

U.S. Department of the Interior
Office of Inspector General

Evaluation Report on State Operated Coal Regulatory Programs

Active coal mining



Reclaimed mining site

Office of Surface Mining



United States Department of the Interior

Office of Inspector General

Eastern Region Audits
381 Elden Street
Suite 1100
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October 27, 2004

Memorandum

To: Director - Office of Surface Mining Reclamation and Enforcement

From: William J. Dolan, Jr. *William J. Dolan, Jr.*
Regional Audit Manager, Eastern Region

Subject: Final Evaluation Report on State Operated Coal Regulatory Programs
Office of Surface Mining Reclamation and Enforcement
(Report No. S-IN-OSM-0087-2003)

This report presents the results of our evaluation of the Office of Surface Mining Reclamation and Enforcement's (OSM) State Operated Coal Regulatory Programs. Our review focused on the adequacy of inspection and bond release activities, potential cost savings, and OSM's fiscal year 2002 Government Performance and Results Act (GPRA) performance measures.

We concluded that the processes for performing surface mining inspections and bond releases were in compliance with the Surface Mining Control and Reclamation Act (SMCRA) and OSM regulations for the four states included in our evaluation. We also identified potential cost savings and needed improvements in OSM's development of and reporting on GPRA performance measures.

The Director of OSM responded to the draft report and its six recommendations on September 17, 2004. Based on his response and additional information subsequently provided, we consider two recommendations resolved and implemented, two recommendations resolved but not implemented, and two recommendations unresolved.

The legislation, as amended, creating the Office of Inspector General, (5 U.S.C. App. 3) requires semiannual reporting to Congress on all reports issued, actions taken to implement recommendations, and recommendations that have not been implemented.

Please provide a response to this report by December 15, 2004. The response should provide information requested in Appendix 5 and should be addressed to Roger LaRouche, Assistant Inspector General for Audits, Office of Inspector General (MS 5341-MIB).

We appreciate the cooperation we received from OSM staff during our evaluation. If you have any questions regarding this report, please contact me at (703) 487-8011.

Attachment

cc: Assistant Secretary - Land and Minerals Management
Audit Liaison Officer - Land and Minerals Management
Audit Liaison Officer - Office of Surface Mining Reclamation and Enforcement
Focus Leader - Management Control and Audit Follow-up, Office of Financial
Management (Electronic Copy)

EXECUTIVE SUMMARY

State Operated Coal Regulatory Programs Office of Surface Mining

Background and Objectives

The Office of Surface Mining Reclamation and Enforcement (OSM) is the primary Federal agency for carrying out the mandates of the Surface Mining Control and Reclamation Act (SMCRA) of 1977.¹ Under SMCRA, OSM is responsible for protecting society and the environment from the adverse effects of surface coal mining operations.

The regulation of surface mining is primarily achieved through grants and cooperative agreements with states and Indian Tribes. OSM has an oversight role in the 24 states with approved state regulatory programs and funds 50 percent of these programs. OSM also serves as the regulatory authority for coal mining and reclamation operations in 12 other states.

Our review focused on the adequacy of inspection and bond release activities, potential regulatory program cost savings, and OSM's Government Performance and Results Act (GPRA) performance measures.

Results in Brief

We concluded that the processes for performing surface mining inspections and bond releases were in compliance with SMCRA and OSM regulations for the four states included in our evaluation. Also, we concluded that current OSM regulations may require excessive inspections of low-risk mining sites. With respect to OSM's GPRA reporting, the measure on the amount of bond release acreage is not appropriate because it is not under the control of OSM managers and is output oriented. In addition, we identified weaknesses in the data collection and verification processes. We made six recommendations to the Director of the Office of Surface Mining Reclamation and Enforcement to improve the mine inspection process and GPRA reporting.

¹ Public Law 95-87

**Agency Response
and Office of
Inspector General
Reply**

Based on OSM's response to our draft report, we consider two recommendations resolved and implemented, two recommendations resolved but not implemented, and two recommendations unresolved.

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Abbreviations

GPRA	Government Performance and Results Act
OMB	Office of Management and Budget
OSM	Office of Surface Mining Reclamation and Enforcement
PART	Program Assessment Review Tool
SMCRA	Surface Mining Control and Reclamation Act

Cover Photographs Credit

Active coal mining and reclaimed mining at the Catenary
Mines, Cabin Creek, West Virginia, on September 11, 2003.
OIG photo.

