

**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 2008

(July 1, 2007 to June 30, 2008)

August 28, 2008

7 15 '08

TABLE OF CONTENTS

	<u>Page</u>
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.....	5
C. Customer Service	12
VI. OSMRE Assistance	12
VII. General Oversight Topic Reviews	13
A. State Program Amendments	13
B. Inspection and Enforcement	14
C. Sage Grouse Study	15
List of Figures	
Figure 1	7
Figure 2	7
List of Charts and Graphs	
Chart 1	8
Chart 2	13
Spring Creek Mine Graphs	9
Western Energy Area C Graphs.....	10
Decker West Mine Graphs.....	11
Appendix A: Tabular Summary of Core Data to Characterize the Program.....	16
Appendix B: CFO Response to the State Comments	28

(Cover photo: Seasonal Wetland Westmoreland Resources, Inc. Absaloka 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, 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 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 sixth 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 40-45 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. Production in calendar year 2007 was 35.7 million tons, an increase of 1.4 million tons from calendar year 2006.

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 twelve active surface permits and one active underground mining permit in Montana with a total direct industry employment of approximately 974 people and an annual payroll of approximately \$66.8 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 4,568 acres (Appendix A, Table 2) with a range from 7 acres to 25,625 acres. A total of approximately 68,528 acres are currently permitted and bonded in Montana (Appendix A, Tables 2 & 5). Approximately 35,402 acres of the 68,528 acres permitted have been disturbed by mining (Chart 1 & Appendix A, Table 5) and 15,904 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.

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:

Continuing to develop and improve the MS Access database/tracking system for permit revisions, bond releases, inspections, and annual reports. MT-DEQ anticipated that this project would be completed by June 30, 2008. Due to unforeseen issues, the contract has been extended in FY 2009.

Reviewed database management systems used by others. Further review of the system used by State of Colorado was conducted. Colorado has agreed to provide the computer code for its system to use as a foundation for the Montana database management system.

Initial review of the business process currently in place at MT-DEQ was conducted. Due to the need for further review a consultant has been contracted to assist the program in evaluating the business process and recommending changes. This will be completed early in FY 09 and must be done before the program can proceed with the database management system.

A contract for further development of the State of Montana's electronic file management system is in place. This will be initiated in FY 09 and focus on current and future files. The backlog of files will be prioritized, scanned and entered into the system as time and personnel allow.

Other Efforts

MT-DEQ finalized technical standards for evaluating Phase III (revegetation) bond release applications. The Natural Resources Conservation Service (NRCS) Rangeland Health Assessment methodology was used as the foundation for this effort. Input from within MT-DEQ, mine operators, government agencies, landowners, environmental organizations and other interested parties was very positive. The use of these standards was finalized in spring 2008.

MT-DEQ identified a need to modify the Montana Strip and Underground Mine Reclamation Act (MSUMRA) to allow for flexibility for certain mine facilities when considering the 10-year responsibility period for vegetation establishment for Phase III bond release. The proposal was presented to a joint meeting of representatives from Northern Plains Resource Council and the Montana Coal Council. Support for the proposed change was unanimous, with representatives of both Northern Plains Resource Council and the Montana Coal Council voicing the opinion that they should jointly sponsor the legislation instead of MT-DEQ.

MT-DEQ is working cooperatively with Montana Department of Fish, Wildlife and Parks, U.S. Bureau of Land Management, and Spring Creek Coal Company to identify potential habitat enhancements for sage grouse. The areas under consideration include existing reclamation, future reclamation, lands within the permit area owned by Spring

Creek, and adjacent lands owned by Spring Creek. This effort is to enhance existing habitat, provide better habitat into the future, and as mitigation for a potential BLM coal lease for mine expansion.

MT-DEQ contracted with the Montana Natural Heritage Program to enter all of the wildlife observations (e.g. baseline, annual monitoring, special studies) provided by the coal mines into the state-wide data base. This work was completed during the summer 2007.

MT-DEQ contracted with the Montana Natural Heritage Program to inventory seven U.S. Geological Survey Topographic Quadrangles for wetlands. The seven quads include the area of the active coal mines that have not been inventoried as part of an effort to develop a state-wide wetland database. It is anticipated that this work will be done during the early portion FY 09.

Montana staff continued to participate throughout the report year as instructors and in course development for several national OSMRE courses. Montana also provided technical and regulatory assistance and information to various special interest groups, companies, and individuals regarding Program and mining company issues and responsibilities. The staff vegetation ecologist did a poster presentation at the 15th Wildland Shrub Symposium, June 17-19, 2008, in Bozeman, MT. The title of the presentation was Shrub Reclamation on Southeastern Montana Coal Mines.

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 three complete random sample inspections and conducted seven partial / bond release inspections. Off-site impacts were not identified during the reporting period (see Appendix A, Table 4).

MT-DEQ is currently renewing its Montana Pollutant Discharge Elimination System (MPDES) permits for all of the active coal mines. As the MPDES permits are renewed, the Western Alkaline Standards for sediment control are being incorporated into the permits. These standards and the modeling efforts associated with the permits will better define the acceptable sediment loads from a particular drainage, and whether or not an impact (on-site and/or off-site) is occurring and whether the impact is related to a sediment load significantly exceeding the target or significantly below the target sediment load. Both of these could result in an unacceptable, off-site impact. Montana will continue to develop the process of evaluating the impacts of sediment load throughout the upcoming year.

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 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.

Reclamation activity has and is occurring in Montana. However, the number of acres released from Phase III bond 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 Phase I, II and III. (Montana has a four

phase bond release. In order to report Montana's bond release actions in Table 5, Montana's Phase III and Phase IV bond release will be combined under OSMRE's Phase III bond release in Table 5).

CFO believes another general measurement for contemporaneous reclamation is a comparison of the rate at which lands are being permanently reclaimed (seeded) to the rate of disturbance. The following charts and graphs are used to show the rate at which lands are being permanently reclaimed (seeded) compared to the rate of disturbance.

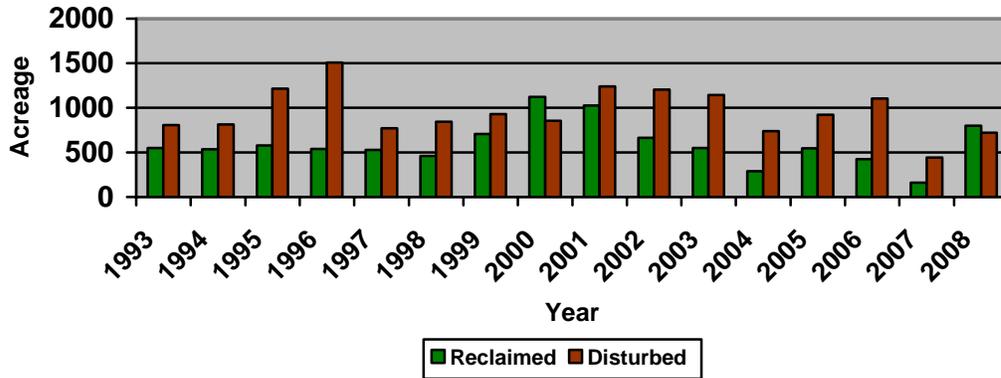
Montana's regulations on contemporaneous reclamation found at the Administrative Rules of Montana (ARM) 17.24.501 require "Backfilling and grading must be kept current with mining operations. To be considered current, backfilling and grading must meet the following requirements, unless otherwise approved 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...."

