OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report for the

MONTANA Regulatory Program

Administered by the Department of Environmental Quality

Evaluation Year 2009

(July 1, 2008 to June 30, 2009)

TABLE OF CONTENTS

Page

I. Introduction 1

II. Overview of Coal Mining Industry 1

III. Overview of Public Participation Opportunities..... 2

IV. Major Accomplishments/Issues/Innovations 3

V. Success in Achieving the Purposes of SMCRA..... 4

A. Off-site Impacts 4
B. Reclamation Success..... 4
C. Customer Service 13

VI. OSMRE Assistance 13

VII. General Oversight Topic Reviews 14

A. State Program Amendments 14
B. Inspection and Enforcement 14
C. Sage Grouse Study 15
D. Grants Management 16

List of Figures

Figure 1 8
Figure 2 8

List of Charts and Graphs

Chart 1 9
Chart 2 14
Spring Creek Mine Graphs 10
Western Energy Area C Graphs.....11
Decker West Mine Graphs.....12

Appendix A: Tabular Summary of Core Data to Characterize the Program..... 17

Appendix B: CFO Response to the State Comments 29

(Cover photo: Wetland, Decker Coal Co., Decker Mine)

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSMRE as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Montana program and the effectiveness of the Montana program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of July 1, 2008 to June 30, 2009. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Casper Field Office (CFO).

The following is list of acronyms used in this report:

ARM	Administrative Rules of Montana
CFO	Casper Field Office
IEMB	Industrial and Energy Minerals Bureau
MPDES	Montana Pollutant Discharge Elimination System
MSUMRA	Montana Strip and Underground Mine Reclamation Act
MT-DEQ	Montana Department of Environmental Quality
NRCS	Natural Resources Conservation Service (USDA)
OSMRE	Office of Surface Mining Reclamation and Enforcement
PMT	Post-Mining Topography
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services

II. Overview of the Montana Coal Mining Industry

Of the 15 major coal-producing states, Montana ranks first in coal resources and reserves and fifth based on overall production. Montana's demonstrated coal reserve base is approximately 120 billion tons, or about 24.6 percent of the total U. S. reserve base. Coalfields are found throughout the State, but most are located east of the Continental Divide and in the south central part of the State. Of the 17 coalfields in the State, two (Fort Union and Powder River) currently have producing mines. Montana coal ranges in rank from lignite to high volatile bituminous, with most of the coal currently mined being sub-bituminous. At the present rate of mining (approximately 35-45 million tons per year), Montana can sustain over 30 years of mining from the coal that is mineable from current operating mines.

Coal mining began in Montana over 100 years ago. Early coal production was almost entirely from underground mines and was largely used by smelters, railroads, and for domestic purposes by early settlers of the State. Early underground production ranged from a few hundred thousand tons to peaks of as high as five million tons during World Wars I and II. Larger surface mining techniques after WWII boosted production to a record of nearly 43 million tons in 1998. According to OSM figures, total coal production in calendar year 2008 was 37.5 million tons, with less than 164 thousand tons

coming from underground sources. That is an increase of 1.8 million tons from calendar year 2007, when total coal production equaled 35.7 million tons.

Note that the Montana Department of Revenue reports total coal production in calendar year 2008 was 41.2 million tons, with less than 83 thousand tons coming from underground sources. That is a decrease of 2.3 million tons from calendar year 2007, when total coal production equaled 43.5 million tons. This difference between OSM and Montana Department of Revenue figures is likely due to the fact that the Absaloka Mine production data may be included in the Montana Department of Revenue figures.

Nearly all of Montana's coal production is used in coal-fired electrical generation facilities to produce electrical power; however, small amounts continue to be used for heating and other domestic uses on a limited regional basis.

There are currently nine active surface permits and one active underground mining permit in Montana with a total direct industry employment of approximately 1008 people and an annual payroll of approximately $72.3 million. Montana's surface mining industry furnishes some of the highest paying and most sought after jobs in the State.

The average size mine is 4,422 acres (Appendix A, Table 2) with a range from 7 acres to 25,625 acres. A total of approximately 66,336 acres are currently permitted and bonded in Montana (Appendix A, Tables 2 & 5). Approximately 36,496 acres of the 66,336 acres permitted have been disturbed by mining (Chart 1 & Appendix A, Table 5) and 17,102 of these disturbed acres have been backfilled, graded, topsoiled, and permanently seeded to final reclamation standards (Chart 1).

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

OSMRE has reviewed the Montana coal program with respect to opportunities for and participation in, the public review and permitting activities done by the Montana Department of Environmental Quality (MT-DEQ). This review found that opportunities for public involvement in mine permitting under the Montana program exist at the following levels of their permanent program: 1) all mine permit applications, major revisions, amendments and test pits, 2) mine permit renewals, 3) mine permit transfers, 4) applications for extensions of time to commence mining, 5) mine permit bond release applications, 6) public road relocations and whenever mining is proposed within 100 feet of a public road, 7) prospecting permits and transfers and 8) prospecting permit bond release applications.

Public notice requirements for most of the program actions listed above consist, at a minimum, of having the applicant place an advertisement in a newspaper of general circulation in the locality of the proposed activity for at least once per week for four consecutive weeks, followed by a 30 day allowance for comment (the public notice for permit transfer is one publication with a 15-day comment period). Any comments received or requests for an informal conference must be formally addressed on the record. Once the mine permitting actions (except for permit transfers, which require a one-time publication by MT-DEQ) are deemed "acceptable", the MT-DEQ also publishes a notice of acceptability once per week for 2 consecutive weeks, followed by a 10-day comment period, which again allows the public to participate in the State's permitting process.

OSMRE's review indicates that all the required publications are documented and of sufficient content to meet the requirements of the Montana program. The MT-DEQ also has an open door policy of making all permit applications and approved permits available for review. Since Montana is a large state, these documents are available in two office locations within Montana. Montana is currently taking steps to make at least some of this information available electronically.

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

Electronic Permitting

MT-DEQ's Data Management Committee continues to develop protocols for submittal of electronic data, including permit applications. Major accomplishments of this committee during the evaluation year include:

The Committee and DEQ's IT Unit implemented the development of a new electronic Document Management system (i.e., FileNet). In addition, the need to develop a user interface system that would integrate the Access database, FileNet, and GIS was identified. Thus, the Committee and the IT Unit conducted a detailed functional, technical, and fiscal analysis of integration systems. They recommended and the Coal Permitting & Compliance Steering Committee made the decision to move forward with a system developed by the state of Colorado, because it offered the greatest functionality for the lowest price in the shortest amount of time.

