# Office of Surface Mining Reclamation and Enforcement

### **Annual Evaluation Summary Report**

for the

Regulatory

Program

**Administered by the State** 

of

# **COLORADO**

for

**Evaluation Year 2001** 

(October 1, 2000, through September 30, 2001)

January 2002

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# I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of, and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Colorado program and the effectiveness of the Colorado program in meeting the applicable purposes of SMCRA as specified in section 102. The Colorado Department of Natural Resources, Division Of Minerals and Geology (DMG) is the regulatory authority for the State of Colorado. This year's report covers the period October 1, 2000 through September 30, 2001. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSM Denver Field Office.

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

AML Abandoned mine lands

BLM U.S. Department of the Interior, Bureau of Land Management CIRCES Colorado Integrated Reclamation Cost Estimating System

CRP Conservation Reserve Program

DMG Colorado Division of Minerals and Geology

DOW Colorado Division of Wildlife

FTE full-time equivalents

GPRA Government Performance Results Act

MSHA U.S. Department of Labor, Mine Safety and Health Administration

OTT Office of Technology Transfer, OSM-WRCC

OSM U.S. Department of the Interior, Office of Surface Mining

Reclamation and Enforcement

SAE small area exemption

SMCRA Surface Mining Control and Reclamation Act of 1977

USFS U.S. Forest Service

WRCC OSM, Western Regional Coordinating Center

# II. Overview of the Colorado Coal Mining Industry

Coal bearing regions within the State cover approximately 29,600 square miles, which is 28.4 percent of the total area of Colorado. Coal reserves vary from lignite to anthracite. More than 70 percent is bituminous, 23 percent is subbituminous, 5 percent is lignite, and less than 1 percent is anthracite. The demonstrated coal reserve base is about 17.08 billion tons, or 3.5 percent of the national reserve base. Of this reserve base, an unmineable fraction exists consisting of coal rendered not mineable because it is in or near alluvial valley floors, national parks, historic and archaeological sites, and under towns or properties where surface impacts are a concern. Section 522 of SMCRA imposes these restrictions. The Federal Government owns some 8.8 million acres of coal rights in the State; on about 72 percent of this land, the Federal Government controls both the coal and surface rights. The U.S. Bureau of Land Management (BLM) leases all Federal coal. BLM estimates that approximately 4.2 billion tons of reserve base are under Federal ownership. Recoverable coal reserves held under Federal lease are estimated to be approximately 1.9 billion tons (of which 540 million tons are surface mineable). On average, 96 percent of Colorado's coal production is obtained from mines on Federal lands. OSM supports the Colorado coal program through an annual grant that provides for 79% of the program's costs.

Commercial coal production first began in 1861, while surface mining for coal began in the early 1950's. Underground production tonnage was first recorded in 1864. Generally, production climbed between 1875 and 1920. The 1 million tons per year milestone was reached in 1888, and the 5 million tons mark was attained by the end of the century. By 1910, production was at 10 million tons annually, and it remained steady until affected by the Depression. Production returned to 5 million tons per year through the mid-1930's. World War II increased production to 8 million tons per year. Following the war, the change to diesel fuel for locomotives and oil for electric production severely reduced the demand for coal, and production ranges remained at 2 to 4 million tons per year through 1963, increased to 8 million tons in 1976, then climbed rapidly to 19.3 million tons in 1981. Coal production declined somewhat through 1988 and then climbed back to 19.3 million tons in 1992. During 1999, Colorado produced 30 03 million tons of coal

Colorado continues to lead the world in record longwall production. The Twentymile Mine continues to hold the record with over one million tons mined in a month.

Surface and underground mines employ less than 2000 people. Employment peaked in the early 1980's with 4700 people producing coal. Currently 20 surface mines, 32 underground mines, 1 surface/underground mine, and 2 facilities are regulated under the approved State program by DMG. Seven underground mines and five surface mines were producing coal at the end of the evaluation period. Permitted mine acreage per mine site ranged from 20 to 22,580 acres.

Differences in elevation create many climatic zones. Local annual precipitation can average less than 8 inches in some areas in extreme western Colorado and can average in excess of 30 inches in certain mountainous areas. Generally, precipitation rates are low at most mine sites, making revegetation difficult. This problem can be overcome with careful species selection. The growing season can be up to 169 days in length at some sites, but is usually much less, especially in the mountainous regions of the western half of the State.