INTRODUCTION

Background

Under the authority of the Surface Mining Control and Reclamation Act (SMCRA) of 1977, the Office of Surface Mining Reclamation and Enforcement (OSM) is responsible for reclaiming and restoring land and water degraded by pre-SMCRA mining, minimizing off-site impacts during current mining operations (since 1977), and ensuring that land is restored to beneficial use after mining has ceased.

The regulation of surface mining is primarily carried out through grants and cooperative agreements with states. Currently, 24 states have “primacy,” or approved state regulatory programs, which include key elements such as permitting and bonding requirements, performance standards for mining operations, mine inspection and enforcement requirements, and procedures for designating lands as unsuitable for mining. In primacy states, OSM’s mission is one of oversight, back-up enforcement authority, and programmatic and technical assistance. OSM grants finance 50 percent of the cost of state regulatory programs. In the 12 states without primacy or cooperative agreements to regulate mining on Federal lands, OSM serves as the regulatory authority for coal mining and reclamation operations.

Nationwide, state and Federal program inspectors performed 88,778 inspections on 8,970 inspectable units in 2002. During these reviews, they wrote 3,961 notices of violation and 322 cessation orders. In addition, OSM conducted 2,297 oversight inspections in the 24 primacy states in 2002, usually with state inspectors, writing 19 notices of violation and 4 cessation orders.

Under its mission goal of environmental protection, OSM has two long-term Government Performance and Results Act (GPRA) goals related to the state regulatory program: (1) to increase the percentage of sites free of off-site impacts and (2) to increase the number of acres released from Phase III bonds.²

² The Phase III bond release occurs when a site has been completely reclaimed and the remaining bond has been returned to the operator.

Objectives and Scope

We performed evaluation work in three primacy states - Kentucky, Pennsylvania, and West Virginia - and Tennessee, which is a Federal program state. Kentucky, Pennsylvania, and West Virginia were selected for review because they have the most inspectable units of the 24 primacy states. These three states receive 57 percent of OSM regulatory grant funds and have 74 percent of all inspectable units. Tennessee was selected because its regulatory program is managed by OSM. Our evaluation focused on the adequacy of inspection and bond release activities, potential cost savings, and OSM's GPRA performance measures. The evaluation was conducted between July and November of 2003 and focused primarily on surface mining regulatory activities in 2001 and 2002. We concluded our work at the end of the survey phase because we determined that the continuation of the evaluation would not identify any additional weaknesses. The Appendices contain detailed information on the scope and prior audit coverage, methodology, sites visited and outside contacts consulted during our evaluation.

RESULTS OF EVALUATION

Overview

We concluded that the state processes for performing surface mining inspections and bond releases were in compliance with SMCRA and OSM regulations. However, we believe that current OSM regulations may result in unnecessary expenditures by both the states and OSM because they require excessive inspections for low-risk mining permits.

In addition, we identified weaknesses in OSM's GPRA reporting. The measure on the amount of bond release acreage is not appropriate because it is not under the control of OSM managers and is output oriented. Also, decision makers may not be provided accurate data because the methods used to collect off-mine site impact data for two of the states are deficient, and because OSM does not verify data provided by the states.

Inspection and Bond Release Activities are Adequate

SMCRA requires that the regulatory authority perform inspections averaging not less than one partial³ inspection per month and one complete inspection per quarter for the surface coal mining and reclamation operation covered by each permit. OSM regulations implementing SMCRA make a distinction between requirements for active operations and inactive operations. The inspection requirement for active operations is a minimum of four quarterly complete inspections and eight monthly partial inspections per year. The minimum requirement at inactive operations is four complete inspections and as many partial inspections as necessary. Abandoned mines must be inspected a minimum of once a year.

Based on our evaluation of inspection documents and discussions with surface mining inspectors and managers, we found that the surface mining inspection processes in the four states were adequate. We reviewed permit files and/or queried state databases for 49 permits⁴ for fiscal years 2001 and 2002 to determine if the states performed the required number, type, and frequency of inspections. We concluded

³ A partial inspection is an on-site or aerial review of compliance with only some of the permit conditions and requirements. A complete inspection is an on-site review of compliance with all permit conditions and requirements within the entire area disturbed or affected by the surface coal mining and reclamation operations.

⁴ In 2002, the four states had a total of 6,995 permits.

that the four states were in compliance with SMCRA and OSM inspection requirements.

SMCRA requires surface mining operators to post bonds to cover the cost of reclaiming the site in the event of forfeiture by the operator. The bond is returned or released to the operator by the regulatory authority in three stages as the reclamation progresses. Based on our evaluation and the lack of evidence of any off-site impacts from sites that have been fully reclaimed, we concluded that the bond release processes in the four states were also adequate.