Included in the Data Committee and IT Unit's analysis was a visit to Colorado's state office in Denver to consult with the staff about their system. DEQ personnel were also provided the opportunity for some "hands-on" exercises with Colorado's system. The state of Colorado was very accommodating to DEQ in this endeavor.

DEQ finalized the contract with Deep End Solutions, the contractor who developed Colorado's latest version of the system, for the initial development and on-going support of the Montana system application.

Other Efforts

Improvements to the MS Access database/tracking system for permit revisions, bond releases, inspections, and annual reports were completed by the contractor and are now operational.

The Coal and Uranium Program conducted a Business Process Reengineering (i.e., Kaizen) Workshop to evaluate and revamp, as appropriate the permitting and compliance processes (i.e., Pre-Application, Application, Inspection, Bond-Release, Revisions).

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

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 MT-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).

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 MT-DEQ and CFO developed an oversight work plan to evaluate and document the effectiveness of the Montana program in protecting the environment and the public from negative off-site impacts resulting from surface and underground mining operations in Montana.

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: State and OSMRE inspection reports, enforcement actions, civil penalty assessments, citizens' complaints, special studies and information from other environmental agencies. If an off-site impact is identified, the sources of information and the basis used to identify and report these impacts will be clearly recorded. Field evaluations for off-site impacts were conducted during routine inspections by MT-DEQ. CFO conducted two partial oversight inspections and one site visit. Off-site impacts were not identified during the reporting period (see Appendix A, Table 4).

B. Reclamation Success:

OSMRE evaluates the effectiveness of the State program in achieving reclamation success based on the number of acres that meet the bond release standards and have been released (reported in Appendix A, Table 5). During this evaluation year information was collected to measure program performance in the area of contemporaneous reclamation. According to REG-8, although not an on-the-ground measure of reclamation success reported in Table 5, contemporaneous reclamation is an important purpose of SMCRA

"to assure that adequate procedures are undertaken to reclaim surface areas as contemporaneously as possible with the surface coal mining operations." It provides an overall perspective of how successfully reclamation is staying current with mining in the State.

According to REG-8, the measurement for contemporaneous reclamation may be measured by evaluating the timeliness of Phase I, Phase II and Phase Ill 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.

Reclamation activity has and is occurring in Montana. However, the number of acres receiving 100% final release (OSM Phase III / MT DEQ Phase IV) is small compared to the number of mined acres actually regraded, soiled and seeded. Table 5 of Appendix A catalogues the acreage of land released from bond for OSM Phase I, II and III. As Montana has a four phase bond release and in order to report Montana's bond release actions Montana's Phase III and Phase IV bond release will be utilized in the evaluation of reclamation success . Please note Montana Phase III bond release is reported as a footnote on Table 5 to clarify the distinction between Montana Phase III and Phase IV bond release.

Montana reclamation phase III is deemed to have been completed when:
(i) the applicable responsibility period (which commences with the completion of any reclamation treatments as defined in ARM 17.24.725) has expired and the revegetation criteria in ARM 17.24.711, 17.24.713, 17.24.714, 17.24.716 through 17.24.718, 17.24.721, 17.24.723 through 17.24.726, 17.24.731, and 17.24.815, as applicable to and consistent with the approved postmining land use are met;
(ii) a stable landscape has been established consistent with the approved postmining land use;
(iii) the lands are not contributing suspended solids to stream flow or runoff outside the permit area in excess of the requirements of ARM 17.24.633 or the permit; and
(iv) as applicable, the provisions of a plan approved by the department for the sound future management of any permanent impoundment by the permittee or landowner have been implemented to the satisfaction of the department; or
(v) the lands meet the special conditions provided in 82-4-235(3)(a), MCA;

Montana reclamation phase IV is deemed to have been completed when:
(i) all disturbed lands within any designated drainage basin have been reclaimed in accordance with the phase I, II, and III requirements;
(ii) fish and wildlife habitats and related environmental values have been restored, reclaimed, or protected in accordance with the Act, the rules, and the approved permit;
(iii) with respect to the hydrologic balance, disturbance has been minimized and offsite material damage has been prevented in accordance with the Act, the rules, and the approved permit;
(iv) alternative water sources to replace water supplies that have been adversely affected by mining and reclamation operations have been developed and are functional in accordance with the Act, the rules, and the approved permit;
(v) the reestablishment of essential hydrologic functions and agricultural productivity on alluvial valley floors has been achieved;
(vi) implementation of any alternative land use plan approved pursuant to ARM 17.24.821 and 17.24.823 has been successfully achieved; and

(vii) all other reclamation requirements of the Act, rules, and the permit have been met.

As part of the evaluation of reclamation success, OSM will adhere to the guidelines as contained in REG 8 for each of the four areas:

a. Land form/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. To date 36,485 acres have been disturbed and of that 14,545 acres (40%) have received Phase I bond release in Montana.

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 II reclamation activity, this measurement will be Phase II bond release. To date 36,485 acres have been disturbed and of that 10,616 acres (29%) have received Phase II bond release in Montana.

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. To date 36,485 acres have been disturbed and of that 10,616 acres (29%) have received Phase II bond release in Montana.

MEASUREMENT: Achievement of postmining land uses will be measured by acres of Montana 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 Montana Phase III bond liability can be documented as having achieved the approved post mining land uses. To date 36,485 acres have been disturbed and of that 1,617 acres (5%) have received Montana Phase III bond release.

MEASUREMENT: Successful revegetation will be measured by the acres of Montana 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 Montana Phase III bond release. To date 36,485 acres have been disturbed and of that 1,617 acres (5%) have received Montana 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. Phase IV bond release in Montana ensures hydrologic reclamation has occurred. It should be noted that for Phase IV bond release to occur in Montana, an entire drainage must be reclaimed to the Phase IV criteria before any final bond release can take place. For this reason, few acres of Phase IV bond release have occurred.

MEASUREMENT: Achievement of surface water quality and quantity restoration can be measured by acres of Montana Phase IV bond release. Surface water quality and quantity restoration may be measured in terms of acres released from bond liability. Montana Phase IV bond release will document that water quality meets surface water quality standards and water quantity is adequate for its intended use. To date 36,485 acres have been disturbed and of that 50 acres (.1%) have received Montana Phase IV bond release.