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

#### MINED LAND RECLAMATION BOARD MEETINGS

The Mined Land Reclamation Board held one of its monthly meetings away from its regular Denver meeting site and they also toured mines in the State. A meeting was held in Canon City. Holding the meetings in the vicinity of the mining operations encourages public participation by making the DMG and the Board more available to the public, and helps DMG and the Board to establish a presence outside of Denver. Mine tours representing various types of mines and technologies help the Board better understand reclamation issues.

#### JOINT DMG/OSM PUBLIC MEETINGS

DMG and OSM conducted two public meetings for the purposes of receiving comments and suggestions for oversight of the Colorado program. The meetings were held in Delta and Craig. Notice of the meetings was announced on public radio. The public was encouraged to submit written comments if unable to attend the meetings. In addition, approximately 130 letters were sent to environmental groups, the coal industry, and consultants with notification of the meetings.

#### EDUCATION AND COMMUNITY OUTREACH

DMG Coal program staff participated in the Year 2001 Coal Conference held in Rangely in May. The Associated Governments of Northwest Colorado sponsored the conference.

At OSM's Wildlife Interactive Forum in Gillette, Wyoming in August, a DMG representative presented a paper on the Success of the Columbian Sharp-tail Grouse on Reclaimed Coal Mines. Representatives of OSM, western state agencies, industry, private citizens and contractors participated in the forum. DMG presented Importance of Coal-Mine Reclaimed Lands to the Columbian Sharp-Tailed Grouse. The paper detailed Colorado coal mine permits where wildlife habitat is either the primary or secondary postmining land use. With approximately 20 years of reclamation completed under the requirements of the Colorado Surface Coal Mining Reclamation Law, it is apparent that the wildlife are using reclaimed lands in large numbers. Contrary to the situation throughout most of its historic range, the population of the Columbian sharp-tailed grouse in northwestern Colorado is thought to be stable or even increasing (Collins, 2001; Hoffman, 2001). This is attributed to recent increases in both reclaimed surface coal mine lands, and Conservation Reserve Program lands. Mine-reclamation lands are important breeding habitat for the Columbian sharp-tailed grouse.

DMG staff also made presentations to local university and school classes, professional organizations, Scout troops and Adult education classes. Presentations focused on the regulatory program and associated reclamation issues.

DMG sponsored an article in the Weekly Reader on Weeds and Native Plants. This publication is distributed nationwide to elementary school age children. DMG also helped sponsor the Newspaper in Education Program in Grand Junction.

In 2001, DMG produced a color brochure for public distribution that provides an overview of the Division's programs. This brochure will enhance the public information display that includes photographs, charts, handouts, and other information on Division activities and coal mining in Colorado. The DMG display was used in outreach efforts throughout the State including the Earth Day at the Denver Zoo, and "A Taste of Colorado-Education Exhibit". The display was also used by the education Foundation of the Colorado Mining Association for a program titled, "Total Concept of the Mining Industry" which is presented to schoolteachers.

A DMG representative assisted the state of Alaska with the design and implementation of their electronic permitting system.

#### YOUTH IN NATURAL RESOURCES

The Colorado Department of Natural Resources manages a program known as Youth in Natural Resources. The mission of this program is to foster an interest in stewardship toward the state's natural resources by providing environmental education and opportunities for summer employment to Colorado's youth. The Division of Minerals and Geology participated in this program in 2001 by sponsoring three students. In addition to work at the Division, the students were given a tour of active mining operations in Colorado and a power station where they learned how coal is used to generate electricity.

#### INTERNATIONAL INFORMATION AND TECHNOLOGY EXCHANGES

DMG continued to participate in OSM's partnership with the Indonesian Ministry of Energy and Mineral Resources. OSM has provided technical assistance and personnel exchanges that support the Ministry's objective of improving its regulation of mining operations, upgrading its technical training capacity, and improving its capacity to decentralize its operations to local and provincial levels of government in Indonesia. During 2001, a group of Indonesians visited our offices to become acquainted with our permit review process and inspection process. In July, a representative of DMG visited Indonesia to conduct training on the principles of inspection.