Many 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 in only two years during the 16 year period, reclamation activities exceeded the disturbance operations. It is encouraging to observe that one of those years is 2008.

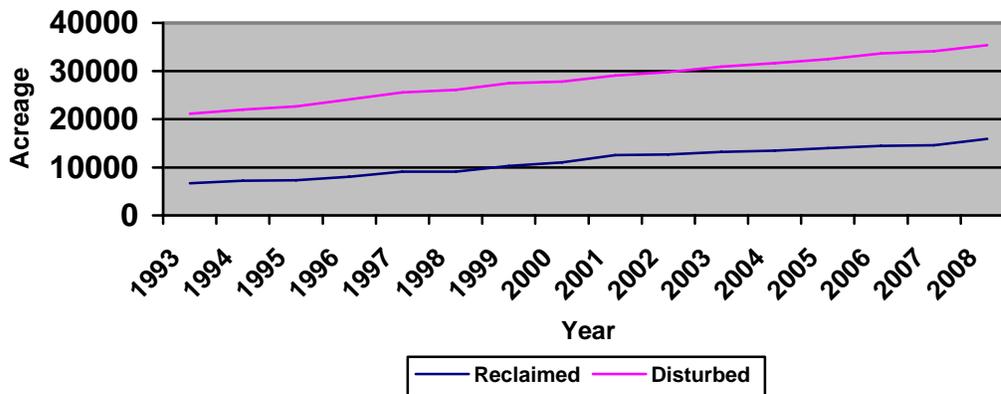
Figure 2 illustrates the cumulative disturbance and reclamation for the aggregate of all mines. Note that the lines are progressively diverging each year, indicating a disproportionate increase of disturbed lands over the reclaimed lands each year.

Figure 1 Annual Disturbance vs Reclamation



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

Figure 2 Cummulative Disturbance vs Reclamation



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

Currently the cumulative reclamation to disturbance ratio is 0.45 to 1.00. This 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 reclaimed could be narrowing. This fact could indicate a reduction in unreclaimed lands which may contribute to an improvement in contemporaneous reclamation and subsequent bond release. As indicated on Chart 1, the total acres disturbed equals 35,402 and total acres reclaimed equals 15,904 for a ratio of .45 on a statewide basis.

Chart 1
MONTANA RECLAMATION SUMMARY

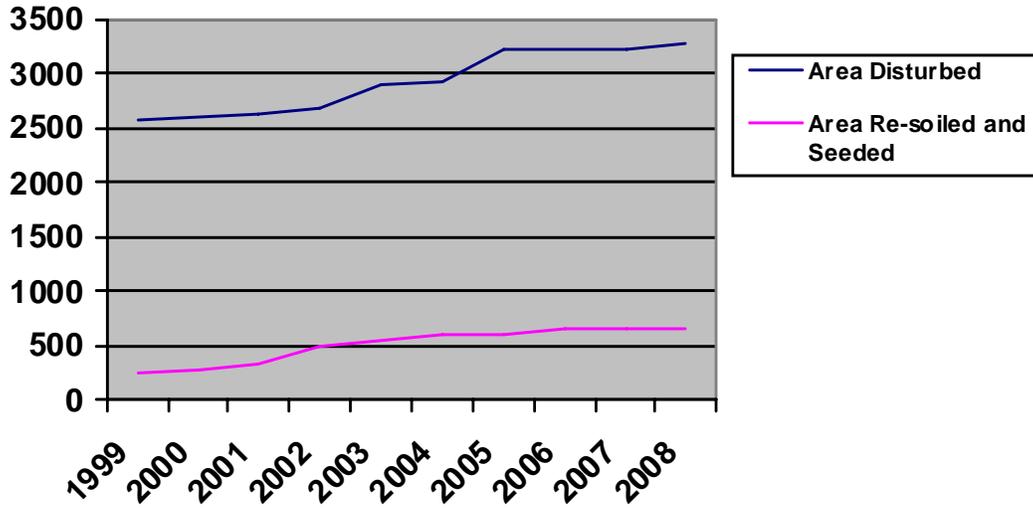
YEAR	ACRES DISTURBED	Cumulative Acres Dist.	ACRES RECLAIMED	Cumulative Acres Recl.	RATIO OF RECLAM VS DISTURB	Cumulative RATIO OF RECLAM VS DISTURB
1993	807	21,103	550	6,695	0.68	0.37
1994	816	21,966	536	7,141	0.66	0.33
1995	1,213	22,610	579	7,313	0.48	0.32
1996	1,507	24,075	541	8,022	0.36	0.33
1997	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

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

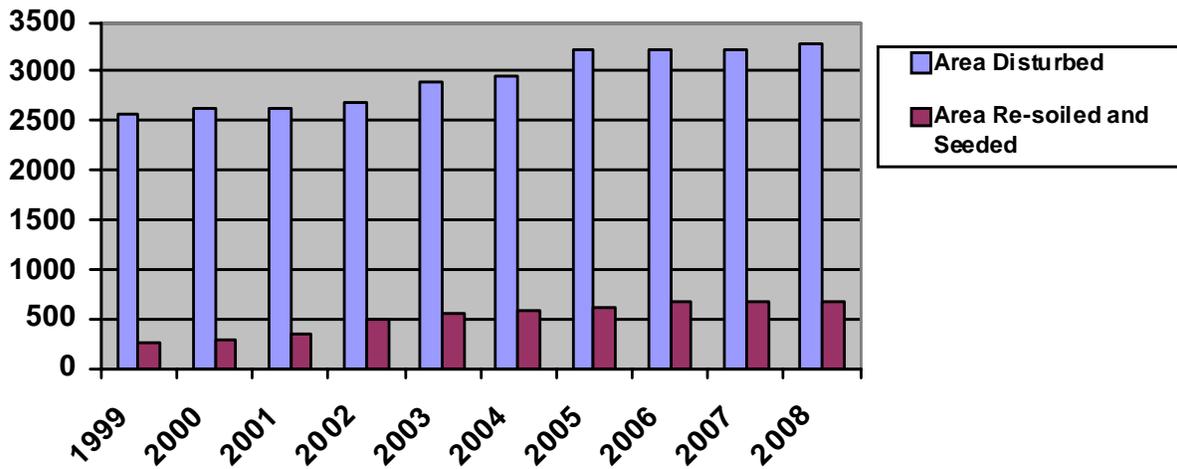
Approximately 17.1 percent of the cumulative disturbed lands on Montana coal mines consist of facilities, such as buildings, ponds, haul roads, soil and overburden stockpiles and other long-term disturbances. These disturbances are necessary in the operation of the mine until mining operations are completed. The total current size of all Montana coal facilities is reported as 6,063 acres. When subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.54 to 1.00. CFO is concerned about the status of the other 46 percent of the net disturbance and will be working with MT-DEQ to determine the status. As regulation ARM 17.24.501 provides, the department may approve exceptions to the contemporaneous reclamation standards when the operator provides written documentation for a variance from the normal time requirements. These disturbed lands may be left in spoil ridges, and/or graded and left idle waiting for final reclamation.

