

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory and Abandoned Mine Land Programs

Administered by the State
of

MONTANA



Evaluation Year 1999
(October 1, 1998 to September 30, 1999)

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(Cover Photo: Recreated sandstone outcrop feature at the Spring Creek Mine)

Regulatory Program

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory and abandoned mine land programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Montana programs and the effectiveness of the Montana programs in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of October 1, 1998 to September 30, 1999. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Casper, Wyoming, OSM Office.

The following list of acronyms are used in this report:

| | |
|--------|--|
| AOC | Approximate Original Contour |
| BLM | Bureau of Land Management |
| BTTI | Branch of Technical Training and Information |
| EY | Evaluation Year |
| FS | U. S. Forest Service |
| MT-DEQ | Montana Department of Environmental Quality |
| NOV | Notice of Violation |
| NPRC | Northern Plains Resource Council |
| OSM | Office of Surface Mining Reclamation and Enforcement |
| PHC | Probable Hydrologic Consequences |
| PMT | Post Mine Topography |
| RSI | Random Sample Inspection |
| SMCRA | Surface Mining Control and Reclamation Act of 1977 |
| TDN | Ten Day Notice |
| TDS | Total Dissolved Solids |
| TIPS | Technical Information Processing System |
| WRCC | Western Regional Coordination Center |

II. Overview of the Montana Coal Mining Industry

Montana's demonstrated coal reserve base is approximately 120 billion tons, or about 24.6 percent of the total U.S. reserve base. Of the 15 major coal-producing states, Montana ranks first in coal resources and reserves. Coal fields are found throughout the State, but most are located east of the Continental Divide. Of the 17 coal fields in the State, two (Fort Union and Powder River) currently have producing mines. Montana coal ranges in rank from lignite to high volatile A bituminous, with most of the coal currently mined being sub-bituminous. At the present rate of mining (approximately 40 million tons per year), Montana can sustain over 35 years of mining from the current mineable reserves.

Coal mining began in Montana over 100 years ago. Early coal production was almost entirely from underground mines and was 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 42 million tons in 1994.

Montana is currently ranked 7th among the U. S. coal producing states, with an annual production for 1998 of approximately 40.8 million tons, all of which came from surface mines. An average price per ton of Montana coal for calendar year 1998 was \$6.78, making the value of the production from 1998 at just over \$276 million. The coal industry also generates approximately \$36 million in severance taxes and approximately \$545 million in Federal and State royalties for Montana annually.

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 12 active surface mines with a total direct industry employment at 900 to 1000 people in the State. Montana's surface mining industry furnishes some of the highest paying and most sought after jobs in the State.

Mine size within the State ranges from 10 acres to nearly 24,000 acres. A total of approximately 59,000 acres are currently permitted in the State. Approximately 27,500 of the 59,000 acres permitted have been disturbed and 10,300 of these disturbed acres have been backfilled, graded, topsoiled, and permanently seeded to reclamation standards (see Table 6).

III. Overview of Public Participation in the Program

Casper Field Office (CFO) staff have reviewed the Montana program with respect to opportunities for and participation in, the public review of permitting activities by the Montana Department of Environmental Quality (MT-DEQ). The CFO review indicates that opportunities for public involvement in mine permitting under the Montana program exist at the following levels of their permanent program: 1) all new applications, major revisions, or amendments, 2) permit renewals, 3) permit transfers, 4) applications for extensions of time to commence mining, and 5) bond release applications. While public involvement is not available for new prospecting permit applications, renewals, amendments, or transfers, there are provisions in the Montana program for public notice and comment at bond release time.

Public notice requirements for 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 2-4 weeks (depending on permitting activity) followed by a 30-60 day comment period. Any comments received or requests for an informal hearing must be formally addressed on the record.

The CFO review indicates that all the required publications were 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 at two locations within Montana; at Helena and Billings.

IV. Major Accomplishments / Issues / Innovations

During this evaluation period, the MT-DEQ continued their two year study addressing the affects from mining to the regional hydrologic systems (primarily the East Fork of Armells Creek drainage) in the Colstrip, Montana area. This ongoing study originally was focused on possible impacts from the two mines in the area (Rosebud Mine and Big Sky Mine), but soon expanded to include industrial and municipal impacts from the power plant and the town of Colstrip.

Dan Erbes, a hydrologist for the MT-DEQ, coordinated a cooperative evaluation that included the Montana Facilities Siting Program, the Water Protection Bureau, the Resource Protection and Planning Bureau, and the Montana Bureau of Mines and Geology.

Their findings indicate that mining is having a temporary affect in reducing both quality and quantity of groundwater on the mine permit areas. Monitoring wells in mine spoils

areas are indicating increases in water levels and quality parameters, and most affects from mining on the East Fork Armell's Creek are not noticeable by the time the drainage reaches the town of Colstrip. Most of the issues raised, such as down stream flooding of hay meadows and salt encroachment into some meadows can be attributed to the extra water being put into the hydrologic system by the power plant facilities and the town of Colstrip.

V. Success in Achieving the Purposes of SMCRA

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. The State program must regulate or control the mining or reclamation activity or result of the activity causing an off-site impact. In addition, the impact on the resource must be substantiated as being related to a mining and reclamation activity, and must be outside the area authorized by the permit for conducting mining and reclamation activities.

Montana conducted 88 complete inspections and 107 partial inspections. The CFO conducted 2 complete random sample inspections and 13 partial / focused inspections of coal mining operations in Montana.

Montana issued 6 Notices of Violation (NOV). The CFO issued one ten-day-notice (TDN).

A review of each of these inspections and enforcement actions indicate no negative off-site impacts were observed, see (Table 4).