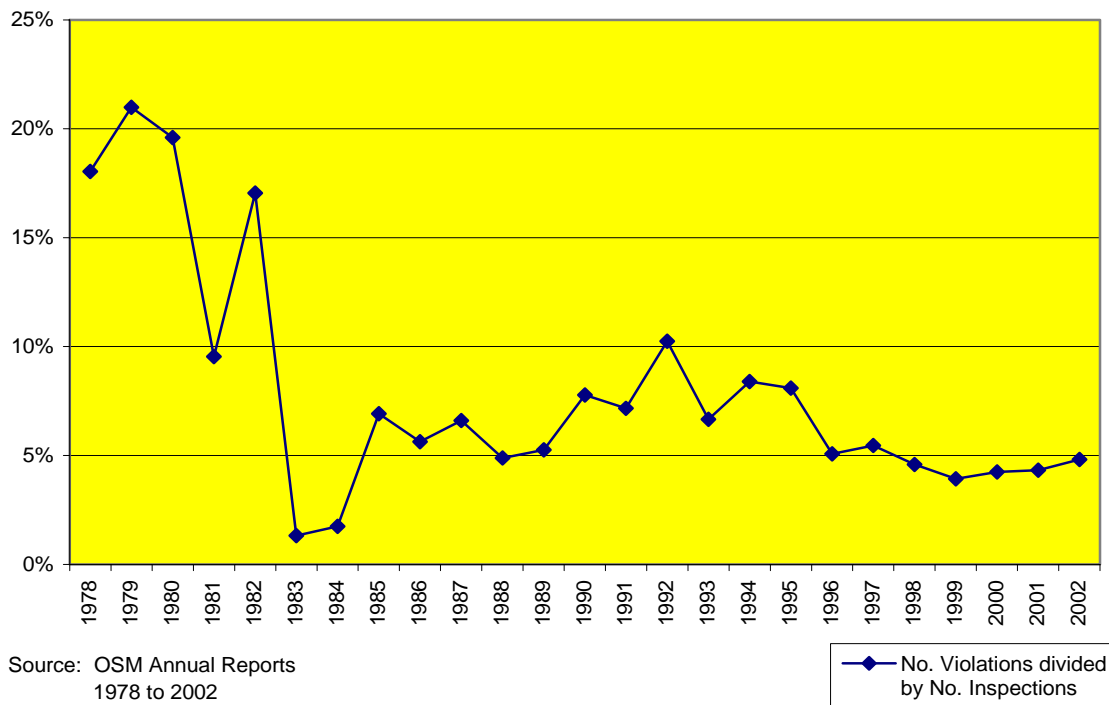
Potential Cost Savings

We determined that OSM and the state regulatory authorities could be conducting excessive inspections of low-risk surface mining permits. SMCRA and OSM regulations require a certain number of inspections on every permit, without consideration of the risk of adverse effects posed by the permit. As a result, the four states we reviewed may be spending as much as \$1.57 million each year on low-risk inspections, which could be put to better use. State and OSM staff also provided us with several other cost saving suggestions.

The Regulatory Environment

SMCRA was passed in 1977 as the result of Congressional concerns about the adverse effects of surface mining including erosion and landslides, flooding, water pollution, fish and wildlife habitat destruction, impaired natural beauty, damaged private property, and safety hazards. However, as noted in OSM's 2002 annual report, 25 years after the passage of SMCRA, land reclamation and environmental protection have become routine parts of the coal mining process. The success of OSM and the state regulatory authorities in bringing the surface mining industry into compliance with SMCRA is illustrated in Figure 1 by the decrease in the rate of violations between 1978 and 2002.

Figure 1 - Non-Compliance Rate 1978-2002



Of the approximately 91,000 inspections performed in 2002 by OSM and the states, 95 percent did not result in a notice of violation or a cessation order. In addition, almost 93 percent of surface mining permits had no off-site impacts⁵ in 2002. Despite this high level of compliance, regulatory authorities have not decreased the level of inspections since the Act was first passed 25 years ago.

Matching Regulatory Resources to Risk

We believe there is potential for reducing the number of inspections at three types of low-risk operations - those that have received their Phase I and Phase II bond releases and abandoned sites. We concur with most state and OSM personnel we spoke with who believed that 12 annual inspections were necessary on sites where active mining or reclamation was taking place. Some of them did agree, however, that there were instances in which the current inspection requirements were higher than necessary for some sites.

⁵ An off-site impact is anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on people, land, water, structures, or other resources outside the permitted area.