Low ratios of reclamation to disturbance indicate that contemporaneous reclamation is not progressing at a rate commensurate to the requirement to stay current with completion of coal removal from each pit area, 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 conducting reclamation efforts in accordance with their mining permits and state rules. The CFO reviewed three mines specifically to review the above items. This information is displayed below.

Contemporaneous Reclamation at the Spring Creek Mine

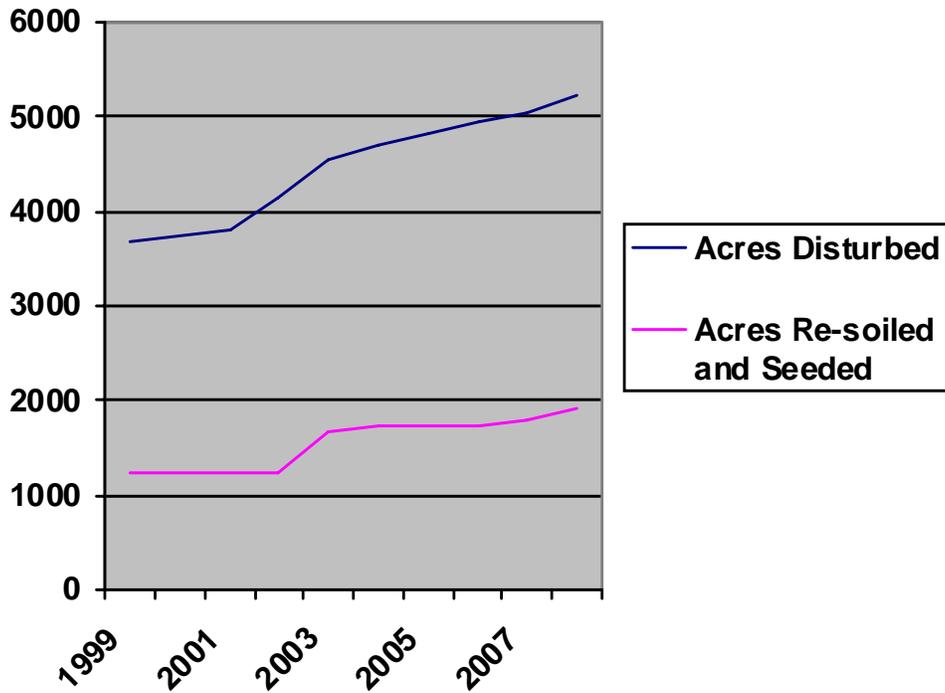


Contemporaneous Reclamation at the Spring Creek Mine

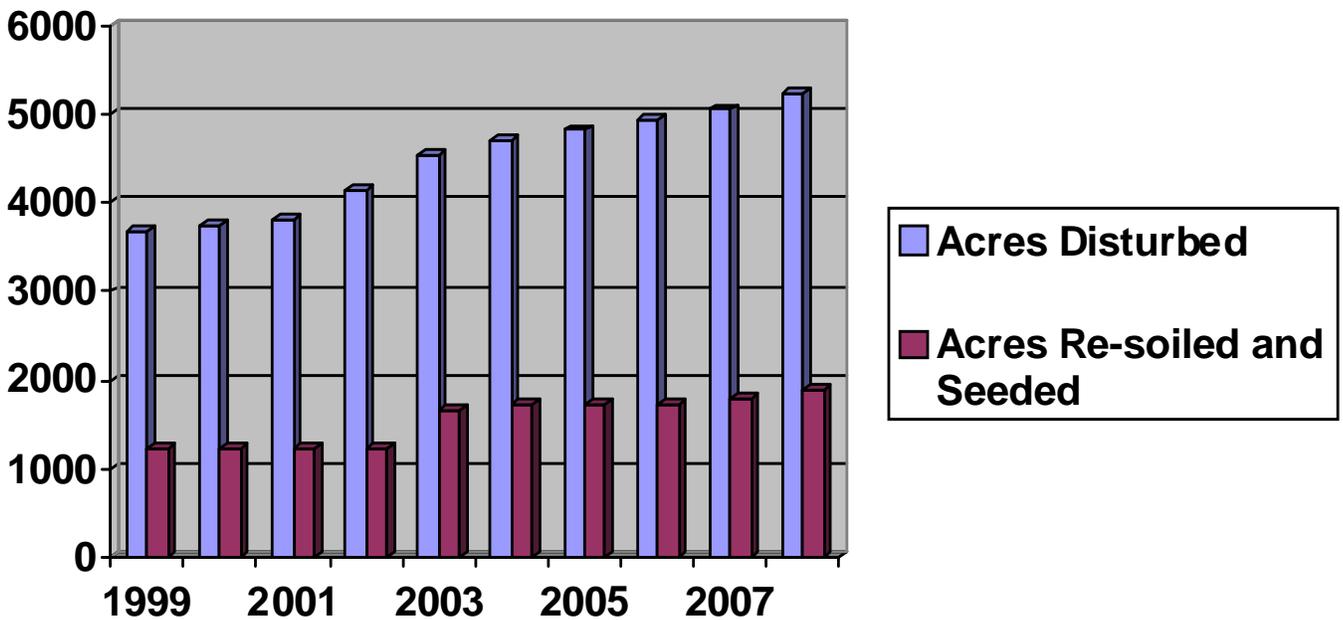


The charts for Spring Creek Mine show a similar slope which indicates mining and reclamation is occurring at similar rates, however, they also show that out of a total of 3247 disturbed acres only 657 acres have been reclaimed. Due to operational considerations, the mine continues to carry a large inventory of lands needing reclamation.