# IV. Major Accomplishments/Issues/Innovations

#### **BOND REPLACEMENTS**

As of July 2000, the DMG held \$24,623,662 in Frontier Insurance Company reclamation bonds for 15 mine permits and exploration notices. Frontier Insurance Company was dropped from the U.S. Department of the Treasury's Circular 570, which authorizes surety companies it to conduct business with the Federal government. DMG used aggressive negotiations and enforcement procedures to effect replacement of the various bonds. Most of the bonds were replaced early in 2001. One of the permits covered by a Frontier bond also entered bankruptcy, and DMG engaged in both enforcement and litigation to resolve the bonding and bankruptcy situation for this permit. DMG effectively managed the Frontier bond situation to ensure that all Frontier bonds were replaced.

#### BOND RELEASE

Final bond release was approved for two surface mines and one underground mine during EY 2001. The DMG terminated jurisdiction after reviewing and approving all requirements for Phase III bond release. These mines were reclaimed to the beneficial post mining land use of rangeland and wildlife habitat.

#### RECLAMATION COST ESTIMATING PROGRAM UPDATED

DMG staff completed work on the Colorado Integrated Reclamation Cost Estimating System (CIRCES) for the OSM. This program, used to establish bond amounts, was updated and finalized.

#### 2001 EXCELLENCE IN SURFACE COAL MINING RECLAMATION AWARD

RAG, Twentymile Coal Company was awarded OSM's 2001 Excellence in Surface Coal Mining Award. The Eckman Park Mine and Mine #1 were given the award for innovative reclamation techniques that created a diverse area of post mining grazing land. Large shrubs such as Big Sage, Woods Rose, Snowberry, and Serviceberry were planted on the reclaimed land to quickly reestablish the native environment. Numerous ponds were created for use by both cattle and wildlife. Today, with the vegetation established, the new wetland habitat brings added diversity. The DMG endorsed Twentymile Coal Company's nomination for the 2001 Excellence in Surface Coal Mining Reclamation Award.

#### STATE RECLAMATION AWARDS

In an effort to encourage innovative reclamation techniques and to recognize those companies that have exceeded the regulatory requirements for environmental protection, DMG participated in the nomination process for the Colorado Mining Association's Annual Reclamation Awards. DMG recognized reclamation techniques, compliance history, and exemplary methods of ensuring public safety at six mines in the state. The companies recognized at an award luncheon during the Colorado Mining Association's annual conference were: Colowyo Coal Company, LP, an affiliate of Kennecott Energy, Seneca Coal Company, a subsidiary of Peabody Energy, and Trapper Mining, Inc., Twentymile Coal Company, Energy Fuels Coal, Inc., and Kaiser Ventures, Inc.

#### BOND FORFEITURE SITE RECLAMATION

As a result of a DMG initiative, the state legislature allocated funds from the Colorado Severance Tax for reclamation and environmental remediation activities on selected coal mine sites where the permits were revoked and where the amount of forfeited bond money was insufficient to stabilize the site. Reclamation activities began on these sites during the 1999 construction season, continued through 2000, and were completed by June 20, 2001.

#### NATIVE SHRUB ESTABLISHMENT ON RECLAIMED LANDS

To address the challenge of establishing native shrubs on reclaimed lands, the DMG was allocated funding from the Colorado Severance Tax to research this topic. Initially, researchers from Colorado State University conducted a comprehensive literature review to determine what research has been conducted in the past. Working with representatives from DMG, the Division of Wildlife, and several mining companies, CSU designed a field study to evaluate several shrub establishment techniques. The operators of three coal mines installed the test plots during the summer of 2000. Initial monitoring was conducted in 2001 and will continue for four more years.

#### RULEMAKING

A Hydrology rulemaking package was finalized which addressed and resolved several 732 issues. Significant progress was also made on revegetation rule changes to address other 732 and bond release issues.

#### **TRAINING**

DMG staff participated in many of the training opportunities made available by the OSM. DMG staff members attended various OSM/NTTP classes. Three DMG staff are also trained to teach the OSM classes. DMG instructors participated in instructor training and helped instruct the Engineering and CAD classes.