At the end of Phase I, the operator has completed the backfilling, re-grading, and drainage control for a bonded area according to the reclamation plan, and the regulatory authority has inspected the work and approved the bond release. At that time, 60 percent of bond fees can be released to the permit holder. Most of the remaining reclamation efforts involve re-establishing vegetation on the site. However, OSM regulations still classify post-Phase I bond release sites as active, and they must be inspected 12 times a year; the same frequency as sites where heavy equipment is operating or blasting is occurring.

We believe there is potential to reduce the number of inspections for many of these post-Phase I release sites. This reduced number of inspections would reflect the reduced risk the regulatory authority recognized when it released 60 percent of the bond money. We found that regulations in two of the states reviewed, Kentucky and West Virginia, do in fact categorize post-Phase I release sites as inactive, and the states only require four complete inspections per year on these sites. No partial inspections are required. OSM has approved these deviations as equivalent to its own regulations.

We suggest OSM consider reducing the number of inspections in this category for the other coal producing states. For example, four complete inspections per year for permits which have received a Phase I bond release and are identified by the regulatory authority as low-risk should be adequate.

According to OSM regulations, permits with a Phase II bond release are classified as inactive and receive four complete inspections per year. In this phase, the regulatory authorities are waiting to ensure the surface of the land is stable and vegetation is re-established before the remainder of the bond can be released. We suggest OSM consider reducing the number of inspections in this category. For example, two complete inspections per year for permits identified by the regulatory authority as low-risk may be adequate.

Finally, some of the permits classified as abandoned have been in that status for several years and natural vegetative processes have stabilized the surface disturbances. Apparently, there is no OSM procedure for removing these types of sites from the inventory and OSM and State authorities continue to perform required annual inspections. For example, this was a problem in the state of Tennessee

where several OSM staff suggested cost savings could be achieved by eliminating unnecessary inspections for abandoned sites. We suggest OSM consider eliminating the annual inspections for low-risk abandoned sites and developing procedures for removing them from the inspection inventory.

Identifying Low-Risk Permits

Currently, OSM and the state regulatory authorities do not use risk assessment because the inspection regulations treat all permits equally, without regard for their safety or environmental records. Still, in some cases, OSM and state regulatory authorities do indirectly consider risk. OSM regulations give limited consideration to risk factors by making a distinction between active and inactive operations. We were also told that permits with problems might be inspected more often than the minimum requirements. In addition, OSM managers mentioned that they have performed special studies in cooperation with the states that often looked at high-risk areas, such as blasting and impoundments.⁶

However, this indirect consideration of risk does not focus inspection resources on those permits that pose the greatest potential threat to public safety or the environment. OSM should consider using risk assessment to reduce the number of inspections they perform because their regulatory program statistics show that since 1998 approximately 93 percent of surface mining permits have been free of off-site impacts and 95 percent of all inspections did not result in violations.

OSM and state regulatory authorities already have the experience and expertise to identify which permits pose the least risk and, therefore, could receive fewer inspections. In addition to operational status, OSM authorities could consider factors such as enforcement history (including off-site impacts), citizen complaints, the presence of large impoundments, water quality issues, and whether the operation involves primarily underground or surface mining.

Cost Savings Analysis

We estimated that the four states could save \$1.57 million a year by reducing the number of inspections performed on low-risk Phase II permits⁷ from twelve to four, on low-risk

⁶ Impoundments are any water, sediment, slurry, or other liquid or semi-liquid holding structures and depressions, either naturally formed or artificially built.

⁷ A Phase II permit has received its Phase I bond release but has not completed sufficient reclamation to receive its Phase II release.

Phase III permits⁸ from four to two, and eliminating approximately half of all inspections on Tennessee's low-risk abandoned permits. The methodology used to calculate cost savings is described in Appendix 2.

Table 1 - Potential Cost Savings for Low-Risk Permits

State	Number of Permits in			Percent (%) Low-Risk	Savings from Fewer Inspections			Overall Savings
	Phase II	Phase III	Abandoned		Phase II	Phase III	Abandoned	
Kentucky	380	87		90	0*	\$ 93,960		\$ 93,960
Pennsylvania	274	535		90	\$591,840	\$577,800		\$1,169,640
Tennessee	35	34	174	90	\$ 75,600	\$ 36,720	\$46,980**	\$ 159,300
West Virginia	309	141		90	0*	\$152,280		\$ 152,280
Total Savings					\$667,440	\$860,760	\$46,980	\$1,575,180

*Phase II permits in Kentucky and West Virginia already receive only four complete inspections per year.

**To be conservative, we reduced the number by of low-risk permits by 45 percent to do the abandoned mine calculations.

To achieve these savings OSM may need to revise the definition of an active permit in its regulations to reduce the number of required inspections on low-risk permits. For example, Phase II permits could be reclassified as inactive because active mining is completed, they have been approved for Phase I bond release, and as a result, their risk is decreased.