Contemporaneous Reclamation at Western Energy AreaC

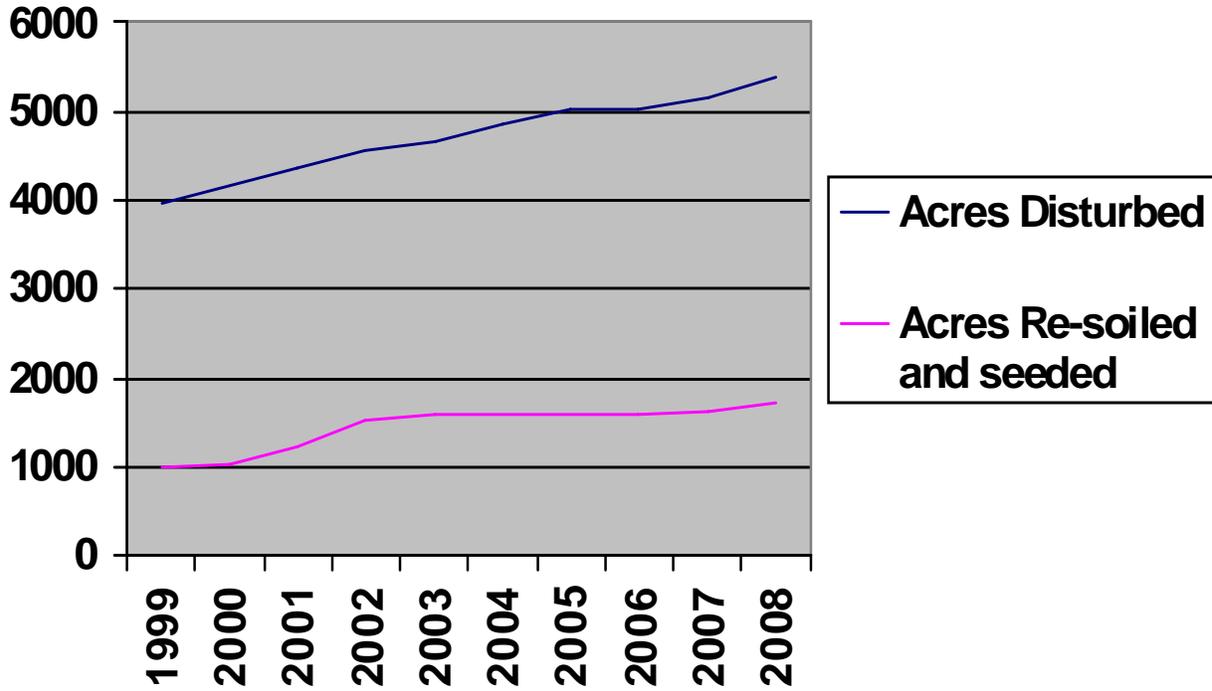


Contemporaneous Reclamation at Western Energy AreaC

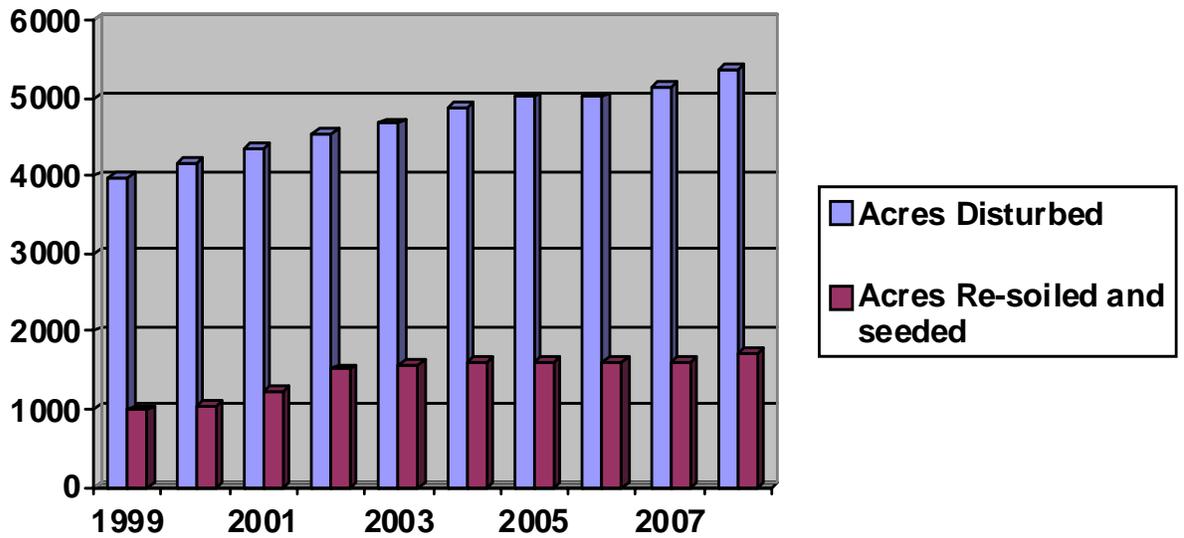


The charts for WECO Area C Mine show dissimilar slopes which indicate mining and reclamation is not occurring at similar rates, as mining is increasing at a faster rate than reclamation. They also show that out of a total of 5337 disturbed acres only 1901 acres have been reclaimed. The mine continues to increase its inventory of lands needing reclamation.

Contemporaneous Reclamation at Decker West



Contemporaneous Reclamation at Decker West



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 5383 disturbed acres only 1710 acres have been reclaimed. The mine continues to increase its inventory of lands needing reclamation.

The MT-DEQ recently developed a “regrade review system” to identify parcels of reclamation that qualify for Phase I (regrade) bond release. Prior to soil laydown, the MT-DEQ will request that all companies submit a soil laydown request, including a figure illustrating the pre-mine topography, the approved post-mining topography (PMT) and the current regraded topography. Review of the request will determine if the regrade complies with the approved PMT. If the regrade complies with the approved PMT, a Phase I bond release application will then be basically a formality, as the MT-DEQ will have already approved the regrade. CFO will be interested in MT-DEQ’s “regrade review system” to see if reclamation efforts increase when the system is implemented. Both agencies will continue to work together to investigate this concern during the next evaluation period.

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)

One Montana IEMB staff member attended an NTTP instructor-led training course during the evaluation year.

B. Technical Innovation and Professional Services (TIPS)

MT-DEQ’s IEMB continues to participate and support TIPS and Technology Transfer activities. The Montana Permitting Program supports these activities by providing two instructors for instruction in TIPS GIS and Mobile Computing classes, and through active representation on the TIPS Steering Committee, Western Region Technology Transfer Team, and the Geospatial Committee. The Montana Program works to develop partnerships during application of technical approaches, collection and management of electronic data for integration into an electronic permitting system, and development of the architecture for an electronic permitting and management system.

Several staff attended the OSMRE TIPS Geospatial Conference. The exchange of information to apply solutions when resolving similar technical challenges was well received by all staff. For instance, a presentation given by the Colorado Program at the Geospatial

Conference resulted in Colorado Program staff providing a web based demonstration of the Colorado Program E-Permitting system to all Montana Permitting staff and key personnel using *Go To Meeting*. Through this partnership facilitated by the TIPS and Technology Transfer Program, the Montana Program will realize approximately \$100,000 in cost savings by utilizing components of the Colorado Program E-Permitting system, and modifying the system to fulfill customized needs of the Montana Program.