B. Bond Releases

OSM evaluated the effectiveness of the State program based on the number of acres that have received bond release (Table 5). The CFO believes this measure does not capture the total effectiveness of the State program due to the type of mining operations, size of mining operation and company policy (not to apply for release until large tracts are eligible for final bond release). The CFO determined that the State program is effective in its goal of having all disturbed lands reclaimed to approved postmining land use; however, there is little motivation for the mining company to seek bond release. Although the number of acres released from bond is relatively small, a substantial amount of reclamation has and is occurring in Montana. Tables 5 and 6 summarize reclamation activity within the State. As the Tables demonstrate, there are very few acres released compared to the number of acres reclaimed in any given year. As part of our 1999 oversight, the Casper Field Office

reviewed and reported the status of bond release and reclamation/disturbance mine by mine for the State. This review indicates that the ratio of reclamation to disturbed lands varies greatly from mine to mine.

C. Customer Service

The coal program in Montana is administered by the Industrial and Energy Minerals Bureau of the Montana Department of Environmental Quality. This Bureau provides service to all parties requesting assistance, documents, or information, as well as regulating the coal mining industry within the State. Their 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 governmental activities.

During this reporting period, the coal program sponsored and/or attended numerous public meetings regarding blasting, hydrological, human, environmental, and land use aspects of mining and reclamation. They provided assistance to individuals and groups such as the Northern Plains Resource Council (NPRC), various environmental consultants, private citizens and landowners, and citizen groups from regions or small communities within Montana. These customers were interested in case- and site-specific problems or issues related to coal mining and regulation within Montana. The Bureau also spends a considerable amount of time assisting the public in addressing questions regarding State and Federal government policies, procedures, and regulations.

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 planned and/or participated in various symposiums, seminars, and workshops in relation to technical and legal aspects of coal prospecting, mining, and reclamation.

VI. OSM Assistance

OSM provided grant assistance to the Montana regulatory program in the amount of \$895,318. This amounted to 82.72 percent of the total cost of the Montana primacy program.

Training was also provided to MT-DEQ staff throughout the evaluation period. Technical courses through OSM's Branch of Technical Training and Information (BTTI) training program were offered to 3 MT-DEQ staff members in enforcement and hydrology. In addition, the OSM grant supported a staff member to attend two courses in ground water monitoring.

All regulatory staff were provided with first aid and safety training by the WRCC's safety training officer at their offices in Helena, Montana. Technical Information Processing Systems (TIPS) training was offered to two staff members. In addition, the Office of Technical Training provided the Montana regulatory program with two software programs to be utilized for mapping purposes.

VII. General Oversight Topic Reviews

A. State Program Amendments

The State Program Amendment process has been ongoing and constant since the Montana program was originally approved by OSM in April, 1980. Since that date, in response to rule challenges, court decisions and new rulemaking, the Federal reclamation regulations have changed and evolved somewhat also. In most cases, this evolution required corresponding changes to the Montana program. Montana has submitted sixteen program amendment packages to OSM for formal review since program approval.

Montana is currently in the process of composing a program amendment package intended to address all outstanding State program issues. This package is scheduled to be submitted to OSM formally by early spring 2000.

B. Hydrologic Modeling System

The MT-DEQ has also done considerable work during the last evaluation period in the development of an analytic system that provides the capability for more efficient and accurate use of the hydrologic data collected from the permits. MT-DEQ staff have begun entry of geologic and hydrologic data sets into an Arc/Info and EarthVision format that will enable them to evaluate water resource recovery and replacement objectives more effectively in the future.

This system was recently used by the MT-DEQ to assist them in responding to concerns about regional groundwater issues in the Colstrip and Decker, Montana areas. In the Colstrip area, information and maps depicting groundwater flow, generated by the MT-DEQ were useful in determining the minimal role the area mines were having on the area groundwater and the impact that industrial and municipal water users from the town of Colstrip were having.

In the Decker area, the MT-DEQ is using this analysis tool to evaluate the impact that dewatering by recent coal bed methane wells have had on the local hydrologic regime. The information gathered from this data will also be used to determine what impacts the area mines are having to the groundwater and assessing the responsibility accordingly.

During this evaluation period, Dan Erbes completed his evaluation of groundwater quality parameters for livestock. Based on his evaluation of agricultural research, premine conditions and regional water quality parameters, the MT-DEQ has adopted 3000 ppm for the upper limit on total dissolved solids (TDS). However, TDS and the ions/anions levels of postmining groundwater will be judged on a case by case basis, since other stock wells in the region (premine and off permit) may or may not have levels higher than the recommended criteria. The mines will not be expected to meet water quality parameters higher than premine conditions.

C. Contemporaneous Reclamation

In the 1998 EY review the CFO developed criteria to be reviewed annually as a comparison of the acres disturbed to the acres reclaimed on a state-wide and mine-site specific basis to evaluate how contemporaneously reclamation is occurring. The CFO plans to continue this specific review by focusing on a mine site specific inventory and status of disturbed lands in 1999 / 2000.



(Contemporaneous mining progression from farming to mining to reclamation and farming again)
(at the Knife River Coal Company Savage mine)

As stated in the 1997 report the CFO believes the Montana coal industry has reached a level of maturity (there are no new mines coming on line or large production changes anticipated) where the number of acres disturbed by mining should be offset or exceeded by the number of acres reclaimed on a statewide average. As indicated in Table A and Exhibit 1, in 1991 and 1992, reclamation in Montana approximated this 1 to 1 ratio (reclaimed to disturbed). Since a low ratio of 1 to 3 (.36) in 1996, it has gradually increased to about 7 to 8 (.87) in 1999. The MT-DEQ and CFO acknowledge there are many factors that can influence this ratio. The CFO and MT-DEQ believe that this issue is

mine specific and should be handled as such. Mine site specific summaries are contained in Exhibit 2. This review will allow MT-DEQ and the CFO to identify those mining operations where a 1 to 1 ratio is not being achieved and monitor their compliance with the approved state program and permit requirements.