Suggestions for Reducing Costs

During our evaluation, we interviewed OSM and state inspectors and managers with firsthand knowledge of the regulatory program. Based on their experience, they provided us with the following suggestions for reducing costs:

- Increasing the use of helicopter over-flights for partial inspections
- Using digital cameras to decrease film developing costs for inspection photos
- Eliminating unnecessary analysis criteria for lab samples
- Simplifying grant requirements (possibly have 3-year grants instead of 1-year)
- Implementing electronic permitting
- Decreasing OSM inspections because they duplicate

⁸ A Phase III permit has received its Phase II bond release but all the requirements of a Phase III release have not yet been met.

- state work
- Reducing travel costs by bringing OSM trainers to the states rather than transporting inspectors to out-of-state classes
- Improving quality of underground mapping

Compliance with Government Performance and Results Act (GPRA)

OSM has two regulatory program performance measures: acres of Phase III bond releases and percentage of sites free of off-site impacts. We concluded that the bond release measure is not appropriate because it is not under the control of OSM or state managers and, it is output rather than outcome oriented. Although we found the off-site impacts measure is appropriate, we identified some weaknesses in the GPRA data collection and verification processes for both measures. Decision makers may not be provided accurate performance data because the methods used to collect off-site impact data for two of the states visited are deficient and because OSM does not verify performance data provided by the states. In addition, procedures developed to comply with January 2003 guidance from the Department should ensure that both staff and managers are held accountable for data accuracy.

Goal Appropriateness

OSM's measure for acres of Phase III bond release is not appropriate because neither OSM nor the state regulatory authorities control when these acres are released. Mining operators actually determine the timing of bond releases through their applications to the regulatory authority.

Prior to our evaluation, OMB's 2003 PART Evaluation⁹ also determined that both of OSM's regulatory performance measures were output rather than outcome oriented. OSM managers told us the bureau was working on revising these measures. A better outcome measure would demonstrate the success of the states and OSM in ensuring that reclaimed surface mines are returned to their pre-mining use and are free of post-reclamation adverse effects.

Data Collection Weaknesses

Although we did not test OSM's GPRA data for errors, we did identify problems with the methodology used to collect the off-site impact data, which could result in inaccuracies. OSM obtained most of its off-site impact and bond release performance data from the states. In Pennsylvania and Kentucky, the OSM field offices review the state inspection

⁹ The purpose of OMB's Program Assessment Rating Tool (PART) is to systematically measure program performance and results. PART uses the framework established in GPRA of long-term outcome goals supported by annual performance goals.

reports to determine if a violation resulted in an off-site impact or how severe the impact was. We believe these determinations should be made by the state inspector, who actually observes site conditions. For instance, in the state of West Virginia, the state and OSM have a performance work plan agreement for the state to provide the off-site impact data to OSM annually.

The data collection methods used by OSM in Pennsylvania and Kentucky need to be improved to ensure accurate performance data. In Pennsylvania, the annual performance data for off-site impacts is projected based on OSM's review of 6 months of the state inspection reports' data. Kentucky only reports off-site impacts resolved through enforcement action to OSM. As a result, GPRA data may be understated if those impacts are not resolved by the end of the reporting year.

In addition, OSM did not adequately disclose in 2002 that the performance data reported for GPRA was primarily obtained from the states. Also, OSM did not assess or identify possible limitations with the states' data.

Lack of Data Verification

Our discussions with OSM field office personnel indicated that there were no processes in place to verify GPRA performance data in 2002. In compliance with guidance on performance data verification received from DOI in January 2003, OSM developed a Validation and Verification Assessment Form. This form is a checklist with 26 items to be completed by a senior OSM official. However, the departmental guidance emphasizes that both staff and management must take accountability for data accuracy. To ensure accuracy, performance data should be verified from the bottom-up by staff most familiar with day-to-day program activities.

OSM also needs adequate procedures to accumulate sufficient information to support the data included in the bureau GPRA report. Field offices should maintain a list of the GPRA accomplishments reported, which would allow the states, regional and national offices to match and verify the performance data. For example, we found that bond release acreage provided by the state offices in Pennsylvania and West Virginia did not match the acreage in the GPRA report.