The Montana Program continues to partner with the OSMRE TIPS and Technology Transfer Program during use of OSMRE TIPS equipment. The Real-Time Kinematic (RTK) GPS unit was used to develop reference locations for mine permits to facilitate the management of electronic permit information. Availability of the system saved the program approximately \$10,000, and enhances the regulatory process. Additionally, a GPS enabled digital camera was loaned to the Montana Program to support TIPS innovative and emerging technology efforts. The Montana Program purchased their own GPS enabled digital camera after assessing that the technology would compliment their pursuit of an electronic permitting system. Staff feedback stated that their exposure to the technology by the TIPS and Technology Transfer Program, and ability to utilize the equipment for a trial period at no obligation, were appreciated and crucial to the decision making process of the purchase.

A TIPS service manager visit was conducted at the Title IV and Title V Program offices in Helena to better understand the programs' needs, deliver shared equipment for project use, and to identify opportunities where TIPS and Technology Transfer can better partner with Montana personnel as both agencies work to implement regulatory solutions. Software updates to Galena and SedCAD TIPS core software were distributed to designated contacts during this reporting period. Additionally, 3 licenses of ArcPad were provided for mobile computing purposes.

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

During the evaluation year three staff members attended TIPS training courses, as shown by Chart 2.

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

TIPS-ArcPAD 7: Mobile GIS for Reclamation Mapping and Analysis	5/20/08	\$594.00
TIPS-Advanced Topics for SurvCADD	8/07/07	\$1,485.00
TIPS-Blasting Log Evaluation Program (BLEP)	2/26/08	\$1,710.00
		\$3,789.00

Montana represents Montana, Wyoming and Alaska on the TIPS Steering Committee, and attended the annual Committee meeting in St. Louis, Missouri during May 2008.

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. Montana has submitted twenty-three formal amendment packages to OSMRE for review and approval since its original program was approved.

Overall, Montana's program is consistent with SMCRA and the Federal regulations. During this evaluation period, Montana had three active amendments in OSMRE's formal review process. The final approval decision on 2003 legislative changes (submitted 8/29/05) was published in the Federal Register dated October 10, 2007. The other two amendment packages address statutory changes made during the 2005 legislative session (submitted 1/18/06) and rule changes for civil penalties (submitted 11/6/06). These two amendment packages were combined into one review. The Final Approval decision was published in the Federal Register Notice dated May 14, 2008. OSMRE has completed review of all outstanding program amendments submitted by MT-DEQ prior to the end of the evaluation year. 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 76 complete inspections and 82 partial inspections for the active permits and eight (8) complete inspections for the two (2) inactive permits. Fifty-two complete inspections were required for the active permits and eight complete inspections for the inactive permits, for a total of 60 complete inspections. 104 partial inspections were required for the active permits. Although MT-DEQ has only reported 82 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 three complete random sample inspections and conducted seven partial / bond release inspections 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 4 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 have been 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 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.

In summary, the mine operators in Montana are including monitoring sage grouse populations and conducting reclamation that either replaces habitat or establishes new habitat.

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:			
EY 2006	33.973	0.266	34.239
EY 2007	34.141	0.216	34.357
EY 2008	35.600	0.137	35.737
<p>^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.</p> <p>Provide production information for the latest three full evaluation years to include the last full evaluation year for which data is available.</p>			

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, 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 Lands		All Lands
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	IP	PP	Total
	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	12	1	2	0	0	1	14	14	0	351	0.2	270	621.2
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	13	1	2	0	0	1	15	15	0	351	0.2	334	685.2
Total number of permits:											16			
Average number of permits per inspectable unit (excluding exploration sites):											1.07			
Average number of acres per inspectable unit (excluding exploration sites):											4,568			
Number of exploration permits on State and private lands:									4	On Federallands ^C :		1		
Number of exploration notices on State and private lands:									4	On Federallands ^C :		1		
<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	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		1	1		2	0		4	1	
Transfers, sales, and assignments of Permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices ^B											2	
Revisions (exclusive of incidental boundary revisions)		30			3			0			33	
Revisions (adding acreage but are not incidental boundary revisions)	1	1	2,200	0	0	0	1	0	0	2	1	2,200
Incidental boundary revisions	2	1	7.9	0	0	0	2	0	0	4	1	7.9
Totals	4	32	2,207.9	1	4	0	5	0	0	10	38	2,207.9

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 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
TYPE OF IMPACT AND TOTAL 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 (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
TYPE OF IMPACT AND TOTAL 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	D	E
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	3328.4		
Phase II	- Surface stability - Establishment of vegetation	1788.33	N/A	
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	101.4	N/A	N/A
Bonded Acreage^A			Acres during this evaluation year	
Total number of new acres bonded during this evaluation year			2207.9	
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, 2007) ^B			66,279	
Total number of acres bonded as of the end of this review period (June 30, 2008) ^B			68527.9	
Sum of acres bonded that are between Phase I bond release and Phase II bond release as of June 30, 2008 ^B			3,650.1	
Sum of acres bonded that are between Phase II bond release and Phase III bond release as of June 30, 2008 ^B			9,350.33	
Disturbed Acreage			Acres	
Number of Acres Disturbed during this evaluation year			721	
Number of Acres Disturbed at the end of the evaluation year (cumulative)			35,402	
^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, 2007 (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 2008 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2008 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2008 (end of current evaluation year) ^A	0		0
Sites with bonds forfeited but uncollected as of June 30, 2008 (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, 2007 (end of previous evaluation year) ^B	0		0
Sites where surety/other party agreed to do reclamation during Evaluation Year 2008 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2008 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2008 (current evaluation year) ^C	0		0
Sites being reclaimed by surety/other party as of June 30, 2008 (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	8.098
Inspection	5.153
Other (administrative, fiscal, personnel, etc.)	1.473
Regulatory Program Total	14.724
AML Program Total	10.85
Total	25.574

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	\$ 1,227,501	82.86 %
Other Regulatory Funding, if applicable	\$ 0	0.00 %
Subtotal	\$ 1,227,501	
Small Operator Assistance Program	\$ 0	100 %
Abandoned Mine Land Reclamation Funding ^A	\$ 8,225,867	100 %
Totals	\$ 9,453,368	

^AIncludes 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	
Status	Complete	Partial
Active ^A	76	82
Inactive ^A	8	0
Abandoned ^A	0	0
Total	84	82
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	4	4
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 Department of Environmental Quality provided comments August 20, 2008 via e-mail on the "Draft Annual Evaluation Summary Report" dated July 30, 2008. Comments pertaining to typographical errors and minor editorial preferences are not reflected in this section but were corrected within the document. The substantial comments are listed below with CFO's responses.