#### WILDLIFE HABITAT RESTORATION

For the past several years, the Colorado Division of Wildlife (DOW) has researched sharptail grouse populations in northwest Colorado as part of the species conservation plan. The results of their research were highlighted in DOW's bimonthly magazine, A Colorado Outdoors. Of particular interest was the documented higher use on reclaimed mine lands compared to Conservation Reserve Program (CRP) lands. DOW attributes the reclaimed land success to the diversity of seed mixes creating desirable habitat for breeding, nesting and brood rearing of the grouse.

#### PROFESSIONAL PAPER

A DMG employee presented a professional paper, <u>Coal Basin Mine Reclamation Case Study</u>, at the national meeting of the American Society for Surface Mining and Reclamation. The paper shares information gleaned from reclamation of a bond forfeiture site. Coal Basin is a large erosional feature located on the east-facing slope of the Grand Hogback in Pitkin County, Colorado. High average annual precipitation, steep slopes, and erosion prone soils combine to create the highly erosive nature of this area. Due to the many unique geologic, topographic, environmental and operational challenges of Coal Basin, classic reclamation techniques and concepts were re-evaluated and subsequently modified in order to meet the reclamation goals established for the site. The reclamation challenges are being met by implementing large-scale geomorphic restoration operations and through innovative steep-slope revegetation practices. To this end, alternative, yet effective, erosion and sediment control techniques have been adopted, and unique revegetation procedures have been undertaken, as the reclamation process continues.

# V. Success in Achieving the Purposes of SMCRA as Measured by the Number of Observed Off-Site Impacts and the Number of Acres Meeting the Performance Standards at the Time of Bond Release

To further the concept of reporting end results, the findings from performance standard evaluations are being collected for a national perspective in terms of the number and extent of observed off-site impacts and the number of acres that have been mined and reclaimed and which meet the bond release requirements for the various phases of reclamation. Individual topic reports are available in the OSM Denver office.

#### **Off-Site Impacts:**

One active inspectable unit was observed with impacts that affected land resources off of the area authorized to be disturbed. No off-site impacts to people, water, or structures were observed from active or inactive operations. Of the 42 inspectable units that are active or inactive, 97.6% were free of off-site impacts.

Three forfeited and revoked operations continue to have off-site impacts to land resources outside of the disturbed area. These three sites were identified during evaluation year 2000 and the off-site impacts have not been corrected during the last year. Of the 14 revoked and forfeited inspectable units, 78.6% were free of off-site impacts.

92.9% of all Colorado inspectable units were free of off-site impacts.

The off-site impact on the active mine was within the permitted area, but off of the disturbed area. Blasting during the mining operations resulted in flyrock leaving the disturbed area. This condition left flyrock deposited on an undisturbed topsoil area. The flyrock was benign in nature; it did not contain acid or toxic materials.

Three bond forfeiture sites continue to have off-site impacts. Off-site sedimentation was the only impact observed on the forfeited sites. These sites have not had any reclamation occur since evaluation year 2000, so the impacts are a continuing event. The three sites and their relatively minor impacts are:

Arness-McGriffin Mine - a small underground operation, has sediment leaving the disturbed area that is deposited on another forfeited coal mine lower down slope. The lower mine has sedimentation ponds in place and the majority of runoff from Arness-McGriffin drains to these structures. Revegetation on the lower forfeited mine has been impacted by the sediments. A noticeable sediment

fan exists that does not have a vegetation cover as good as the surrounding area. DMG's reclamation efforts on the Arness-McGriffin mine have been stymied by public use. Motorcycle trails are evident on the reclaimed slopes, trash has been dumped, and the site has been used as a shooting range.

GEC Mine - is the largest forfeited surface operation in Colorado. Two watersheds have extensive concentrated flow channels in the bottoms. DMG attempted stabilization of one of the channels some years ago by constructing concrete drop structures. The concrete structures have been under- and side cut, which has resulted in failure of the structures. Sediment from the disturbed area was observed in the natural channel below this watershed. The size of the eroded channels on the disturbed area indicates that substantial sediment has left the site, but the impacts were rated as minor. This rating was given because of the relatively minor impacts observed to vegetation, e.g. trees have not been suffocated from accumulated sediments over trunks and root area, because the natural channel appears to have reached a stable equilibrium with regard to erosion, and because some of the sediment fans have now become vegetated with volunteer vegetation.