RECOMMENDATIONS

We recommend that the Director:

1. Consider using risk assessment to determine if the inspection frequency on post-Phase I and Phase II bond release and abandoned permits could be reduced.
2. Consider the feasibility of implementing cost saving suggestions provided by OSM and state inspectors and managers.
3. Revise the bond release GPRA measure to ensure it is outcome-based to the extent possible and is under the control of OSM or state managers.
4. Ensure that performance agreements with primacy states address how data will be collected and provided to OSM on all off-site impacts that are identified on state inspections.
5. Ensure there is adequate disclosure of the sources and limitations of GPRA performance data.
6. Establish procedures to ensure that accountability for the accuracy of the performance data is shared by both staff and management.

Agency Response and Office of Inspector General Reply

Recommendation 1

OSM's responses to the draft report and our replies are summarized below.

Regarding Recommendation 1, OSM did not concur and stated that it would not be prudent to revise Federal rules to further reduce inspection frequency for inactive or abandoned sites. The response noted; however, that there is some flexibility on the part of the individual States to reduce inspection frequency. Also, OSM indicated that risk-based assessment is already built into the inspection process. Finally, OSM did not believe that our forecast of cost savings will occur.

While OSM disagreed with Recommendation 1, it did not provide detailed support for its positions. As OSM and the

states performed approximately 86,000 inspections in FY 2002 that did not result in a notification of violation or a cessation order, we request that OSM submit additional support for its position that it would not be prudent to reduce inspection frequency. We have classified the Recommendation as unresolved and request that OSM provide additional information regarding its position on this matter.

Recommendation 2

OSM considered the cost savings suggestions in Recommendation 2 in their response, and so we classified the Recommendation as resolved and implemented.

Recommendation 3

OSM did not concur with Recommendation 3, maintaining that the bond release measure is outcome-based and shows program results as intended by GPRA. Both the OIG and OMB have determined that the number of acres released from Phase III bonds is an output, not outcome measure. We believe it's an output because it measures an activity rather than effect, benefits, or results. We also note that OSM managers and staff identified the measure as problematic because they lacked control over bond releases. We have asked OSM to reconsider its non-concurrence with our Recommendation related to this measure.

Recommendation 4

OSM did not concur with the original Recommendation 4. Subsequently, we discussed this Recommendation with an OSM official and agreed on effective alternative action. We revised the Recommendation based on OSM's agreement to ensure that state performance agreements address how data will be collected and provided to OSM on all off-site impacts that are identified during state inspections. We consider this Recommendation resolved, but not implemented until OSM makes the appropriate changes to state performance agreements. The officials responsible for implementation are OSM Regional Directors Brent Wahlquist, Charles Sandberg, and Al Klein. The target implementation date is June 30, 2005.

Recommendation 5

OSM concurred with Recommendation 5. In addition, OSM provided us with an excerpt from their 2005 budget justification/2003 performance report, which disclosed that OSM obtains their performance information from the states. We consider the Recommendation resolved and implemented.

Recommendation 6

OSM also concurred with Recommendation 6. In response to Recommendation 6, OSM also agreed to develop procedures to ensure that data verification and validation is conducted at both staff and management levels and is identified in future documents. These actions, when implemented, would resolve our concerns about data collection weaknesses, disclosure of data sources, and lack of data verification. The official responsible for implementation is Ruth Stokes, Chief, Office of Planning, Analysis and Budget. The target implementation date is June 30, 2005.

Evaluation Scope and Prior Audit Coverage

Evaluation Scope

We performed evaluation work in three primacy states-- Kentucky, Pennsylvania, and West Virginia--and Tennessee, which is a Federal program state. We conducted the evaluation between July and November of 2003 and focused primarily on surface mining regulatory activities in 2001 and 2002.

We conducted our work in accordance with the President's Council on Integrity and Efficiency's Quality Standards for Inspections. We included such tests of records and other procedures that were considered necessary under the circumstances. We concluded our work at the end of the survey phase because we determined that the continuation of the evaluation would not identify any additional weaknesses. Therefore, the scope of the work was limited to those procedures performed during the survey phase. As a result, our review of management controls and testing of state inspections was limited.

Prior Audit Coverage

During the past 10 years, neither the General Accounting Office nor the Office of Inspector General has issued any reports on the state operated coal regulatory program.

Methodology

During the evaluation, we obtained and reviewed inspection and bond release flowcharts and process narratives and SMCRA and OSM regulatory requirements. In addition, we reviewed OSM budget justifications and the 2001 and 2002 OSM annual state evaluations for the four states. We also had discussions with state and OSM inspectors and managers, as well as industry and environmental and citizens' group representatives, and observed on-site surface mining inspections in West Virginia and Tennessee.