MTDEQ's Comment: MTDEQ suggested Page 1, second full paragraph, last sentence be revised to read "At the present rate of mining (approximately 40-45 million tons per year), Montana can sustain over 30 years of mining from the coal that is mineable from current operating mines."

CFO's Response: CFO made the change.

MTDEQ's Comment: MTDEQ suggested an additional sentence should be added to the end of the third paragraph, Page 1 to read as follows, "Production in calendar year 2007 was 43.5 million tons; it was approximately 46 million tons for the evaluation period."

CFO's Response: CFO disagrees that production in calendar year 2007 was 43.5 million tons. According to OSMRE coal production data compiled from records reported by all coal mines operating in the State of Montana to OSMRE, the gross coal tonnage mined in Montana in calendar year 2007 was 35.7 million tons (see Appendix A, Table 1.) CFO added the following sentence to Page 1, third paragraph, "Production in calendar year 2007 was 35.7 million tons, an increase of 1.4 million tons from calendar year 2006."

MTDEQ's Comment: MTDEQ suggested Page 2, fourth full paragraph be revised to read as follows, "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."

CFO's Response: CFO made the change.

MTDEQ's Comment: MTDEQ suggested Page 3, first paragraph, second sentence be revised to read, "MT-DEQ anticipated that this project would be completed by July June 30, 2008."

CFO's Response: CFO made the change.

MTDEQ's Comment: MTDEQ suggested Page 3, sixth paragraph, first sentence be revised to read, "MT-DEQ identified a need to modify the Montana Strip and Underground Mine Reclamation Act (MSUMRA) to allow for flexibility for certain mine facilities when considering the 10-year responsibility period for vegetation establishment for Phase III bond release."

CFO's Response: CFO made the change.

MTDEQ's Comment: MTDEQ inserted the following italicized comment into Page 5, fourth paragraph which reads, "Reclamation activity has and is occurring in Montana (see Chart 1). However, CFO believes that the State program is moderately effective in its goal of having all disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible. This is evidenced by the fact that the number of acres released from Phase III bond is small compared to the number of mined acres actually regraded, soiled and seeded. *(The previous two statements and the thrust of this entire subsection raise the following conundrum. OSM is using a contemporaneous reclamation standard that has no legal basis or meaning. Using a comparison of reclamation acreage with disturbed acreage in a general, across-the-board manner as a basis for evaluating the Montana program is misdirected and unrelated to specific Montana program rules or requirements in the existing mining permits. Moreover, the OSM rule at 30 CFR 816.101 regarding specifics on time and distance requirements for contemporaneous reclamation has been under suspension since 1992. OSM needs to discuss contemporaneous reclamation in the context of what's legally required by the Montana rules and the permits. The only way OSM can properly assess this topic in Montana is to evaluate each mining operation to determine if it is complying with its permit and the applicable state rules.)* Table 5 catalogues the acreage of land released from bond for Phase I, II and III. (Montana has a four phase bond release. In order to report Montana's bond release actions in Table 5, Montana's Phase III and Phase IV bond release will be combined under OSMRE's Phase III bond release in Table 5)."

CFO's Response: CFO is evaluating contemporaneous reclamation as per instructions in OSMRE REG-8. For clarification CFO revised Page 5, second and third paragraphs (preceding the paragraph referenced above) to read, "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 OSM Directive REG-8 (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 ~~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."

In addition, CFO will let the reader interpret the data presented in Table 5 of Appendix A in order to make his or her own determination of the effectiveness of the State program in achieving contemporaneous reclamation. Thus, CFO has revised the paragraph following the two paragraphs referenced above to read, “Reclamation activity has and is occurring in Montana (see Chart 1). However, CFO believes that the State program is moderately effective in its goal of having all disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible. This is evidenced by the fact that the number of acres released from Phase III bond 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 Phase I, II and III. (Montana has a four phase bond release. In order to report Montana’s bond release actions in Table 5, Montana’s Phase III and Phase IV bond release will be combined under OSMRE’s Phase III bond release in Table 5).”

MTDEQ’s Comment: MTDEQ inserted the following comment into Page 5, fifth paragraph which reads, “The following charts and graphs are used to highlight CFO’s concerns that the rate at which lands are being permanently reclaimed (seeded) *(seeded acres should include Phase II – as they have been seeded and the desired vegetation is establishing)* compared to the rate of disturbance may not be as contemporaneous as possible. This 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 mine operations’ emphasis on coal production over reclamation.”

CFO’s Response: Seeded areas do include Phase II lands. Areas where the RA has released phase II bond are a subset of areas soiled and seeded/planted (as per the instructions for completing the GPRA tables). For clarification CFO has revised the paragraph and added two additional paragraphs to read, “CFO believes another general measurement for contemporaneous reclamation is a comparison of the rate at which lands are being permanently reclaimed (seeded) to the rate of disturbance. The following charts and graphs are used to highlight CFO’s concerns that show the rate at which lands are being permanently reclaimed (seeded) compared to the rate of disturbance. ~~may not be as contemporaneous as possible.~~

Montana’s regulations on contemporaneous reclamation found at the Administrative Rules of Montana (ARM) 17.24.501 require “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....”

Many differences in the ratios of disturbance vs. reclamation ~~This~~ 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 mine operations’ 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.

MTDEQ's Comment: MTDEQ offered the following comment regarding Page 6, Figures 1 and 2 and Page 6, first and second paragraphs which discuss the graphic portrayal of annual disturbance compared to reclamation in Figure 1 (bar graph), and the graphic portrayal of cumulative disturbance compared to reclamation in Figure 2 (line graph), *“(Note: A major factor that has not been considered is that the Rosebud Mine (Area C and Area B), the Absaloka Mine, and the Spring Creek Mine have undergone significant mine expansions. This, in turn, increases the disturbance faster than reclamation, especially as new areas are developed while mining continues in the existing areas. It will be instructive to observe how OSM, as the Regulatory Authority on the Crow Reservation, addresses this issue with the opening of the South Extension, Absaloka Mine. There will only be disturbance and no reclamation for a number of years.)”*

CFO's Response: CFO agrees significant mine expansions increase the disturbance faster than reclamation. However, the requirement to reclaim lands is not waived for mine expansions. Reclamation should follow mining in a progressive manner. The only bona fide time in a mine expansion where disturbance should exceed reclamation is when new and additional resources (personnel and equipment) are added to the existing operation.