Table A
MONTANA STATEWIDE RECLAMATION SUMMARY

| YEAR | ACRES DISTURBED | ACRES RECLAIMED | RATIO OF RECL. VS. DIST. |
|-------------|----------------------------|----------------------------|-------------------------------------|
| 1990 | 531 | 119 | 0.22 |
| 1991 | 737 | 700 | 0.95 |
| 1992 | 783 | 695 | 0.89 |
| 1993 | 807 | 550 | 0.68 |
| 1994 | 816 | 536 | 0.66 |
| 1995 | 1213 | 579 | 0.48 |
| 1996 | 1507 | 541 | 0.36 |
| 1997 | 773 | 527 | 0.68 |
| 1998 | 842 | 462 | 0.55 |
| 1999 | 687 | 601 | 0.87 |

D. Inspection and Enforcement

The Montana Department of Environmental Quality continues to conduct frequent and thorough inspections. Montana conducted 88 complete inspections and 107 partial inspections and met or exceeded the required number of inspections at all permits during the evaluation year. The Casper Field Office conducted 6 complete random sample inspections and 13 partial / focused inspections of coal mining operations in Montana.

Montana inspection reports are complete, and accurately document site conditions and mine activity, and give the status of any violations. They 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.

EXHIBIT 1
Statewide Reclamation vs. Disturbance Ratio

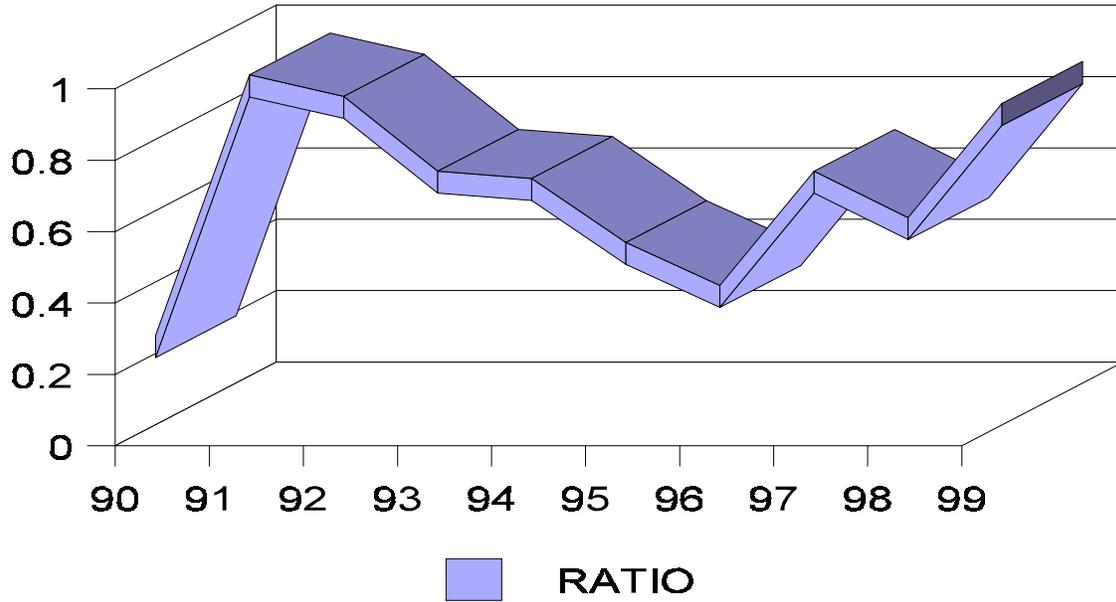


EXHIBIT 2
Mine Specific Reclamation Ratio

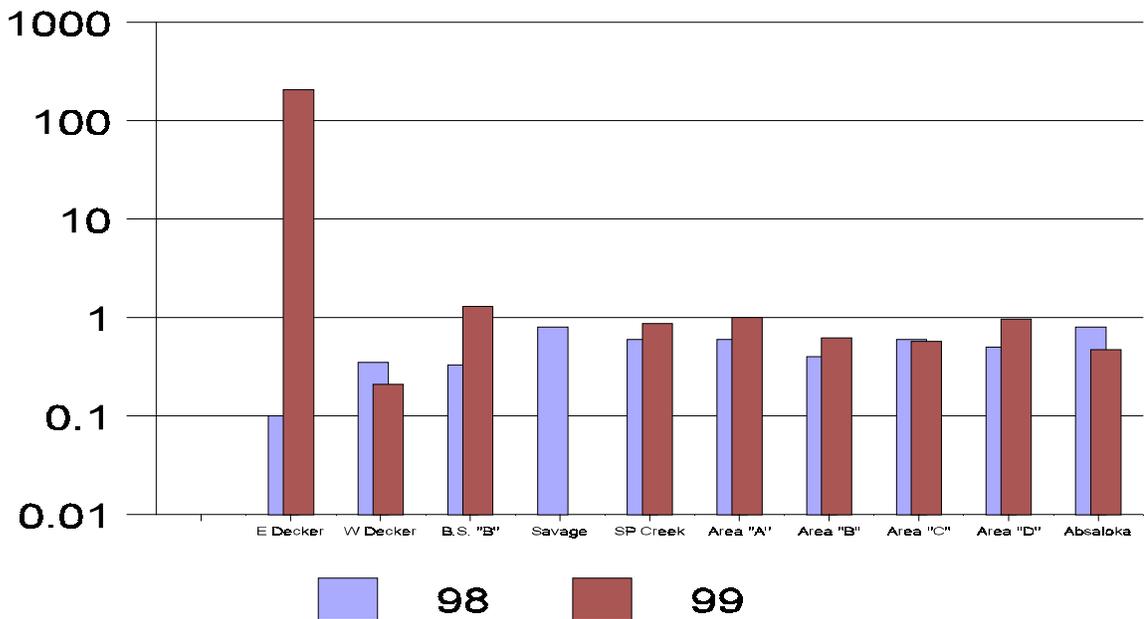
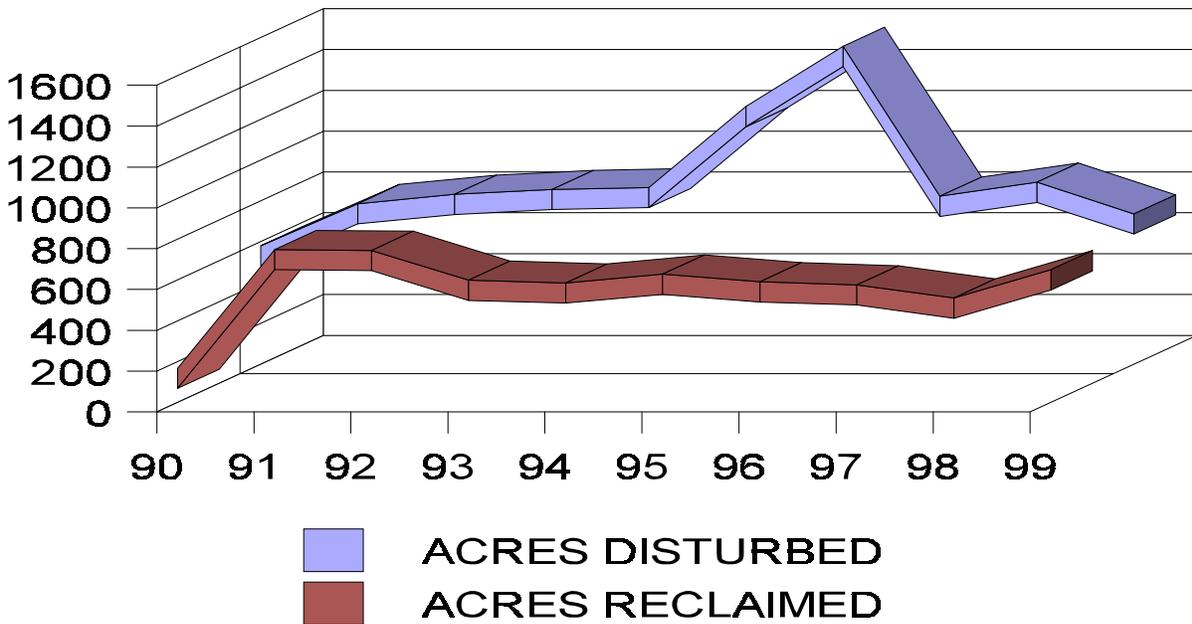