Coal Basin Mine - is the largest forfeited underground mine in Colorado. This mine has the most complex hydrologic regime in Colorado. It is the highest elevation coal mine in the United States, with portals over 10,000 feet in elevation. The basin is layered with Mancos shale. Avalanche chutes are pervasive and intersect the disturbed areas. The watersheds carry large debris flows during high intensity thunderstorms. Backfilling and grading of the Coal Basin Mine is essentially completed. The road system has been deep-ripped to increase moisture infiltration and encourage plant growth. DMG has utilized unique revegetation efforts, such as using native seed and establishing plant micro-ecosystems, in its efforts to establish a diverse, effective plant cover to reduce the off-site impacts from this mine.

OSM conducted 15 inspections on active, inactive, and forfeited mines with at least a partial focus on off-site impacts. DMG conducted 274 complete inspections and 216 partial inspections with at least a partial focus on off-site impacts. One off-site impact due to blasting operations was observed at an active mining operation. A State Notice of Violation was issued for the occurrence at the active site. The observation was deemed to have a minor impact on land resources. 99.8% of all inspections occur without finding off-site impacts. One observed off-site impact does not present a discernable pattern. The Colorado program has been successful in deterring off-site impacts from coal mining operations.

#### **B.** Bond Release:

After reviewing and approving all requirements for Phase III bond release, DMG terminated jurisdiction for an underground mine, two large surface mines, and a large part of another surface mine in northwest Colorado. These mines were reclaimed to the beneficial post mining land uses of rangeland/ wildlife habitat and pastureland.

Few permanent program mining operations in Colorado have acreage that has been granted a full Phase III bond liability release. Determining the success of the Colorado program based on this figure is deceptive because these Colorado coal operations tend to be large and long-lived. Some operators have been granted variances from contemporaneous reclamation as allowed by State and Federal regulations. More than half of the mines are underground operations where the surface disturbance will not be reclaimed until final closure of the mine. Also, all of the mines are subject to the 10-year minimum bond liability period. These combined factors result in acreage figures that do not represent the success of reclamation in Colorado.

Calendar year (CY) 2000 GPRA figures, the last full year of information available, show a clearer picture of reclamation status in Colorado. 70% of all the acreage disturbed by coal mining, including abandoned mines, has been backfilled and graded. 28.6%, or 6,323 acres of the 22,113 total disturbed acres in Colorado, are in long-term facilities or are active mine areas. 53% of all acreage disturbed by coal mining has received a Phase I bond release. 37% of all acreage disturbed by coal mining has received a Phase II bond release. 11% of all acreage disturbed by coal mining has received a Phase III bond release. Of the nine coal producing states in the WRCC region, Colorado accounts for 30% of the Phase III bond releases during CY2000. Colorado leads the western States under WRCC in bond releases.

# VI. OSM Assistance

The percentage of program costs for which OSM provides funding is relatively high in Colorado. The majority of mines operate on Federal lands and OSM funds the regulation of these mines through a Federal lands cooperative agreement. OSM provided \$1.63 million to DMG for the evaluation period. This figure represents 79 % of the total program costs.

DMG continues to implement its electronic permitting program. In order to assist DMG in its implementation of paperless permitting, OSM provided electronic permitting funds for a HP DesignJet 800PS color printer. This equipment cost \$7,106.05. The equipment has proven essential to DMG selectronic permitting efforts, because it allows DMG to print results of their technical analyses and integration of submitted electronic maps and data with appropriate DMG data and maps. Decision documents and reports now include relevant, high quality and easily interpreted information. OSM's Office of Technology Transfer (OTT) provided support for the DMG IT Manager to travel to the State of North Dakota. He conducted demonstrations for three days for the Public Service Commission on DMG's MS-based workflow/database software developed for Colorado's coal and minerals programs.

OSM staff members and DMG's technical library.