MTDEQ's Comment: MTDEQ also offered the following additional comment regarding Page 6, Figures 1 and 2 and Page 6, first and second paragraphs which discuss the graphic portrayal of annual disturbance compared to reclamation in Figure 1 (bar graph), and the graphic portrayal of cumulative disturbance compared to reclamation in Figure 2 (line graph), *“(Again, to properly judge compliance with the requirements of contemporaneous reclamation OSM needs to look at each individual permit area. This would show that as permit areas are mined out (Big Sky Area A and Area B, Western Energy Area E), the areas are reclaimed in a timely and effective manner. For areas that are expanding (Western Energy Area C and Area B, Spring Creek, Absaloka) the ratio of reclamation to disturbance do not approach 1:1 due to operational factors. In areas where mining is proceeding along a long-term mine plan (Western Energy Area D, Decker – East and West Pits) the ratio should approximate 1:1. It will also show that in areas of temporary cessation that some areas (Western Energy Area A) reclamation has proceeded as far as possible to allow for future resumption of mining. However, this discussion of ratios of reclamation to mining is academic, since there are no legal requirements in this regard.)”*

CFO's Response: CFO does examine individual permit areas. CFO agrees that there is no legal basis for using disturbance vs. reclamation ratios. However, the ratios do show, in a broad sense, how reclamation is occurring. Long-term trends can be observed from these ratios. OSM REG-8 mandates that Phase I, II, III (or MT equivalents) be used to evaluate reclamation success. CFO has added these ratios of disturbed to “seeded” acres to further show that reclamation is occurring. CFO does this because there is not a requirement for operators to seek bond release.

MTDEQ's Comment: MTDEQ also offered the following additional comment regarding Page 6, Figures 1 and 2 and Page 6, first and second paragraphs which discuss the graphic portrayal of annual disturbance compared to reclamation in Figure 1 (bar graph), and the graphic portrayal of cumulative disturbance compared to reclamation in Figure 2 (line graph), *“(Montana has also*

learned that it is better to reclaim fewer large blocks as compared to a large number of smaller blocks. It is difficult at best to tie several small blocks of reclamation together, especially if there is (are) a drainage(s) involved. Therefore, reclamation (e.g. final grading and seeding) does not and should not necessarily proceed in lock step with pit advancement. Rough backfilling, however, can and does proceed in somewhat the same time frame as pit advancement. Since one of the main objectives of contemporaneous reclamation is to manage the reclamation commitment and bond amount, focusing on rough regrading is the more appropriate indicator of contemporaneous reclamation; this also directly relates to legal requirements in the rules and permits.)

CFO's Response: CFO believes that rough regrading is a major step in the reclamation process. However, CFO believes that seeded acres which actually produce vegetation are a better way to judge contemporaneous reclamation.

MTDEQ's Comment: MTDEQ also offered the following additional comment regarding Page 6, Figures 1 and 2 and Page 6, first and second paragraphs which discuss the graphic portrayal of annual disturbance compared to reclamation in Figure 1 (bar graph), and the graphic portrayal of cumulative disturbance compared to reclamation in Figure 2 (line graph), "*(Finally, Montana rules require that Phase IV (final) Bond Release must be applied to an entire drainage basin; this fact must be recognized with respect to "delays" that OSM may perceive regarding this stage of bond release and OSM's evaluation of contemporaneous reclamation.)*"

CFO's Response: CFO does not intend to imply large block reclamation is inappropriate.

MTDEQ's Comment: MTDEQ suggested Page 6, last paragraph be revised to read as follows, and inserted the following italicized comment, "Currently the cumulative reclamation to disturbance ratio is 0.45 to 1.00. This indicates the situation has improved during the evaluation year compared to the previous seven years. ~~Ideally the ratio should be 1 to 1. Preferably the ratios should have an equal number of values above and below a ratio of 1 to 1. (These statements have no legal basis.)~~ It appears based on the data this year, that the gap between the acres disturbed verses reclaimed could be narrowing, which could indicate a reduction in the backlog of unreclaimed lands, which may contribute to an improvement in contemporaneous reclamation and subsequent bond release. As indicated on Chart 1, the total acres disturbed equals 35,402 and total acres reclaimed equal 15,904 for a ratio of .45 on a statewide basis."

CFO's Response: CFO agrees these statements have no legal basis. CFO believes this is a measurement tool to demonstrate contemporaneous reclamation on a statewide basis. For clarification, CFO has revised the paragraph to read, "Currently the cumulative reclamation to disturbance ratio is 0.45 to 1.00. This 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 reclaimed could be narrowing, which. This fact could indicate a reduction in unreclaimed lands, which may contribute to an improvement in contemporaneous reclamation and subsequent bond release. As indicated on Chart 1, the total acres disturbed equals 35,402 and total acres reclaimed equal 15,904 for a ratio of .45 on a statewide basis."

MTDEQ's Comment: MTDEQ inserted the following italicized comment into Page 7, first paragraph which reads, "Approximately 17.1 percent of the cumulative disturbed lands on Montana coal mines consist of facilities, such as buildings, ponds, haul roads, pits 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 the all Montana coal facilities is reported as 6,063 acres. *(It is not clear what is included in facilities as reported by the companies. Does this include ramp roads and adjacent areas with a regrade variance, dragline corridors/walk ways, soil stockpiles, etc.? How are pits incorporated? Again, it appears that an inadequately defined statistic has been generated. Without a clear definition of facilities area, it is not known if the companies are reporting a useful number.)* Even when subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.54 to 1.00. CFO is concerned about the status of the other 46 percent of the net disturbance. These disturbed lands may be left in spoil ridges, and/or graded and left idle waiting for final reclamation. Reclamation during the years 2000 and 2008 is the only time reclamation operations exceeded the rate of disturbance in a 16 year period (ratios of 1.31 to 1 and 1.11 to 1 respectively). This fact indicates that it is possible for mines in Montana to achieve at least 1 to 1 reclamation to disturbance.

CFO's Response: CFO disagrees with your statement that an inadequately defined statistic has been generated. The term "facilities" refers to long-term mining or reclamation facilities. These are defined in footnote #4 of Montana's Annual Mining Report form. Roads and soil and overburden stockpiles are included in the definition. Ramp roads, including the entire area within the right-of-way, would be considered facilities since ramp roads are defined as roads, according to ARM 17.24.301. Dragline corridors/walk ways are not considered facilities since they are not included in the definition of roads and are not access, haul or ramp roads. Pits are not included in the definition of facilities. Pits are active mining areas reported as such on Montana's Annual Mining Report form. For clarification, CFO has revised the paragraph to read, "Approximately 17.1 percent of the cumulative disturbed lands on Montana coal mines consist of facilities, such as buildings, ponds, haul roads, pits 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 the all Montana coal facilities is reported as 6,063 acres. ~~Even when~~ **When** subtracting the acreage of the facilities from the cumulative disturbance, the ratio of reclamation to net disturbance is 0.54 to 1.00. CFO is concerned about the status of the other 46 percent of the net disturbance **and will be working with MT-DEQ to determine the status. As regulation ARM 17.24.501 provides, the department may approve exceptions to the contemporaneous reclamation standards when the operator provides written documentation for a variance from the normal time requirements.** These disturbed lands may be left in spoil ridges, and/or graded and left idle waiting for final reclamation. ~~Reclamation during the years 2000 and 2008 is the only time reclamation operations exceeded the rate of disturbance in a 16 year period (ratios of 1.31 to 1 and 1.11 to 1 respectively).~~ This fact indicates that it is possible for mines in Montana to achieve at least 1 to 1 reclamation to disturbance.