EXHIBIT 3
Reclamation Status - Acres/Year



Montana maintains an inspectable units list and a inspection data base sufficient to meet its program requirements.

Montana issued 6 Notices of Violation and 0 Imminent Harm or Failure to Abate Cessation Orders during this evaluation period. No pattern of violation exists or show cause hearings / alternative enforcement action (bond forfeiture) was initiate during this evaluation period.

The CFO did issue one TDN during this review period, Montana’s action / response to the TDN was considered appropriate.

E. Financial Management

CFO conducted financial oversight during the evaluation period. CFO visited MT- DEQ offices in Helena, Montana and reviewed financial information. Specifically, drawdowns, timeliness of grant applications and reports audits, accounting, payroll and travel were reviewed.

A drawdown analysis was completed for the existing Administration and Enforcement grant. Over half of the daily cash balances were reviewed. Excess balances were not being held. No problems were found.

Montana is submitting grants and required reports in a timely manner.

An A-133 audit has been completed for two years ending June 30, 1997. There were no findings or inappropriate costs relative to the Title V Program. A second A-133 audit will be completed in early FY2000 to cover one year ending June 30, 1999.

A review of payroll and benefits was made to ensure that charges for personnel and benefits were being made to OSM grants were legitimate and that OSM was not supporting non-coal activities.

Travel for the Title V program was reviewed relative to the State's policies and procedures. Charges were appropriate and approvals had been done and were appropriate.

Property management was reviewed and no problems were found.

CFO made one Administration and Enforcement grant award during EY99. The award was made in less than 60 days of the grant application, meeting the Government Performance Standards.

F. Permit/Revision Material Distribution

Montana's Cooperative Agreement with OSM designates the MT-DEQ as the party responsible for distribution of all permits and permit revision material to all other agencies necessary for permit review and approval (OSM, BLM, FS, etc). Montana however, has delegated that responsibility to the coal mine operators.

As a check on the permit distribution system, the CFO selected sample permit revision material and tracked it through the distribution process. Our review indicated that some material was not always being distributed to the necessary parties in a consistent and timely manner. CFO and MT-DEQ staff met in August, 1999 to discuss this issue. As a result of this meeting, the State agreed to contact the mine operators in Montana and reaffirm their requirement to submit approved permit revision material to the appropriate parties within 30 days of approval. The MT-DEQ did contact the mine operators in September, 1999.

As follow-up, the CFO will continue to monitor the distribution of permit material during the next evaluation period.

G. Non-Standard Reclamation Practices

For many years, OSM and the MT-DEQ have been meeting and discussing the State's use of the alternate reclamation provisions of their program to waive certain performance standards in their approval of some non-standard reclamation practices. These proposals have been designed to construct certain specific and unique habitat features into the postmining topography.

The Montana program specifies that the postmining land use for all reclaimed lands in Montana will be “livestock grazing and wildlife habitat”. The Montana program’s alternate reclamation provisions can be used to approve postmining land uses other than livestock grazing and wildlife habitat (for example, county roads or industrial areas, etc.). OSM has a concurrence role in all alternate reclamation proposals submitted to the MT-DEQ and has routinely concurred with Montana on alternate reclamation proposals addressing changes in postmining land use and several “bluff extensions”. During its oversight review of this subject, OSM determined that the alternate reclamation provisions of the Montana program do not allow for the waiver of performance standards in conjunction with the creation of certain non-standard reclamation practices i.e. highwall retention (bluffs), angle of repose spoil piles (thin breaks), and steep spoil outcrops (mixed shrub habitat). In the past however, Montana has proposed to use these provisions for that purpose.



(Unapproved Bluff Extension feature constructed by Peabody Big Sky Mine)

The State and OSM agree that these diverse habitats are a useful and desirable goal. With this shared interest in mind, the State has agreed to address this issue by clarifying the use of both the alternate reclamation and approximate original contour (AOC) provisions of their program. The State will continue to use alternate reclamation provisions for changes in postmining land use, but will employ the AOC provisions of their program to recreate the diverse and unique topographic features that existed in the pre-mine topography and landscape. To assist its staff, mine operators, and OSM in making acceptable determinations regarding AOC and postmine topography (PMT), the MT-DEQ has developed AOC and PMT guidelines for use by the mine operators in designing AOC features.