When the Frontier Insurance Company was terminated from Circular 570, DMG requested and was provided technical assistance from OSM's Bonding Specialist. Because DMG had accepted bonds from Frontier, it sought assistance in determining the financial status of Frontier, in determining State regulatory provisions that would be the basis for requiring permittees to replace their Frontier bonds with bonds from other

sureties, in reviewing and commenting on a reinsurance agreement between Frontier and National, and in establishing procedures for letters of credit to be confirmed by banks other than the issuing banks.

OSM also provided the opportunity for a DMG staff member to participate in and present a paper at OSM's interactive forum on *Approaching Bond Release: Wildlife Habitat Construction and Wildlife Use of Reclaimed Lands in the Arid and Semi-Arid West*, in Gillette, Wyoming. DMG presented a paper entitled <a href="Importance of Coal-Mine">Importance of Coal-Mine</a> Reclaimed Lands to the Columbian Sharp-Tailed Grouse. The paper detailed Colorado coalmine permits where wildlife habitat is either the primary or secondary postmining land use.

DMG also participated in a bond release discussion panel with western State technical representatives on *How to Assess the Adequacy of Wildlife Success*.

OTT provided the opportunity for two DMG staff members to participate in the OTT-sponsored workshop *Modeling Reconstructed Topography and Relief, and Associated Issues Relating to Approximate Original Contour (AOC)*, in Denver, CO, along with 8 industry representatives, consultants, and other State/Federal agency staff attendees.

OTT provided the opportunity for one DMG Coal Program staff member to present a professional paper at the 18<sup>th</sup> National Meeting of the American Society for Surface Mining and Reclamation, held in Albuquerque, New Mexico, entitled *Land Reclamation* -- *A Different Approach*. The DMG employee presented the professional paper Coal Basin Mine Reclamation Case Study.

# VII. General Oversight Topic Reviews

As part of the annual performance agreement, the OSM and DMG oversight team selected topics to be evaluated and defined the scope of the topic. For purposes of clarity and consistency, definitions and measurements were included in the agreement. Specific mines and a field evaluation schedule were agreed upon. Operators were not informed that their particular operation would be reviewed prior to the field visit.

Oversight of the Colorado regulatory program focused on small area exemptions as a topic to determine off-site impacts. Coal exploration bond release was evaluated to determine reclamation success. Public notification of the underground mining schedule was evaluated to assess customer service. In addition to these topics, four complete inspections were conducted.

#### A. Off-Site Impacts

#### **Small Area Exemptions (SAE)**

The intent of this review was to determine how effectively DMG was implementing its approved program to ensure all runoff from disturbed areas that did not pass through a sedimentation pond would comply with the water quality standards and effluent limitations. The Colorado program allows for exemptions from the requirement to pass all runoff from the disturbed areas through a sedimentation pond only after the operator has demonstrated; a.) that sedimentation pond and treatment facilities are not necessary for the drainage to meet effluent limitations and the applicable State and Federal water quality requirements for downstream receiving waters and b.) that the disturbed surface drainage area within the total disturbed surface area is small and there is no mixture of surface drainage with discharge from underground mine workings.

This review concentrated on the on-the-ground off-site impacts of SAE's. The approved mine permit was reviewed to ensure that DMG had reviewed and approved a demonstration for each SAE and to determine any construction and maintenance specifications for sediment control techniques associated with each SAE. None of the mining operations had discharge monitoring records for any of the SAE's.

The field review mainly focused on ensuring that each sediment control measure associated with an SAE was properly built and maintained, that there were no visual indicators indicating water quality problems downstream from the SAE, that the field conditions were accurately described in the demonstration, and that the runoff met the effluent limitations and the applicable State and Federal water quality requirements for downstream receiving waters.

OSM was able to determine that DMG was effectively implementing its approved program in finding that:

• All SAE's had a demonstration that had been reviewed and approved by DMG.

- None of the SAE's exhibited signs of downstream water quality issues.
   Aggravated erosion and accelerated sedimentation were not observed below the SAE's or any of the sediment control measures.
- The SAE and its sediment control measures had been constructed and maintained as approved in the permit.

DMG issued an enforcement action to one of the mining companies because it had stored oil and grease in an SAE. There were small stains on the ground around some of the storage barrels, but there was not any staining close to the sediment control structure; the ultimate discharge point of any runoff from the SAE.