MTDEQ's Comment: MTDEQ also inserted the following italicized comment into Page 7, at the end of the first paragraph included above, "*(It appears that OSM thinks that one-size-fits-all*

mining and reclamation plans can and should be applied to any and all operations. Why then do we have approved individual permits that have different mining and reclamation plans?)

CFO's Response: OSM does not believe that one-size-fits-all. This is the basis for CFO examining individual permits.

MTDEQ's Comment: MTDEQ suggested Page 7 last paragraph be revised to read as follows, "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 **in accordance with their mining permits and state rules.** A similar study has been initiated in Wyoming and North Dakota. The CFO reviewed three mines specifically to review the above items. This information is displayed below.

CFO's Response: CFO made the change suggested by MTDEQ, revised the first sentence for clarification and struck the third sentence of the paragraph. The revised paragraph reads "Low ratios of reclamation to disturbance indicate that contemporaneous reclamation is not progressing at **a the same rate as mining, commensurate to the requirement to stay current with completion of coal removal from each pit area,** 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 conducting reclamation efforts in accordance with their mining permits and state rules. ~~A similar study has been initiated in Wyoming and North Dakota.~~ The CFO reviewed three mines specifically to review the above items. This information is displayed below.

MTDEQ's Comment: MTDEQ offered the following comment at the end of Page 8, last paragraph which discusses the graphic portrayal of cumulative disturbance compared to reclamation at Spring Creek Mine as shown in the line graph. The paragraph and comment read, "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 3247 disturbed acres only 657 acres have been reclaimed. The mine continues to carry a large inventory of lands needing reclamation. *(It seems that OSM has not reviewed Spring Creek's approved permit and operations plan. This mine maintains four pits, using coal from all three of those pits to blend coal to create a useable product for its customers – without this, the market for this coal would be greatly reduced, negatively affecting coal conservation. Spring Creek has reclaimed as close to the idled pit (Pit 1) as possible and has been within four spoil ridges and meeting the reclamation schedules at the other pits. Most spoil ridge peaks at Spring Creek are actually below final grade, requiring material to be hauled in from other areas of the mine to produce the final PMT. The proper evaluation would be to compare actual reclamation progress with what Spring Creek is permitted and required to do with respect to mining and reclamation.)*

CFO's Response: CFO has reviewed Spring Creek's approved permit and found that the mine was in compliance with the reclamation plan as of January 1, 2007. For clarification CFO has revised the text of the paragraph to read, "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 3247 disturbed acres only 657 acres have been reclaimed. **Due to**

operational considerations, the mine continues to carry a large inventory of lands needing reclamation.”

MTDEQ’s Comment: MTDEQ offered the following comment at the end of Page 9, last paragraph which discusses the graphic portrayal of cumulative disturbance compared to reclamation at Western Energy Area C Mine as shown in the line graph. The paragraph and comment read, “The charts for WECO Area C 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 5337 disturbed acres only 1901 acres have been reclaimed. The mine continues to increase its inventory of lands needing reclamation. *(This mine has continued to expand [Area C-North and Area C-West, which was opened up during the evaluation year]; and in the expansion mode, the numbers are going to be skewed in a direction not favoring reclamation. Area C-North was mined through in a relatively short period of time, and regrade has kept up with disturbance and as the area was mined through, regrade of the entire area proceeded.)*”

CFO’s Response: CFO agrees significant mine expansions can increase the disturbance faster than reclamation. However, as mining expands to new areas, reclamation should continue in areas of existing pits. Significant mine expansions should be approved only if additional resources (personnel and equipment) are dedicated for the expansion, or if reclamation of existing pits are kept at a constant pace (i.e. do not allow reclamation resources to be diverted for mine expansion). Some acceptable reasons for a divergence in the slope of the lines representing the disturbed and reclaimed areas are a new pit area, new mines, approved variances or temporary cessation. Mine expansion is no reason to curtail reclamation of lands previously mined, and therefore the lines representing disturbed area and reclamation should not diverge with expansion of mining in this particular case.

MTDEQ’s Comment: MTDEQ inserted the following italicized comment into Page 13, second full paragraph which reads, “Overall, Montana’s program is consistent with SMCRA and the Federal regulations. However, several critical delays in submission of program amendments to OSMRE for review and approval have prevented the program from being in complete compliance with SMCRA. When the MT-DEQ finishes and approves rule changes through their internal process, there have been delays in submission of these new rules to OSMRE for review. If these changes are not as effective as the requirements of SMCRA, OSMRE must disapprove the new rules and the process may have to start over again. These delays in submittal have the potential to create some confusion as to which rules are in effect as this approval process plays out. OSMRE has also experienced delays in our review of the State submittals. OSMRE must get concurrence on our review of the State programs from the Office of the Solicitor. That concurrence has been affected by personnel availability and workload priorities, making timeliness difficult. *(The foregoing in this paragraph includes some amendments that were outside of the current evaluation period; the text should be revised accordingly)*. 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.”

CFO's Response: CFO agrees with the comment, has struck all but the first and last sentences of the paragraph and has combined the remaining two sentences into the paragraph that follows to read, "Overall, Montana's program is consistent with SMCRA and the Federal regulations. During this evaluation period, Montana had three active amendments in OSMRE's formal review process. The final approval decision on 2003 legislative changes (submitted 8/29/05) was published in the Federal Register dated October 10, 2007. The other two amendment packages address statutory changes made during the 2005 legislative session (submitted 1/18/06) and rule changes for civil penalties (submitted 11/6/06). These two amendment packages were combined into one review. The Final Approval decision was published in the Federal Register Notice dated May 14, 2008. OSMRE has completed review of all outstanding program amendments submitted by MT-DEQ prior to the end of the evaluation year. 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."

MTDEQ's Comment: MTDEQ suggested Page 14, fifth paragraph be revised to read as follows, "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. Within the EIS' and EA's when Sage grouse and associated habitats is identified as a fauna within the lease boundaries it is are discussed in the EIS's and EA's, including its habitat (such as Leks). 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's Response: CFO agrees with the suggested revision and made the change.

MTDEQ's Comment: MTDEQ suggested Page 14, sixth paragraph be revised to read as follows, "CFO reviewed the Montana permit applications and Annual reports. TwoThree 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 the 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 present 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."

CFO's Response: CFO agrees with the suggested revision and made the change.