MEASUREMENT: Achievement of groundwater recharge capacity and ground water quantity and quality restoration can be measured by acres of Montana Phase IV bond release. Groundwater recharge, quality and quantity will be measured in terms of acreage released from Montana Phase IV bond liability. To date 36,485 acres have been disturbed and of that 50 acres (.1%) have received Montana Phase IV bond release.

MEASUREMENT: Achievement of surface water quality and quantity restoration can be measured by acres of Montana Phase IV bond release. Bond release will document that the water quality and quantity leaving the mine site meets the applicable standards. Montana Phase IV bond liability can be considered as having achieved restoration of this aspect of surfacewater quality and quantity. To date 36,485 acres have been disturbed and of that 50 acres (.1%) have received Montana Phase IV bond release.

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. 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 III bond release until completion of the entire mining operation. 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 reclamation success.

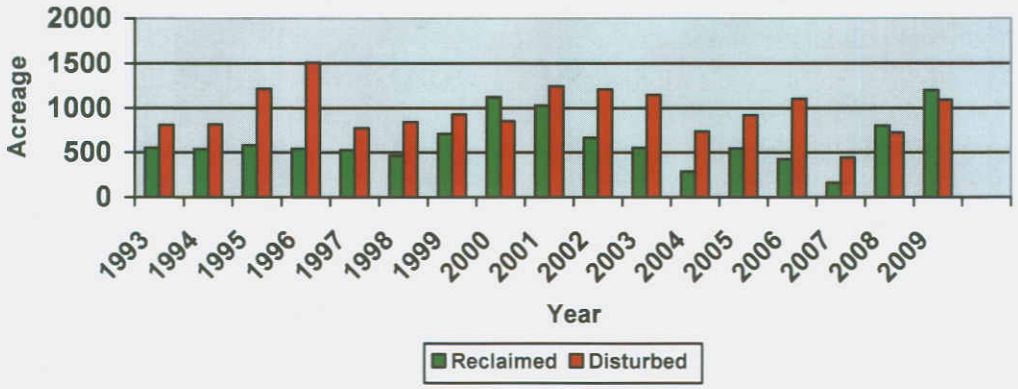
CFO believes another general measurement for contemporaneous reclamation is a comparison of the rate at which lands are being permanently reclaimed (seeded) to the rate of disturbance. This evaluation year mining companies in Montana have reclaimed more land than they have disturbed. This fact coupled with the REG-8 measurements support the CFOs conclusion that Montana is reclaiming land as contemporaneously as possible during this evaluation year. The following charts and graphs are used to show the rate at which lands are being permanently reclaimed (seeded) compared to the rate of disturbance. Montana's regulations on contemporaneous reclamation found at the Administrative Rules of Montana (ARM) 17.24.501 require that, "...Backfilling and grading must be kept current with mining operations. To be considered current, backfilling and grading must meet the following requirements, unless otherwise approved by the department upon adequate written justification and documentation provided by the operator; on lands affected by area strip mining, there must not be more than four consecutive spoil ridges present in any location. Backfilling and grading must be completed within two years after coal removal from each pit has been concluded...." Differences in the ratios of disturbance vs. reclamation could be due to the nature of the mining operations in Montana, or there could be delays in backfilling & grading or

permanent seeding operations due to the mines' operational emphasis on coal production over reclamation. Lands in these charts are considered permanently reclaimed (seeded) 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 been sought.

Figures 1 and 2 illustrate the overall mining and reclamation activities for the Montana coal mines since 1993. Chart 1 provides the actual acres disturbed and reclaimed annually for all mines. Figure 1 shows that during the last two years acres reclaimed exceeded acres disturbed.

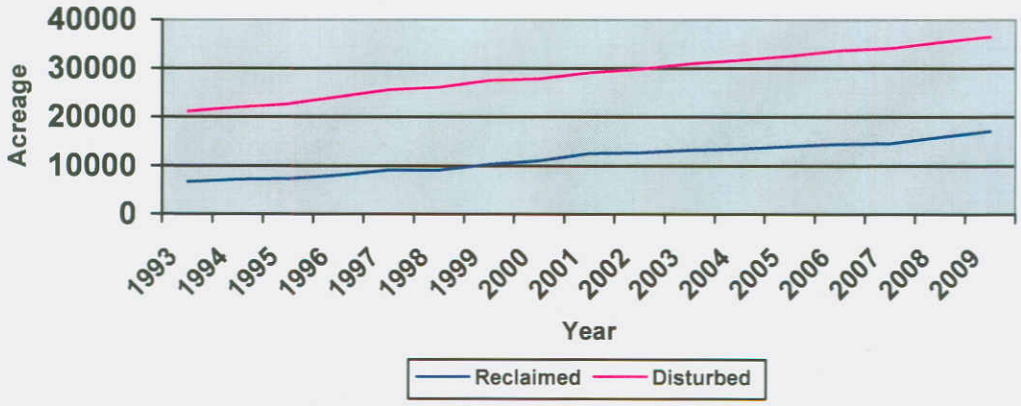
Figure 2 illustrates the cumulative disturbance and reclamation for the aggregate of all mines within the State. Note that the lines have converged over the last two years, indicating that reclamation is occurring slightly faster than disturbance.

Figure 1. Annual Disturbance vs. Reclamation



Source of data: 2009 Government Performance Reporting Act (GPRA) data collected from MT-DEQ

Figure 2. Cummulative Disturbance vs. Reclamation



Source of data: 2009 Government Performance Reporting Act (GPRA) data collected from MT-DEQ

Currently the cumulative reclamation to disturbance ratio is 0.47 as indicated on Chart 1. This ratio indicates that the rate of reclamation is increasing.

