the comment and response cycle that delays acceptance. Finally, submittal of an annual report is a statutory requirement for operators in Wyoming, and there is no parallel federal requirement. However, Wyoming has always required mine operators to provide OSM with coal mine annual reports once they are accepted because they are so important for evaluating contemporaneous reclamation.

Page 17, third paragraph:

Wyoming has a comment similar to the one above. The revision and the annual reports were available for review. Copies were not circulated because the revision was not approved and the annual reports were not accepted. Wyoming proposes that the CFO be notified when annual reports are submitted.

Concluding paragraph:

The CFO indicates that contemporaneous reclamation has been an ongoing concern for ten years. However, the concern has not been substantiated by thorough investigation. Wyoming proposes that the CFO and state program work together to assess each mine permit and make a finding regarding the status of each mine and their achievement of contemporaneous reclamation. This will also include assessing the information submitted through annual reports, determining if there is additional information that is needed, and clarifying the confusion with maps. After so many years with this concern, it is time to determine if it is legitimate and how to resolve any issues we identify.

Sincerely,

Donald R. McKenzie
Administrator
Wyoming Department of Environmental Quality
Quality
Land Quality Division

Carol Bilbrough
Program Manager
Wyoming Department of Environmental
Land Quality Division

Appendix C: CFO Response to the State Comments

State Comment:

Sect V. B In previous reports, this section was titled “Reclamation Success as Measured by Bond Release”. It is important that this title be retained to make it clear to the reader that the section describes a specific approach to evaluating reclamation success. Wyoming requests the section title be revised accordingly.

CFO Response:

The text has been revised to include LQD’s comment.

State Comment:

Sect V. B This section evaluates the effectiveness of the Wyoming program in achieving reclamation success using acres of land that have been bond released. It is important to put bond released acres into context, and to distinguish the different approaches to evaluating successful reclamation that are discussed in this section.

Bond-released acres is the ultimate regulatory measure of reclamation success. Until an area has achieved bond release, the quality of the reclamation is unproven. Bond release occurs a minimum of 10 years after seeding, and is a measure of successful vegetation establishment, surficial stability, and reclamation of drainages (plus other factors). There is no federal or state requirement that operators submit a bond release request for any or all eligible acres, and there are many reasons why operators might choose to delay requests for bond release. As a consequence, there are many more acres eligible for bond release than are actually released. Therefore, it is important to realize that evaluating reclamation success using bond release is the most restrictive measure available and should be interpreted accordingly.

CFO Response:

The CFO feels that Wyoming’s point is valid regarding the use of bond release as a measure of reclamation success. However, OSM Directive REG-8 requires that documentation of acres released from all phases of reclamation be used as a measure of timeliness of reclamation. CFO also believes that the ratio of acres disturbed vs. acres seeded is another way to measure contemporaneous reclamation in a general sense. We have altered this section of the report to better explain why the CFO uses bond release acres as a measure of reclamation success.

State Comment:

Another term used in this section is contemporaneous reclamation. Contemporaneous reclamation describes the process of reclamation occurring concurrently with mining disturbance, and assesses how diligently operators are reclaiming lands once mining disturbance is completed and the area is available for reclamation. It includes backfilling the pit to a specific topography, replacing topsoil, and final seeding of the reclaimed area. It is a measure of the process of reclamation, whereas bond release is a measure of the success of reclamation ten years later. On an annual basis, many fewer acres are bond released than are reclaimed. For example, in 2007,

192.7 acres were approved for phase III bond release, while 12, 258 acres were reclaimed to final seeding (Chart 3). Using bond-released acres as a measure of contemporaneous reclamation severely underestimates the acres of reclaimed land on Wyoming coal mines, and results in invalid conclusions regarding contemporaneous reclamation in Wyoming.

Therefore, the Land Quality Division (LQD) disagrees with the conclusion that Wyoming is “moderately effective” in contemporaneous reclamation because the basis of the conclusion is not valid. LQD requests that discussion of contemporaneous reclamation evaluation using bond-released acres be removed, and that this section be limited to discussion of reclamation success.

CFO Response:

As discussed previously, CFO is required by OSM Directive REG-8 to use bond released acres as a measure of contemporaneous reclamation on a statewide basis and in a general way. CFO also uses the ratio of acres disturbed vs. acres seeded as another way to measure contemporaneous reclamation. This ratio does show that progress is being made without regard to bond released acres. CFO also agrees that there is no basis to assign a rating of how well Wyoming is ensuring reclamation success. CFO has removed any language that remarks on the effectiveness of Wyoming’s efforts regarding contemporaneous reclamation. There are no published standards to assign a “grade” of good, bad, or moderate to their program.

State Comment:

Sect. VII A. The CFO has been very diligent in attending all of the Land Quality Advisory Board meetings. Wyoming is very appreciative of their continued support and technical contributions to these meetings.