During the evaluation period, the CFO conducted several partial inspections at Montana mines to review on-the-ground conditions regarding these non-standard reclamation sites and determined that if implemented as proposed, these sites would not be in conflict with Montana's program or SMCRA requirements. However, the permits reviewed for these sites, do not contain specific documentation that these features approximate the original contours and replace any unique and diverse habitats destroyed by mining.

During the next evaluation period, the CFO will continue to conduct inspections to evaluate the implementation and use of Montana's alternate reclamation provisions and AOC guidelines in the field.

The following photos are examples of some of the non-standard reclamation features approved and developed in Montana.



(Bluff Extension at the Rosebud Mine Area C)



(Thin Breaks Rosebud Mine Area C)



(Thin Breaks Rosebud Mine Area C)



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(Mixed Shrub/Steep Slope Rosebud Mine Area D)

APPENDIX A:

The following tables represent data pertinent to the State and Federal regulatory program and activities within Montana. These tables also summarize funding provided by OSM and Montana staffing. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1998 to September 30, 1999. Additional data used by OSM in its evaluation of Montana's performance is available for review in the evaluation files maintained by the Casper, Wyoming, OSM Office.

TABLE 1

| COAL PRODUCTION (Millions of short tons) | | | |
|---|--------------------------|------------------------------|--------------|
| Period | Surface mines | Underground mines | Total |
| Coal production ^A for entire State: | | | |
| Annual Period | | | |
| 1997 | 38.733 | 0.011 | 38.744 |
| 1998 | 40.824 | 0.003 | 40.827 |
| 1999 | 40.627 | 0.000 | 40.627 |
| | 120.184 | 0.014 | 120.198 |

^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.. Since the Absaloka mine was jointly regulated by both Montana and OSM during the evaluation year, production information for this table includes coal owned by the Crow Tribe and produced from the Absaloka Mine.

TABLE 2

| INSPECTABLE UNITS As of September 30, 1999 | | | | | | | | | | | | |
|--|--------------------------------|----|-----------------------|----|-----------|----|--------|----|----------------------------|---|--------|-------|
| Coal mines and related facilities | Number and status of permits | | | | | | | | Insp. Unit ^D | Permitted acreage ^A (hundreds of acres) | | |
| | Active or temporarily inactive | | Inactive | | Abandoned | | Totals | | | | | |
| | | | Phase II bond release | | | | | | | | | |
| | IP | PP | IP | PP | IP | PP | IP | PP | | IP | PP | Total |
| STATE and PRIVATE LANDS | | | | | | | | | | | | |
| REGULATORY AUTHORITY: STATE | | | | | | | | | | | | |
| Surface mines | 0 | 11 | 2 | 2 | 0 | 0 | 2 | 13 | 15 | 0.28 | 187.9 | 188 |
| Underground mines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other facilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotals | 0 | 11 | 2 | 2 | 0 | 0 | 2 | 13 | 15 | 0.28 | 187.9 | 188 |
| FEDERAL LANDS | | | | | | | | | | | | |
| REGULATORY AUTHORITY: STATE | | | | | | | | | | | | |
| Surface mines | 0 | 11 | 0 | 1 | 0 | 0 | 0 | 12 | 12 | 0 | 336.69 | 337 |
| Underground mines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other facilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotals | 0 | 11 | 0 | 1 | 0 | 0 | 0 | 12 | 12 | 0 | 337 | 337 |
| ALL LANDS^B | | | | | | | | | | | | |
| Surface mines | 0 | 11 | 2 | 2 | 0 | 0 | 2 | 13 | 15 | 0 | 554 | 554 |
| Underground mines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other facilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 0 | 11 | 2 | 2 | 0 | 0 | 2 | 13 | 15 | 0 | 554 | 554 |
| Average number of permits per inspectable unit (excluding exploration sites) | | | | | | | | | | <u>1</u> | | |
| Average number of acres per inspectable unit (excluding exploration sites) | | | | | | | | | | <u>3693</u> | | |
| Number of exploration permits on State and private lands: | | | | | | | | | | <u>2</u> | | C |
| | | | | | | | | | | On Federal lands: <u>2</u> | | C |
| Number of exploration notices on State and private lands: | | | | | | | | | | <u>17</u> | | C |
| | | | | | | | | | | On Federal lands: <u>17</u> | | C |
| <p>IP: Initial regulatory program sites. PP: Permanent regulatory program sites.</p> <p>^A When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.</p> <p>^B Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.</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> <p>^D Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.</p> | | | | | | | | | | | | |

TABLE 3

**STATE PERMITTING ACTIVITY
As of September 30, 1999**

| 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 | 2 | 9943 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 9,943 |
| Incidental boundary revisions | | 2 | 1.5 | | 0 | 0 | | 0 | 0 | 0 | 2 | 2 |
| Revisions (exclusive of incidental boundary revisions) | | 4 | | | 0 | | | 0 | | 0 | 4 | |
| 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 | 2 | 2 | | 0 | 0 | | 0 | 0 | | 2 | 2 | |
| Exploration notices ^B | | 0 | | | 0 | | | 0 | | 0 | 0 | 0 |
| Totals | 3 | 10 | 9,945 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 9,945 |

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions N/A

-

^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 | | | | | | | | | | | | | | |
|--|----------------|---|--------|----------|-------|-------|----------|-------|-------|----------|-------|------------|----------|-------|
| 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 | | | | | | | | | | | | | |
| | Land Stability | | | | | | | | | | | | | |
| | Hydrology | | | | | | | | | | | | | |
| | Encroachment | | | | | | | | | | | | | |
| | Other | | | | | | | | | | | | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total number of permits or mine sites with observed off-site impacts Permits <u> 0 </u> or Mine Sites <u> </u> Total number of permits or mine sites evaluated: Permits <u> 15 </u> or Mine Sites <u> </u> Total number of observations made to evaluate mine sites or permits for off-site impacts <u> 203 </u> or Mine Sites <u> </u> | | | | | | | | | | | | | | |