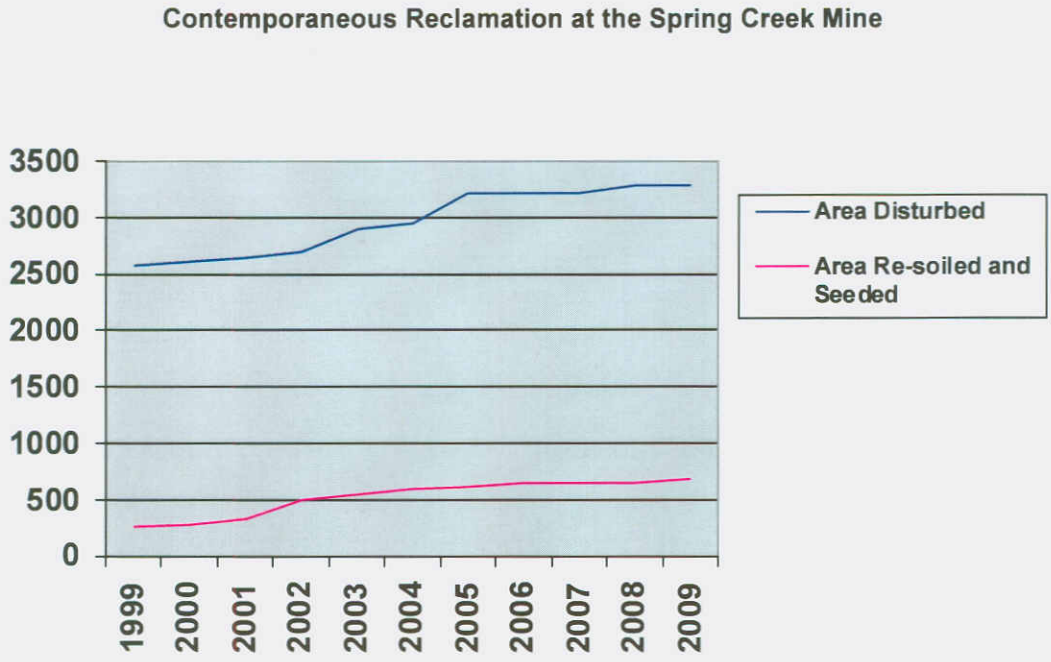
Chart 1
MONTANA RECLAMATION SUMMARY

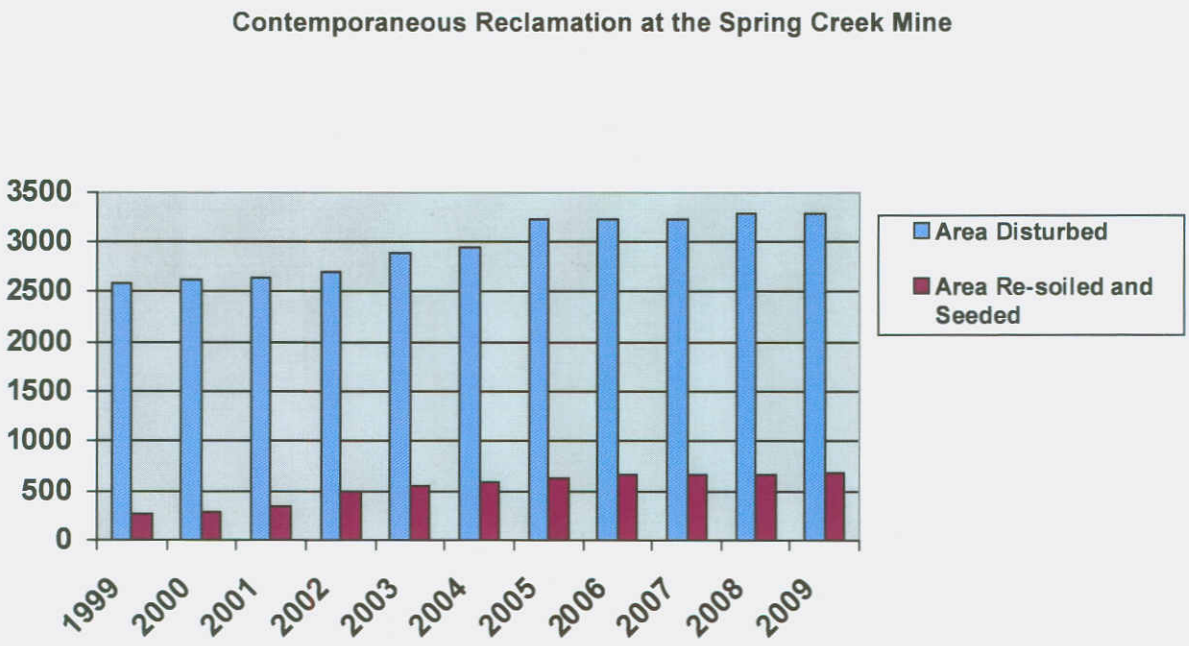
YEAR	ACRES DISTURBED	Cumulative Acres Dist.	ACRES RECLAIMED	Cumulative Acres Recl.	RATIO OF RECLAM VS DISTURB	Cumulative RATIO OF RECLAM VS DISTURB
1993	807	21,103	550	6,695	0.68	0.37
1994	816	21,966	536	7,141	0.66	0.33
1995	1,213	22,610	579	7,313	0.48	0.32
1996	1,507	24,075	541	8,022	0.36	0.33
1997	773	25,545	527	9,101	0.68	0.35
1998	842	26,061	462	9,084	0.55	0.35
1999	928	27,457	708	10,286	0.75	0.37
2000	853	27,759	1,121	11,038	1.31	0.40
2001	1,241	29,017	1,026	12,511	0.83	0.43
2002	1,205	29,763	666	12,670	0.55	0.43
2003	1,144	30,910	550	13,218	0.48	0.43
2004	738	31,646	288	13,498	0.39	0.43
2005	920	32,502	545	14,006	0.59	0.43
2006	1,103	33,694	426	14,442	0.39	0.43
2007	444	34,138	162	14,584	0.36	0.43
2008	721	35,402	801	15,904	1.11	0.45
2009	1083	36,485	1,198	17,102	1.11	0.47

Source: 2009 Government Performance Reporting Act (GPRA) data collected from MT-DEQ

Approximately 16.9 percent of the cumulative disturbed lands on Montana coal mines consist of facilities, such as buildings, ponds, haul roads, soil and overburden stockpiles and other long-term disturbances. These disturbances are necessary in the operation of the mine until mining operations are completed. The total current size of all Montana coal facilities is reported as 6,175 acres. When subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.56.