To ensure compliance with SMCRA and OSM regulatory requirements by OSM and the primacy states, we randomly selected a small number of permits from each of the four states (49 total) and tested the inspection records to verify that the correct number, type, and frequency of inspections had been performed in 2001 and 2002. For Phase III bond releases, we reviewed 2002 inspection records and citizen complaints, when possible, to confirm that there were no problems in the year the bond was released.

To calculate the estimated savings from reducing the number of inspections on low-risk sites we performed the following steps:

- Calculated an estimate of the cost of an inspection in the four states by dividing the 2002 budget for inspections and enforcement by the number of inspections performed in 2002.¹⁰ We used \$600 as an average cost of a complete inspection, or \$300 for a partial inspection.
- Assumed that 90 percent of the sites in Phase II and Phase III could be classified as low-risk.

¹⁰ We assumed that two partial inspections were equal to one complete inspection.

- For Phase II units, multiplied the number of low-risk sites by \$2,400 (\$300 per inspection X 8 partial inspections) to determine the cost savings from reducing the number of required inspections from eight partial and four complete to just four complete.
- For Phase III units, multiplied the number of low-risk sites by \$1,200 (\$600 per inspection X 2 complete inspections) to determine the cost savings from reducing the number of required inspections from four complete to just two complete.
- For abandoned units, multiplied the number of low-risk sites by \$600 (\$600 per inspection X 1 complete inspection) to determine the cost savings from reducing the number of required inspections from one complete to zero complete inspections for low-risk abandoned permits in Tennessee.¹¹

We did not test the accuracy of GPRA data reported because the evaluation was concluded at the end of survey. We did, however, interview state and OSM staff to determine if the data collection methods used were reasonable.

¹¹ To be conservative, we reduced the number by of low-risk sites by half (45 percent) to do the abandoned mine calculations.

Sites Visited and Outside Contacts

Sites Visited

We visited and/or contacted the following OSM and State Offices:

<u>Office</u>	<u>Location</u>
OSM Headquarters Office	Washington, DC
OSM Appalachian Regional Office	Pittsburgh, PA
OSM State Office	Lexington, KY
OSM State Office	Harrisburg, PA
OSM State Office	Knoxville, TN
OSM State Office	Charleston, WV
OSM Field Office	Johnstown, PA
Kentucky State Office	Frankfort, KY
Pennsylvania State Office	Harrisburg, PA
West Virginia State Office	Nitro, WV
Cambria District Office	Ebensburg, PA

Outside Contacts

Kentucky Coal Association
 Kentucky Resources Council
 Tri-State Citizens Mining Network, Pennsylvania
 Save Our Cumberland Mountains, Tennessee
 Tennessee Coal Association
 West Virginia Highland Conservancy
 West Virginia Coal Association



United States Department of the Interior

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
Washington, D.C. 20240

MEMORANDUM

To: Roger La Rouché
Assistant Inspector General for Audits, Office of Inspector General

Through: Rebecca W. Watson *Rebecca Watson* SEP 15 2004
Assistant Secretary Land and Minerals Management

FOR
From: Jeffrey D. Jarrett, Director *Jeffrey D. Jarrett* SEP 13 2004
Office of Surface Mining

Subject: Draft Audit Report on the Office of Surface Mining and State-Operated Coal Regulatory Programs (Report No. S-IN-OSM-0087-2003)

Thank you for the opportunity to review and comment on the draft audit report on State-Operated Coal Regulatory Programs. The audit was conducted to determine (1) the adequacy of inspection and bond release activities; (2) potential for regulatory program cost savings; and (3) Office of Surface Mining (OSM) reporting of Government Performance and Results Act (GPRA) performance measures.

The Draft Audit Report determined that inspection and bond release activities are adequate. The Report also provided six recommendations addressing the use of risk assessment to determine inspection frequency for "low-risk sites"; implementation of cost saving suggestions provided by OSM and State inspectors and managers; revision of bond release GPRA measure to ensure that it is more outcome-based and that results can be controlled by OSM or state managers; requiring that performance agreements include amendment of State inspector procedures to ensure identification and severity of off-site impacts; adequate disclosure of sources and limitations of GPRA performance data; and revision of procedures to ensure both staff and management are accountable for accuracy of performance data. The attached response addresses the six recommendations.

If you have questions or require additional information regarding this response, please have your staff contact Sarah Donnelly, Acting Chief, Division of Regulatory Support at (202) 208-2826, or by email at: SDonnell@osmre.gov.

Attachment

**OFFICE OF SURFACE MINING
RESPONSE TO IG AUDIT RECOMMENDATIONS
(Report No. S-IN-OSM-0087-2003)**

OSM has reviewed the Draft Audit Report and the six recommendations. The following contains OSM's comments and responses on each of the six recommendations, as well as a few comments specific to the narrative of the draft report.