TABLE 5

| ANNUAL STATE MINING AND RECLAMATION RESULTS | | |
|---|---|---|
| Bond release phase | Applicable performance standard | Acreage released during this evaluation period |
| Phase I | ! Approximate original contour restored ! Topsoil or approved alternative replaced | 1263 |
| Phase II | ! Surface stability ! Establishment of vegetation | 847 |
| Phase III | ! Post-mining land use/productivity restored ! Successful permanent vegetation ! Groundwater recharge, quality and quantity restored ! Surface water quality and quantity restored | 0 |
| | Bonded Acreage Status^A | Acres |
| | Total number of bonded acres at end of last review period (September 30, 1998) ^{B1} | 59,550 |
| | Total number of bonded acres during this evaluation year | 55,314 |
| | Number of acres bonded during this evaluation year that are considered re-mining, if available | 0 |
| | Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7) | 0 |
| <p>^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.</p> <p>^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).</p> | | |

TABLE 6
MONTANA RECLAMATION SUMMARY

| YEAR | ANNUAL ACREAGE | | | | CUMULATIVE ACREAGE | | | | TOTAL ACRES PERMITTED |
|------|----------------|------------------------|----------|--------|--------------------|------------------------|----------|--------|-----------------------------|
| | DISTURBED | BACKFILLED & GRADED | RESOILED | SEEDED | DISTURBED | BACKFILLED & GRADED | RESOILED | SEEDED | |
| 1993 | 806.57 | 892.13 | 482.02 | 549.53 | 21,103 | 11,860 | 6,729 | 6,695 | 60,730 |
| 1994 | 816.02 | 649.80 | 394.31 | 536.31 | 21,966 | 12,530 | 7,116 | 7,141 | 60,354 |
| 1995 | 1213.22 | 757.20 | 408.41 | 579.01 | 22,610 | 12,750 | 7,278 | 7,313 | 59,181 |
| 1996 | 1507.32 | 739.00 | 463.86 | 540.56 | 24,075 | 13,768 | 8,008 | 8,022 | 58,963 |
| 1997 | 772.88 | 504.14 | 606.83 | 527.12 | 25,545 | 14,773 | 9,179 | 9,101 | 60,786 |
| 1998 | 842.30 | 896.20 | 579.70 | 462.20 | 26,061 | 15,751 | 9,193 | 9,084 | 59,550 |
| 1999 | 928.41 | 894.41 | 880.76 | 707.96 | 27,457 | 16,909 | 10,612 | 10,286 | 59,670 |

TABLE 7

| STATE BOND FORFEITURE ACTIVITY | | | |
|---|--------------------|----------------|--------------------|
| (Permanent Program Permits) | | | |
| | Number of Sites | Dollars | Disturbed Acres |
| Bonds forfeited as of September 30, 1998 ^A | 3 | 795,924 | 307.40 |
| Bonds forfeited during EY 1999 | 0 | 0 | 0 |
| Forfeited bonds collected as of September 30, 1998 ^A | 1 | 428,500 | 48.02 |
| Forfeited bonds collected during EY 1999 | 0 | 0 | 0 |
| Forfeiture sites reclaimed during EY 1999 | 0 | 0 ^B | 0 |
| Forfeiture sites repermited during EY 1999 | 0 | | 0 |
| Forfeiture sites unreclaimed as of September 30, 1999 | 3 | | 307.40 |
| Excess reclamation costs recovered from permittee | 0 | 0 | |
| Excess forfeiture proceeds returned to permittee | 0 | 0 | |
| ^A Includes data only for those forfeiture sites not fully reclaimed as of this date. ^B Cost of reclamation, excluding general administrative expenses. | | | |

TABLE 8

| STATE STAFFING (Full-time equivalents at end of evaluation year) | |
|--|--------------|
| Function | EY 1999 |
| Regulatory program | |
| Permit review | 9.71 |
| Inspection | 6.18 |
| Other (administrative, fiscal, personnel, etc.) | 1.76 |
| TOTAL | 17.65 |

TABLE 9

| FUNDS GRANTED TO MONTANA BY OSM (Millions of dollars) EY 1999 | | |
|--|-----------------------|--|
| Type of grant | Federal funds awarded | Federal funding as a percentage of total program costs |
| Administration and enforcement | 0.895 | 82.720 |
| Small operator assistance | 0.000 | 0.000 |
| Totals | 0.895 | |

TABLE 10

| STATE OF MONTANA INSPECTION ACTIVITY | | |
|---|--|-----------------|
| PERIOD: October 1, 1998 - September 30, 1999 | | |
| Inspectable Unit Status | Number of Inspections Conducted | |
| | Partial | Complete |
| Active* | 89 | 60 |
| Inactive* | 18 | 22 |
| Abandoned* | 0 | 4 |
| Exploration | 0 | 2 |
| TOTAL | 107 | 88 |

* Use terms as defined by the approved State program.

TABLE 11

| STATE OF MONTANA ENFORCEMENT ACTIVITY PERIOD: October 1, 1998 - September 30, 1999 | | |
|---|---------------------------|------------------------------|
| Type of Enforcement Action | Number of Actions* | Number of Violations* |
| Notice of Violation | 6 | 6 |
| Failure-to-Abate Cessation Order | 0 | 0 |
| Imminent Harm Cessation Order | 0 | 0 |

* Do not include those violations that were vacated.