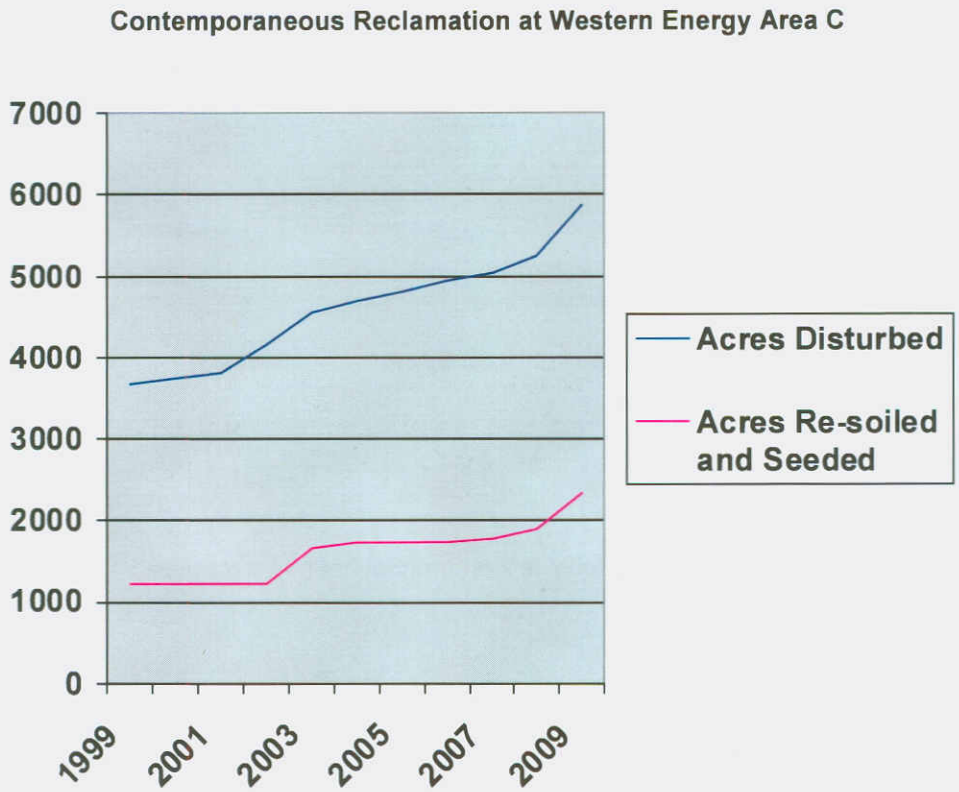
The following charts and graphs are for three active coal mines in Montana. The charts depict the status of reclamation vs. disturbance. A review of the mines was conducted to determine if the mines were in compliance with their approved reclamation plan. Following each set of charts, a brief summary of reclamation status is provided.

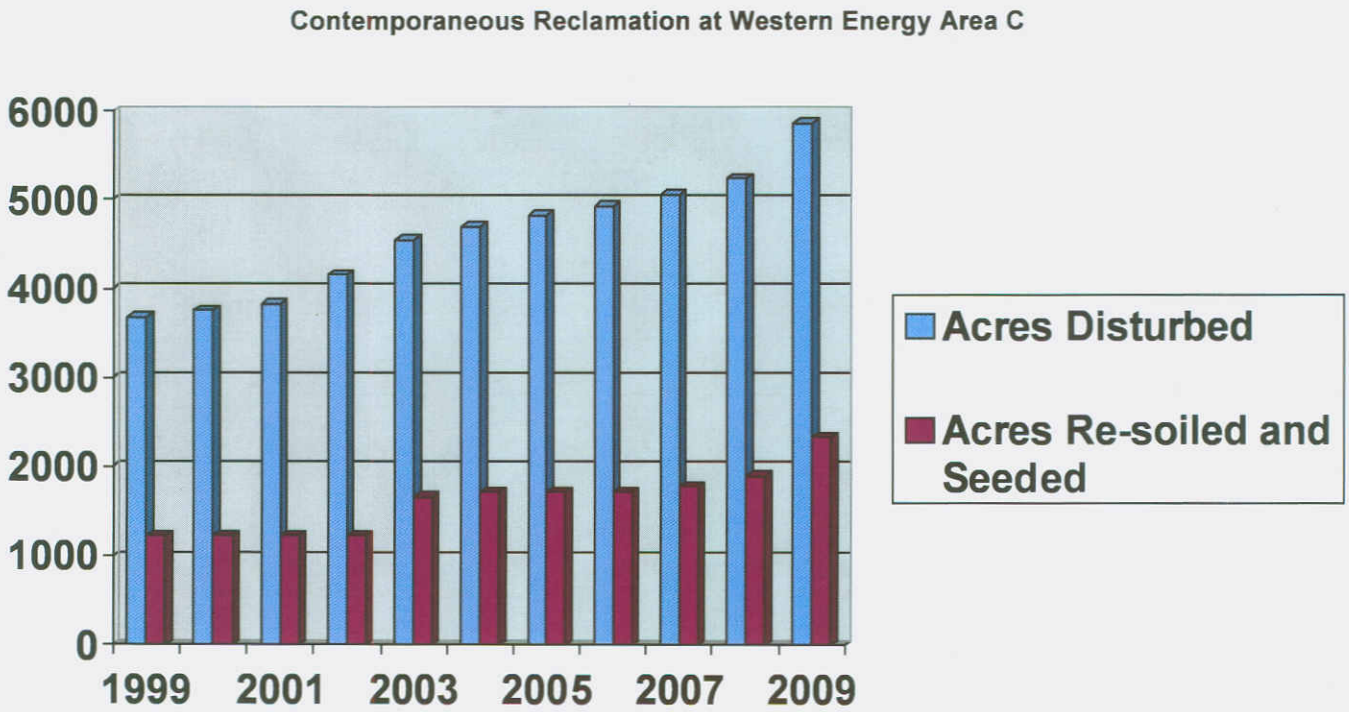




The charts for Spring Creek Mine show a similar slope which indicates mining and reclamation is occurring at similar rates, however, they also show that out of a total of 3,290 disturbed acres only 684 acres have been reclaimed. Due to operational