One mining operation had an old approved design for containment structures. These structures were approved as SAE's, however, given their function to contain runoff, the structures should have met the sedimentation pond requirements. Prior to the field review, DMG had approved a new SAE plan with sediment control structures for the disturbed area based on the fact that it was no longer active and reclamation was to begin. The newest plan eliminated the containment structures, but had not yet been implemented.

One mining operation was in the process of backfilling and grading an idled disturbed area. The area was transitioning from an active area to a reclaimed area. The sedimentation control plan had different components for the disturbed area that ranged from designed sedimentation ponds to silt fence. Topographical changes that occurred during the backfilling and grading operations changed the anticipated watersheds for the approved sediment control measures. The measures were still in place, but the design watersheds had increased or decreased. OSM and DMG have agreed to review the impact of reclamation operations on sediment control measures approved for active areas during evaluation year 2002.

#### B. Reclamation Success

#### **Coal Exploration Bond Releases**

In 1999, DMG started a project to update its Notices of Intent to Explore files. The goals have been to ensure that all reclamation has been completed, that reporting requirements have been complied with, that all present and future reclamation and reporting requirements are done in a timely manner, and to return performance bonds to parties who have successfully completed reclamation.

DMG's ongoing course of action to achieve these goals has been to contact permittees and landowners to determine reclamation status of the lands, encouraging permittees delinquent in reporting to submit the reports, entering all information in a new database and development of a system that generates reports to help staff track reporting deadlines, and by encouraging permittees who have completed reclamation to request a bond release.

It was anticipated that DMG would receive a number of bond release requests because of its efforts. This anticipated result did not materialize and as such, OSM and DMG did not complete a review of this topic. OSM and DMG still believe a review of this topic is appropriate and necessary; therefore, a continued review of this topic has been scheduled for EY02.

#### C. Customer Service

#### **Public Notice of Underground Mining Schedule**

SMCRA and the approved Colorado program require underground mining operations to notify all owners of property and residents within the area above underground workings and the adjacent areas of the schedule of underground mining activities. The schedule is to be distributed to those individuals at least six months prior to mining under their property.

On the surface, this review appeared to be a straightforward application of the regulations. However, a number of regulatory questions arose about procedure and when the notification must take place. Some of these questions are fairly unique to the west where BLM and the U.S. Forest Service (USFS) conduct their own regular inspections of the operations on Federal lands. Examples of the regulatory questions that arose are:

- Is a written notification necessary when a coal operator has negotiated a lease with a landowner (be they private, State, or Federal) where mining is anticipated upon acceptance of the lease? In other words, does the lease constitute the sixmonth notification to that landowner?
- Is a coal operator required to send a written notification to a Federal land management agency (landowner) such as BLM or the USFS when those agencies have people that inspect the coal mining operation as frequently as once a month and verify extraction locations?
- Is it acceptable under the plain reading of the regulation for an operator to send notification with the anticipated mining schedule at the onset of the mining operations, even though it may be years before a landowners property will be undermined?
- Does a coal mining company have to notify the landowner if that landowner is another company wholly owned by the coal company's parent corporation?

Four of the operations field checked had sent the landowner notifications prior to sixmonths before undermining the property. One of the operations field checked was in compliance because only its property was being undermined and it would be some years before any other landowners property would be undermined. While the operator was unaware of the notification requirement, DMG had at least two years to ensure the operator was aware of his responsibilities.

This review was successful not only because it determined that DMG was properly administering its program, but also because it resulted in identifying murky regulatory

language that DMG can choose to develop policy for if it is determined necessary.

#### **D.** Complete Oversight Inspections

Four complete oversight inspections were conducted jointly with DMG in Colorado during the oversight year. The inspections were conducted on operations that were not subject to a review under one of the topics listed above and had not been subject to an oversight inspection during the preceding year. While the inspections were conducted as complete inspections, critical attention was paid to the conditions that were reviewed under the special focus topics.

Diversity in such categories as operational status, type of operation, geography, and size was considered in selecting the mine sites. No Ten-Day Notices or Federal enforcement actions were taken as a result of these inspections. The operations were found to be in compliance with the performance standards and permit requirements.