TABLE 12

| LANDS UNSUITABLE ACTIVITY STATE OF MONTANA | | | |
|---|---|--------------------------------------|---|
| PERIOD: October 1, 1998 - September 30, 1999 | | | |
| Number of Petitions Received | 0 | | |
| Number of Petitions Accepted | 0 | | |
| Number of Petitions Rejected | 0 | | |
| Number of Decisions Declaring Lands Unsuitable | 0 | Acreage Declared as Being Unsuitable | 0 |
| Number of Decisions Denying Lands Unsuitable | 0 | Acreage Denied as Being Unsuitable | 0 |

Appendix B

DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMITTING AND COMPLIANCE DIVISION
INDUSTRIAL AND ENERGY MINERALS BUREAU



MARC RACICOT, GOVERNOR

1520 EAST SIXTH AVENUE

STATE OF MONTANA

(406) 444-4970
FAX (406) 444-1923

PO BOX 200901
HELENA, MONTANA 59620-0901

Coal and Uranium Mining Program

January 10, 2000

Harv Gloe, Program Specialist
Office of Surface Mining
Casper Field Office
100 East "B" Street
Casper, WY 82601-1918

RE: Annual Oversight Report – Draft Copy for Montana

Dear Harv:

Thanks for providing a draft copy of your annual oversight to Montana's coal regulatory program and for requesting our comments. The draft looks pretty good to us, but there are a few items that draw disagreement and discussion.

Page 2, Fifth paragraph: Neither Montana nor the courts agree that Westmoreland Resource's Absaloka mine is an Indian Lands mine. I would suggest instead. " This mine total includes the jointly (OSM and Montana) regulated Absaloka mine that is located adjacent to the northern boundary of the Crow Reservation on the Ceded Strip and which includes Crow coal and private surface.

Page 3, Third paragraph, second sentence: I would suggest instead ... "The MT-DEQ also has an open door policy of making all permit applications and approved permits available for review at two locations within Montana; Helena and Billings.

Page 3, Fourth paragraph, first sentence: I would suggest instead... "During this evaluation period, the MT-DEQ continued to address the effects from mining....." I believe this will be an ongoing study that continues to receive updates as we learn more.

Page 4, Third paragraph, first sentence: The number 197 should be 107.

Page 5, Fifth paragraph: OSM grant assistance was actually 82.72% instead of 84.

Page 7, First paragraph: After ...and regional water quality parameters, the MT-DEQ..., I suggest "has adopted water quality criteria for livestock use that includes criterion of 3000 ppm for the upper limit on total dissolved solids (TDS). However, TDS and the cations/anions of postmine groundwater, will be judged on a case by case basis, since other stock wells in the region (premine and off permit) may or may not have levels higher than the recommended criteria. The mines will not be expected to have better water quality than premine conditions."

Page 7, Contemporaneous Reclamation: The photo used is just fine, but we may suggest also, the photo that Steve Regele provided earlier of Spring Creek Coal Company. Because they've been part of the focus for contemporaneous reclamation, it should be appropriate.

Page 9, Exhibit 2: Westmoreland's Absaloka mine was omitted, and Western Energy was identified only as areas A,B,C, and D.

Page 10, Eighth paragraph: Montana is misspelled.

"AN EQUAL OPPORTUNITY EMPLOYER"

Harv Gloe
January 11, 2000
Page 2

Page 11, Last paragraph: In the first sentence, after ...all reclaimed lands in Montana...change to.. "grazing land for livestock and wildlife, fish and wildlife habitat, or both". In the second sentence, please delete *permanent impoundments* from those examples of postmine uses that require alternate reclamation. While it is possible that a permanent impoundment may not meet requirements for fish and wildlife habitat, it's not likely to be approved in other, completely separate contexts.

Page 12, First two paragraphs: I would sure suggest a different approach to this discussion. For one thing, the only bluff extensions approved have been with OSM concurrence, so it's probably incorrect to imply that OSM has consistently interpreted that alternate reclamation provisions do not allow for the waiver of performance standards, if in fact they didn't meet AOC. The other points raised also require some refinement. For example, the thin breaks and the mixed shrub habitat were both done under the provisions of Approximate Original Contour (AOC) and other premine conditions; reconstruction of these features is necessary to re-establish those conditions. I think it's correct to say that OSM and Montana have together concluded the best way to approach diversity in reclamation is through very careful documentation of the conditions that existed prior to mining and then ensure the postmine topography (PMT) approximates AOC. I would also modify the sentence discussing our guidelines to something like... "To assist staff, operators and OSM in making acceptable determinations, the MT-DEQ has developed AOC and PMT guidelines.

Page 12, Photo: The photo used to highlight a bluff extension is one of an area that has not even been proposed as such. In its current state it does not meet the approved PMT. Also, our engineers have examined the area very closely to determine if sufficient area, spoils, and soils exist to meet the existing plan; they do.

Page 13, Photo of the Thin Breaks: I suggest that it's very misleading not to indicate the actual area that encompasses the "thin breaks", because the entire area shown is certainly not representative.

Table 1, Superscript ^A, last sentence: Again, Montana does not accept the designation of Westmoreland Resource's Absaloka mine as being the Crow Tribe's. It should be sufficient to indicate the Crow Tribe owns the coal.

Table 8: Montana does not split FTE into specific functions. Each staff member, (with the exception of administrative) performs duties in both permitting and compliance activities. We continue to believe this is the best structure for efficient and functional administration of MSUMRA and the delegated SMCRA responsibilities.

Again, thanks for the opportunity to look at the draft copy. Hopefully our comments are considered for the final.

Sincerely,


Steve Welch, Chief
Industrial and Energy Minerals Bureau

c. Neil Harrington
Steve Regele

SW/dv

FC: 626.61

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APPENDIX C

Casper Field Office Director's Response to Montana's Comments

On January 13, 2000, the Montana Department of Environmental Quality provided the Casper Field Office with their comments regarding the draft EY99 Annual Report. These comments and the Casper Field Office response follow:

1. MT Comment: Page 2, Fifth paragraph: Neither Montana nor the courts agree that Westmoreland Resource's Absaloka mine is an Indian Lands mine. I would suggest instead. "This mine total includes the jointly (OSM and Montana) regulated Absaloka mine that is located adjacent to the northern boundary of the Crow Reservation on the Ceded Strip and which includes Crow coal and private surface."

CFO Response: The intent of this paragraph was to describe the impact of Montana's coal industry on the State's economy. Since the sentence in question did not contribute to that train of thought, it was removed from the report.