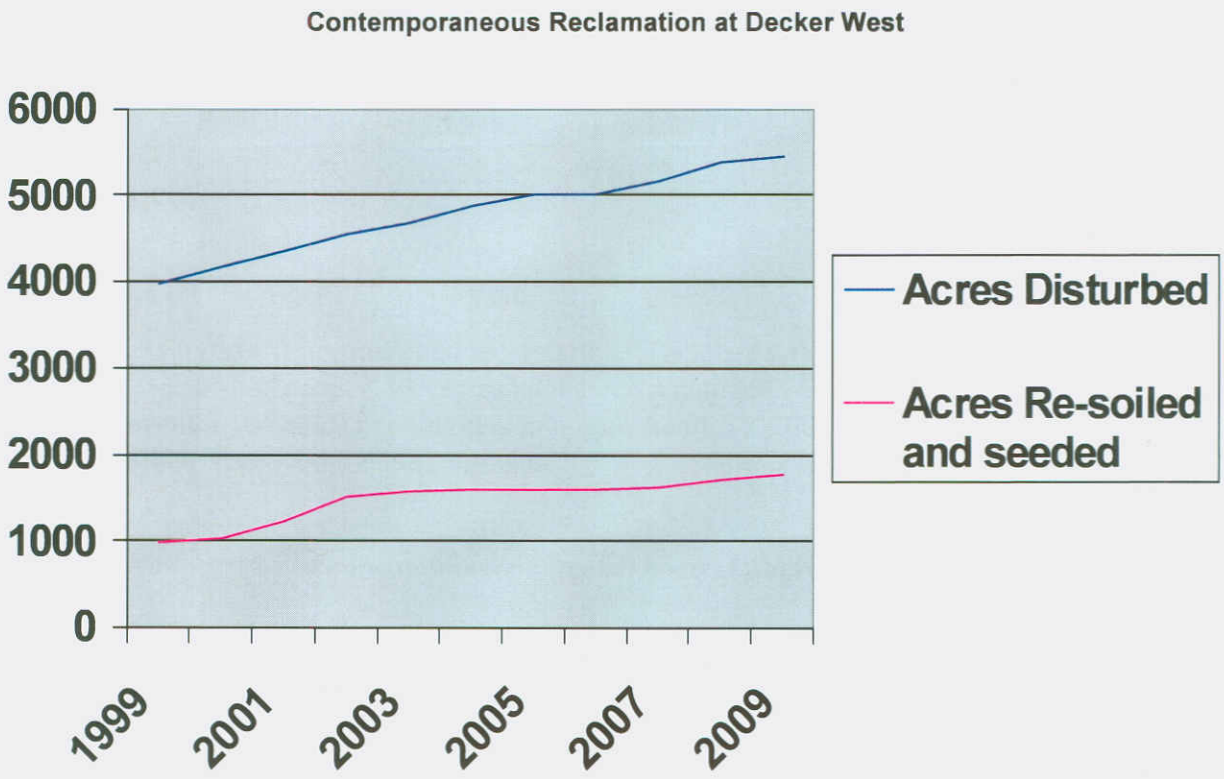
considerations, the mine continues to carry a large inventory of lands needing reclamation. As of EY 2008 Spring Creek was in compliance with their approved reclamation plan.

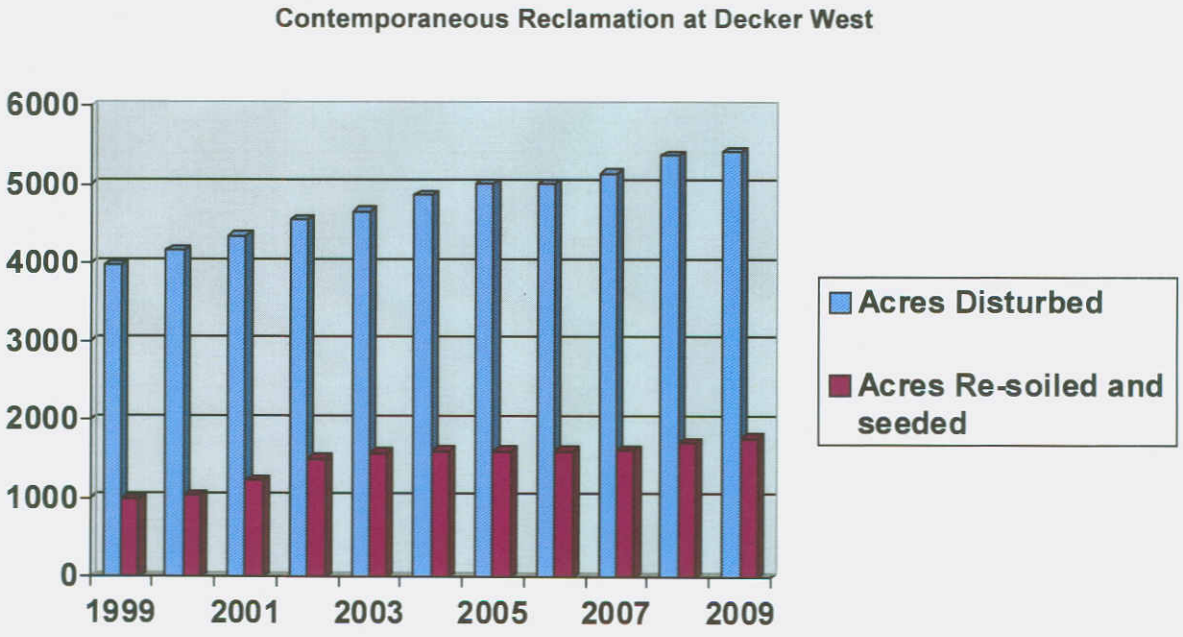




The charts for WECO Area C Mine show a similar slope which indicates mining and reclamation may be occurring at similar rates, however, it appears that mining is

increasing at a faster rate than reclamation. The charts also show that out of a total of 5,861 disturbed acres 2,335 acres have been reclaimed. The mine continues to increase its inventory of lands needing reclamation. As of EY 2008 the mine was in compliance with their approved reclamation plan.





The charts for the Decker West Mine show dissimilar slopes which indicate mining and reclamation is not occurring at similar rates, as mining is increasing at a faster rate than reclamation. They also show that out of a total of 5,433 disturbed acres 1,771 acres have been reclaimed. The mine continues to increase its inventory of lands needing reclamation. The CFO conducted a partial oversight inspection at the Decker West mine to review and compare the approved mining and reclamation plan to the on-the-ground conditions. The MT/DEQ recently required the mine to submit a new reclamation plan to address the backlog of lands needing reclamation. This inspection documented that the company is adhering to the new reclamation plan. The mine continues to increase its inventory of lands needing reclamation. As of EY 2009 the mine was in compliance with their approved reclamation plan.

C. Customer Service:

The coal program in Montana is administered by the Industrial and Energy Minerals Bureau (IEMB), a bureau under the MT-DEQ. IEMB provides service to all parties requesting assistance, documents or information, and regulates the coal mining industry within the State. Its services include, but are not limited to attending or making presentations at public meetings, discussions with individuals or groups regarding the Montana coal program or related regulatory, reclamation, or government activities.