CFO Response:

The CFO will continue to support and assist the Land Quality Division in its efforts to address any outstanding program deficiencies to bring the Wyoming program into full compliance.

State Comment:

Sect. VII B. The last paragraph on inspection and enforcement discusses LQD requirements for design and construction of primary roads. The basis of this comment is a disagreement between LQD and OSM on the intent and interpretation of the LQD rules cited in the paragraph. LQD is in agreement that this issue needs to be resolved, but not in agreement with the implication that LQD is incorrect in administration and/or enforcement of the LQD Rules. LQD is committed to meeting with OSM to resolve the issue.

CFO Response:

The CFO does not intend to imply that LQD is incorrectly administering its program. However, the CFO does feel that there is a difference in the interpretation of LQD’s rules and that the issue should be further addressed during the next evaluation period.

State Comment:

Sect. VII C Contemporaneous Reclamation. The information in Charts 1 and 2 appear to be exactly the same numbers, the only difference being bar chart vs. line graphs. As far as we can determine, these charts do not present different information, and only one of them should be used to demonstrate the point that OSM is making.

CFO Response:

The CFO agrees that the charts depict the exact same numbers (data). However, the two charts are submitted as alternatives to aid the reader in visualization of the rate of change and increase in volume of reclamation that is accumulating.

State Comment:

Wyoming agrees that contemporaneous reclamation is very important and bears close scrutiny. We welcome the oversight and use of information in the graph and Chart 3 to evaluate contemporaneous reclamation. We basically concur with the conclusions and agree with the goal of evaluating contemporaneous reclamation on an individual mine basis.

However, Wyoming does not agree with using Table 5 data for evaluating contemporaneous reclamation, for the same reasons discussed in the comments above. That is reclamation success, not contemporaneous reclamation. Wyoming does not agree with the statement that the information in Table 5 is a valid assessment if reclamation is “keeping step” with mining progression and that it (Table 5) should be considered a source for this measurement (page 16, 4th paragraph).

CFO Response:

The comments from the previous section (Section V. B) address this State comment:

As discussed previously, CFO is required by OSM Directive REG-8 to use bond released acres as a measure of contemporaneous reclamation on a statewide basis and in a general way. CFO also uses the ratio of acres disturbed vs. acres seeded as another way to measure contemporaneous reclamation. This ratio does show that progress is being made without regard to bond released acres. The CFO has rewritten this section of the report to better clarify our intent. CFO also agrees that there is no basis to assign a rating of how well Wyoming is ensuring reclamation success. CFO has removed any language that remarks on the effectiveness of Wyoming’s efforts regarding contemporaneous reclamation. There are no published standards to assign a “grade” of good, bad, or moderate to their program.

State Comment:

Page 16, paragraph discussing the review of Black Butte and Black Thunder mines:
Wyoming disputes Item 2, which states that the annual report maps were not available to OSM and were two or more years behind schedule. The annual reports are available in the LQD Cheyenne office, the LQD office which oversees the mine, and at the offices of the mine operation itself. Copies of the annual reports are not distributed further until the contents of the report are accepted by LQD as being accurate and complete. This is dependent on responsiveness of the mine operators to annual report comments, and may take some time. The annual reports

are not behind schedule. They have been submitted in a timely manner; it is the comment and response cycle that delays acceptance. Finally, submittal of an annual report is a statutory requirement for operators in Wyoming, and there is no parallel federal requirement. However, Wyoming has always required mine operators to provide OSM with coal mine annual reports once they are accepted because they are so important for evaluating contemporaneous reclamation.

CFO Response:

The CFO notes LQD's concern; however, the report stands as written. The reports in question are to be distributed in a timely manner by the LQD as required by the OSM/ DEQ Cooperative Agreement. The CFO will continue to work with LQD during the next evaluation period to address this issue.

State Comment:

Page 17, third paragraph:

Wyoming has a comment similar to the one above. The revision and the annual reports were available for review. Copies were not circulated because the revision was not approved and the annual reports were not accepted. Wyoming proposes that the CFO be notified when annual reports are submitted.

CFO Response:

See response to paragraph above.

State Comment:

The CFO indicates that contemporaneous reclamation has been an ongoing concern for ten years. However, the concern has not been substantiated by thorough investigation. Wyoming proposes that the CFO and state program work together to assess each mine permit and make a finding regarding the status of each mine and their achievement of contemporaneous reclamation. This will also include assessing the information submitted through annual reports, determining if there is additional information that is needed, and clarifying the confusion with maps. After so many years with this concern, it is time to determine if it is legitimate and how to resolve any issues we identify.

CFO Response:

The CFO agrees with LQD and feels that a joint evaluation of the information available to determine whether contemporaneous reclamation is being accomplished would be very useful. We will continue to evaluate this issue during the next evaluation year.