2. MT Comment: Page 3, Third paragraph, second sentence: I would suggest instead..."The MT-DEQ also has an open door policy of making all permit applications and approved permits available for review at two locations within Montana; Helena and Billings."

CFO Response: The report has been changed as suggested.

3. MT Comment: Page 3, Fourth paragraph, first sentence: I would suggest instead..."During this evaluation period, the MT-DEQ continued to address the affects from mining..." I believe this will be an ongoing study that continues to receive updates as we learn more.

CFO Response: The report has been changed to reflect the State's suggestion.

4. MT Comment: Page 4, Third paragraph, first sentence: The number 197 should be 107.

CFO Response: The report has been changed to include the correct inspection numbers.

5. MT Comment: Page 5, Fifth paragraph: OSM grant assistance was actually 82.72% instead of 84.

CFO Response: The report has been changed to reflect the correct grant percentages.

6. MT Comment: Page 7, First paragraph: After...and regional water quality parameters, the MT-DEQ..., I suggest "has adopted water quality criteria for livestock use that includes criterion of 3000 ppm for the upper limit on total dissolved solids (TDS). However, TDS and the cations/anions of postmining groundwater, will be judged on a case by case basis, since other stock wells in the region (premine and off permit) may or may not have levels higher than the recommended criteria. The mines will not be expected to have better water quality than premine conditions."

CFO Response: The suggested changes have been incorporated into the report.

7. MT Comment: Page 7, Contemporaneous Reclamation: The photo used is just fine, but we may suggest also, the photo that Steve Regele provided earlier of Spring Creek Coal Company. Because they've been part of the focus for contemporaneous reclamation, it should be appropriate.

CFO Response: The CFO decided to use only the one photo to depict the contemporaneous reclamation process. Additional photos, while always useful in detailing the reclamation process, would have altered the report format and increased the difficulty of reproductions.

8. MT Comment: Page 9, Exhibit 2: Westmoreland's Absaloka mine is omitted, and Western Energy was identified only as areas A, B, C, and D.

CFO Response: The purpose of Exhibit 2 is to show reclamation progress on the active permits within Montana. The Rosebud Area E permit has completed backfilling and grading, resoiling, and reseeding of all areas disturbed by mining. No new disturbance is anticipated in this permit area, so it and other permits (Blackjack and Big Sky Area A) with similar status have been removed from the graph. Westmoreland's Absaloka Mine has been added to Exhibit 2.

9. MT Comment: Page 10, Eighth paragraph: Montana is misspelled.

CFO Response: The report has been corrected to incorporate the change.

10. MT Comment: Page 11, Last paragraph: In the first sentence, after...all reclaimed lands in Montana...change to.."grazing land for livestock and wildlife, fish and wildlife habitat, or both". In the second sentence, please delete *permanent impoundments* from those examples of postmine uses that require alternative reclamation. While it is possible that a permanent impoundment may not meet requirements for fish and wildlife habitat, it's not likely to be approved in other, completely separate contexts.

CFO Response: The report has been changed to incorporate the suggested change.

11. MT Comment: Page 12, First two paragraphs: I would suggest a different approach to this discussion. For one thing, the only bluff extensions approved have been with OSM concurrence, so it's probably incorrect to imply that OSM has consistently interpreted that alternate reclamation provisions do not allow for the waiver of performance standards, if in fact they didn't meet AOC. The other points raised also require some refinement. For example, the thin breaks and the mixed shrub habitat were both done under the provisions of Approximate Original Contour (AOC) and other premine conditions; reconstruction of these features is necessary to re-establish those conditions. I think it's correct to say that OSM and Montana have together concluded the best way to approach diversity in reclamation is through very careful documentation of the conditions that existed prior to mining and then ensure the postmine topography (PMT) approximates AOC. I would also modify the sentence discussing our guidelines to something like.."To assist staff, operators and OSM in making acceptable determinations, the MT-DEQ has developed AOC and PMT guidelines.

CFO Response: Montana is correct in its observation that OSM has concurred on some bluff extension proposals in the past. However, OSM's review of this procedure indicates that this practice is inconsistent with the Montana program. OSM has been working with the MT-DEQ to clarify when alternate reclamation or the AOC provisions of its program apply to a reclamation proposal to prevent this practice from continuing in the future. The report has been changed to address the State's concerns and clarify the issue.

12. MT Comment: Page 12, Photo: The photo used to highlight a bluff extension is one of an area that has not even been proposed as such. In its current state it does not meet the approved PMT. Also, our engineers have examined the area very closely to determine if sufficient area, spoils, and soils exist to meet the existing plan; they do.

CFO Response: The report and the photo caption have been changed to clarify that the bluff feature constructed at the Big Sky Mine has not been approved.

13. MT Comment: Page 13, Photo of the Thin Breaks: I suggest that it's very misleading not to indicate the actual area that encompasses the "thin breaks", because the entire area shown is certainly not representative.

CFO Response: The photo of the "thin breaks" at the Rosebud Area C mine has been altered to clearly identify the area boundaries of the reclamation feature in question.

14. MT Comment: Table 1, Superscript A, last sentence: Again, Montana does not accept the designation of Westmoreland Resource's Absaloka mine as being the Crow Tribe's. It should be sufficient to indicate the Crow Tribe owns the coal.

CFO Response: The footnote to Table 1 has been changed to clarify why Crow tribal owned coal is included in Montana's coal production totals.

15. MT Comment: Table 8: Montana does not split FTE into specific functions. Each staff member, (with the exception of administrative) performs duties in both permitting and compliance activities. We continue to believe this is the best structure for efficient and functional administration of MSUMRA and the delegated SMCRA responsibilities.

CFO Response: The CFO realizes that most of the Montana staff perform functions in both permitting and inspection, but as in past reports, for purposes of this table the staff numbers have been categorized according to the percentages submitted to OSM in the State's Administrative and Enforcement grant application. That application indicates that 55% of the funds are dedicated to permitting, 35% to inspection and 10% to administration of the program.