In addition to the services provided to the general public, the coal program staff and management also contribute to task forces and ad-hoc committees in relation to inter- and intra-agency problem solving committees and panels. Some coal program personnel also plan and/or participate in various symposia, seminars, and workshops in relation to technical and legal aspects of coal prospecting, mining, and reclamation.

VI. OSMRE Assistance

A. National Technical Training Program (NTTP)

During the evaluation period, 2 Montana IEMB staff and 10 Montana AML staff attended a total of 11 NTTP (National Technical Training Program) training courses. No Montana personnel participated as NTTP instructors during this reporting period.

B. Technical Innovation and Professional Services (TIPS)

OSM was a co-convener for the 2009 American Society of Mining and Reclamation (ASMR) and Billings Land Reclamation Symposium (BLRS) Joint Conference in Billings, MT, May 30 through June 5, 2009. OSM hosted a TIPS & Technology Transfer booth at this conference with staff from all three OSM Regions participating. The WR Technical Team hosted their annual meeting during this conference led by Duane Matt. All western states and tribes had an opportunity to share their program accomplishments, use of TIPS technical tools and software, and technology transfer initiatives in the west.

OSMRE's Technical Librarian filled two reference requests and provided seven article reprints to the Montana SRA staff members.

During the evaluation year three staff members attended TIPS training courses, and two staff members participated as TIPs instructors.

Chart 2 TIPS Training Attended by Montana IEMB Staff for EY 2008

TIPS-AutoCAD Fundamentals for Permitting and Reclamation	6/16/09	$ 1129
TIPS-Introduction to ArcGIS for Mining and Reclamation	4/21/09	$ 1224
TIPS-AutoCAD Fundamentals for Permitting and Reclamation	6/16/09	$ 1264
		$3,617

VII. General Oversight Topic Reviews

A. State Program Amendments

The state program amendment process in Montana has been ongoing and constant since the Montana program was originally approved by OSMRE in April, 1980. Since that date, in response to rule challenges, court decisions and new rulemaking, the Federal reclamation regulations have also changed and evolved. In most cases, this Federal evolution required corresponding adjustments to the Montana and other state programs.

Overall, Montana's program is consistent with SMCRA and the Federal regulations. During this evaluation period, the final approval decision on State Program Amendment SATS # MT-028-FOR was published in the Federal Register Notice on January 5, 2009. State Program Amendment SATS # MT-029-FOR, which addresses normal husbandry practices, is currently under review by OSM. State Program Amendment SATS # MT-030-FOR, which addresses legislative changes regarding the determination of successful revegetation for final bond release, is currently under review by OSM.

At this time, there are no other outstanding programmatic issues unresolved in the Montana program. Both OSMRE and the MT-DEQ are trying to streamline and improve the amendment approval process through better cooperation and communication on both the Federal and State levels.

B. Inspection and Enforcement

The MT-DEQ continues to conduct frequent and thorough inspections. MT-DEQ conducted 69 complete inspections and 83 partial inspections for the 11 active permits and eight (8) complete inspections for the four inactive permits. Forty-four complete inspections were required for the active permits and 16 complete inspections for the inactive permits, for a total of 60 complete inspections. Eighty-eight partial inspections were required for the active permits. Although MT-DEQ only reported 83 partial inspections, they have exceeded total inspection frequency with the additional complete inspections. MT-DEQ has exceeded the minimum inspection frequency requirements of Federal regulations (30 CFR 840.11) and the Cooperative Agreement (30 CFR 926.30).

The Casper Field Office conducted two partial oversight inspections and conducted one site visit of coal mining operations in Montana.

MT-DEQ inspection reports are complete, accurately document site conditions and mine activity, and give the status of any violations. The inspection reports have continuity with previous reports. All performance standards were reviewed and documented during complete inspections and the reports contain a discussion of the current mine status. Each partial inspection report documents performance standards reviewed and permit requirements reviewed as well as the portions of the mine site inspected.

MT-DEQ maintains an inspectable units list and an inspection data base sufficient to meet its program requirements (See Table 2).

MT-DEQ issued 9 Notices of Violation and no Imminent Harm or Failure to Abate Cessation Orders during this evaluation period (See Table 10). No patterns of violation exist or show cause hearings or alternative enforcement action (bond forfeiture) were initiated during this evaluation period.

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

C. Sage Grouse Study

Sage grouse mitigation for CFO is only a concern in Montana and Wyoming. The Bureau of Land Management (BLM) in both States were contacted to see how they address sage grouse during the pre-coal leasing and stipulation and condition to the coal leases.

BLM in both states prepare Environmental Impact Statements (EIS's) and Environmental Assessments (EA's) for their coal leasing program. OSMRE is a participating agency. Sage grouse and associated habitats identified within the lease boundaries are discussed in the EIS's and EA's. The BLM relies on OSMRE and the State Regulatory Authorities, and their consultation with the U.S. Fish and Wildlife Service and Game and Fish departments, to develop any required mitigation for all wildlife species including sage grouse.

CFO has reviewed the Montana permit applications and Annual reports. Three mines were identified as having sage grouse habitat in or near the permit area. Those mines, the East and West Decker, and Spring Creek mines identified either sage grouse habitat in or near the permit areas. CFO reviewed the information and the monitoring and mitigation measures implemented by the mining companies. Both permits specifically addressed reclamation efforts to replace and create new habitat for sage grouse. The success of the reclamation mitigation measures is difficult to determine due to other factors such as the drought effect on habitat, and the West Nile virus found in the area. Despite these factors, only one sage grouse lek has been destroyed which occurred in the early 1980s. All of the original leks have not been destroyed by mining. The mine operators are conducting annual sage grouse counts and there doesn't seem to be much of a change in the population.

The mine operators in Montana are including monitoring sage grouse populations and conducting reclamation that either replaces habitat or establishes new habitat. No new

activity was reported concerning this study for EY 2009. .

D. Grants Management

The Montana Regulatory Grant administration was monitored throughout EY2009. A site visit to the offices in Helena Montana by the Grants Specialist and Regulatory Program Specialists to discuss Regulatory program implementation for the current evaluation year was conducted June 24-26, 2008. The FY2008 Regulatory Grant was closed during EY2009 with final closeout reports submitted within the timeframes required by the OSM Federal Assistance Manual and no deficiencies noted. A letter-of-credit random sample drawdown request for the FY2009 Regulatory Grant was selected by the Grants Specialist for further analysis, and no deficiencies noted. Interviews conducted with the Regulatory Grant Accounting staff confirmed that recent audits had no questioned or disallowed costs associated with OSM Regulatory grant(s). The Grants Specialist will continue to monitor the Montana Regulatory Grant administration in EY2010.

APPENDIX A

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

NOTE:

These tables present data pertinent to mining operations and State and Federal regulatory activities within Montana. They also summarize funding provided by OSM and Montana 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 Montana's performance is available for review in the evaluation files maintained by the Casper OSM 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:			
Calendar Year			
CY 2006	34.141	0.216	34.357
CY 2007	35.600	0.137	35.737
CY 2008	37.314	0.164	37.478

[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.

NOTE:
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 2

Inspectable Units
As of June 30, 2009

Coal mines and related facilities	Number and Status of Permits: Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals		Nbr.of Insp. Units[A]	Permitted Acreage[B] (100's of acres): Federal Lands		State/Private Lands		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	9	1	4	0	0	1	13	14	0	393	0.2	205.8	599
Underground mines	0	1	0	0	0	0	0	1	1	0	0	0.0	64	64
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Total	0	10	1	4	0	0	1	14	15	0	393	0.2	269.8	663

Total number of permits: 15

Average number of permits per inspectable unit (excluding exploration sites): 1.00

Average number of acres per inspectable unit (excluding exploration sites): 4,422

Number of exploration permits on State and private lands: 3 On Federallands[C]: 1

Number of exploration notices on State and private lands: 1 On Federallands[C]: 1

IP: Initial regulatory program sites

PP: Permanent regulatory program sites

A Inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.

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.

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.

TABLE 3

State Permitting Activity

As of June 30, 2009

Type of Application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres[A]	App. Rec	Issued	Acres	App. Rec.	Issued	Acres
New Permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	1	0		0	0		0	0		1	0	
Transfers, sales, and assignments of Permit rights	0	0		1	1		0	0		1	1	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										4	4	
Exploration notices [B]											2	
Revisions (exclusive of incidential boundary revisions		57			22			0			79	
Revisions (adding acreage but are not incidental boundary revisions)	2	0	0	0	0	0	0	0	0	2	0	0
Incidental boundary revisions	0	0	0	0	0	0	0	0	0	0	0	0
Totals	3	57	0	1	23	0	0	0	0	8	86	0

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 NUMBER OF EACH TYPE	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
	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 (excluding bond forfeiture sites): 15

Inspectable units free of off-site impacts: 15

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 NUMBER OF EACH TYPE	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
	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	D	E
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	998.9		
Phase II	- Surface stability - Establishment of vegetation	784.9	N/A	
Phase III [C]	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	0	N/A	N/A

Bonded Acreage[A]	Acres during this evaluation year
Total number of new acres bonded during this evaluation year	0
Number of acres bonded during this evaluation year that are considered remining, 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, 2008)[B]	66,320.0
Total number of acres bonded as of the end of this review period (June 30, 2009)[B]	66,335.9
Sum of acres bonded that are between Phase I bond release and Phase II bond release as of June 30, 2009[B]	3,928.2
Sum of acres bonded that are between Phase II bond release and Phase III bond release as of June 30, 2009[B]	10,566.53

Disturbed Acreage	Acres
Number of Acres Disturbed during this evaluation year	1,092.7
Number of Acres Disturbed at the end of the evaluation year (cumulative)	36,495.8

[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).

[C]Montana Phase III bond release for EY2009 was 1617.5 acres. See Chapter 5, Section B, for further explanation.

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 & 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, 2008 (end of previous evaluation year)[A]	0		0
Sites with bonds forfeited and collected during Evaluation Year 2009 current evaluation year)	0	$0	0
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2009 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2009 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2009 (end of current evaluation year[A]	0		0
Sites with bonds forfeited but uncollected as of June 30, 2009 (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, 2008 (end of previous evaluation year)[B]	0		0
Sites where surety/other party agreed to do reclamation during Evaluation Year 2009 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2009 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2009 (current evaluation year)[C]	0		0
Sites being reclaimed by surety/other party as of June 30, 2009 (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 2009
Regulatory Program	
Permit Review	8.16
Inspection	5.20
Other (administrative, fiscal, personnel, etc.)	1.49
Regulatory Program Total	14.85
AML Program Total	14.14
Total	28.99

TABLE 8

Funds Granted To Montana

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	$ 1,357,365	86.2 %
Other Regulatory Funding, if applicable	$ 0	0.00 %
Subtotal	$ 1,357,365	
Small Operator Assistance Program	$ 0	100 %
Abandoned Mine Land Reclamation Funding[A]	$ 9,547,050	100 %
Totals	$ **10,904,415**	

[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 Status	Number of Inspections Conducted	
	Complete	Partial
Active [A]	69	83
Inactive [A]	8	0
Abandoned [A]	0	0
Total	77	83
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	9
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	0
Number Petitions Accepted	0	0
Number Petitions Rejected	0	0
Number Decisions Declaring Lands Unsuitable	0	0
Number Decisions Denying Lands Unsuitable	0	0

APPENDIX B

Montana's Comments and Casper Field Office Responses

Montana comment on Page 6.d. Contemporaneous Reclamation:

Based on our recent meeting with CFO, we thought the following type of analysis was going to be eliminated. We have since been reminded that this is required by REG-8. In any case, this [REG-8] analysis contains very ambiguous information and can easily lead the reader to a wrong conclusion regarding reclamation at Montana's coal mines. The ratio of reclaimed lands to disturbed lands is influenced by a myriad of factors, including operations with expanding operations (e.g. a new amendment or mine plan expansion), emphasis on Phase I regrade/bond release – this creates larger tracts of reclamation that are generally higher quality (better blending with adjacent areas, better drainage reclamation, more diverse topography, etc.) than narrow - pit width - mine pass reclamation, revegetation problems (e.g. establishment of annual bromes/weeds vs. the desired species) which must be addressed prior to proceeding with revegetation, etc.

Also, "contemporaneously as possible" only has meaning with respect to what is required in each permit. Ratios of area reclaimed to area disturbed are not relevant to this matter.

CFO response:

CFO does not disagree with this reasoning; however, CFO must evaluate Montana based on the requirements of REG-8. Also, ratios of area reclaimed to area disturbed actually indicate a positive trend in contemporaneous reclamation in Montana during this evaluation year.