Report Narrative – OSM Comments

Executive Summary:

Page i – second paragraph; “OSM serves as the regulatory authority for coal mining and reclamation operations in 12 other states, most of which have little or no active mining.”

It should be noted that Washington ranks 17th among States in production (2002) with 5.8 million tons and Tennessee ranks 20th with 3.17 million tons. In addition, OSM also serves as the regulatory authority for mines on Indian lands with about 27 million tons produced in 2002.

Introduction – Background

Page 1 – second paragraph: “The regulation of surface mining is primarily carried out through grants and cooperative agreements with states and Indian tribes.”

Indian Tribes should be struck; we do provide regulatory grant funds to the Tribes but only for their training, not for them to regulate coal mining operations.

Potential for Regulatory Program Cost Savings

Recommendations:

1. **Consider using risk assessment to determine if the inspection frequency on post-Phase I and Phase II bond release and abandoned permits could be reduced.**

Response: OSM does not concur with this recommendation. Inspection frequency is specified by statute and the implementing regulations. Additionally, we believe that risk-based assessment already is built into the inspection process. We offer the following comments:

OSM Comments:

- The Surface Mining and Reclamation Act (SMCRA) at section 517(c) and the Federal implementing regulations at 30 CFR 840.11 (for State inspections) and 30 CFR 842.11 (for Federal inspections) specify the frequency of inspections.
- Although the Federal regulations do provide for a reduced inspection frequency for inactive and abandoned sites, OSM does not believe it would be prudent to revisit these Federal rules to obtain a further reduction in frequency. There is, however, some flexibility on the part of the individual States, since SMCRA provides that certain adjustments may be made on a State-by-State basis.
- In on-the-ground application, inspectors take into account their experience, existing site conditions and any special problems, as well as the scheduled frequency of inspection when deciding what to look at on a partial inspection. This is the practical application of risk-based assessment in the inspection process, and it is this approach that has resulted in the high incidence of compliance (only 5% of inspections in 2002 resulted in violations) noted by the auditors in their draft report.
- It also should be noted that - in many instances - a single inspectable unit may contain a mix of areas: those that contain active mining, as well as areas designated in the audit as "post-Phase I" and "post-Phase II." Generally, an inspector concentrates on the active area in a partial inspection, which, in effect, responds to concerns expressed by the auditors in this recommendation. Thus, while the recommendation may be "plausible," OSM does not believe that, in practice, the forecast cost savings will occur.

2. Consider the feasibility of implementing cost saving suggestions provided by OSM and State inspectors and managers.

Response: We have considered each of the "Suggestions for Reducing Costs" contained in the Draft Audit Report on pages 8-9. OSM is always open to and continues to find and implement new cost savings measures and will continue to do so, to the degree feasible, in the future. Our comments follow:

a. Increasing the use of helicopter over-flights for partial inspections.

Response: The use of helicopter over-flights remains an option for all offices. Depending upon cost, availability of equipment and

other factors, such over-flights can be effective in some situations. Currently in Kentucky, hourly rental rates exceed \$550 per hour, and, using the cost/inspection assumptions contained in the draft audit report, at least 13 “on-the-ground” inspections would be necessary to “break even.” In addition, to be an effective inspection method, the distance between mine sites should not be great, or the inspection should cover only a single large mine (more prevalent in the western States); weather and the time of year must be favorable; and vegetative cover conditions need to be discernable from a fly-over. One also must be aware that certain violations cannot be observed or measured from a fly-over, e.g., substandard water discharges.

b. Using digital cameras to decrease developing costs for inspection photos.

Response: Almost all personnel use digital cameras to document field observations. As prices decrease and durability under field conditions increases, usage will increase. OSM will continue both to encourage the States to use digital cameras, and to purchase digital camera equipment as appropriate for its own field personnel.

c. Eliminating unnecessary analysis criteria for lab samples.

Response: When considering possible changes to the analysis criteria, the overriding concern must be the need to ensure that the evidence produced is acceptable and defensible in hearings and appeals. That said, the current protocol for both State and Federal regulatory programs includes field testing to determine whether discharges are in compliance. If these tests indicate that a potential violation exists, the effluent is sampled and taken to a qualified laboratory for analysis. Laboratory testing usually is restricted to the parameter in question, rather than a broad suite of tests which are more expensive. Additionally, the States and OSM have the option of revising sampling requirements to meet the field situation, and many States have exercised that option.

d. Simplifying grant requirements (possibly have 3-year grants instead of 1-year).

Response: Regulatory grants to States are funded through annual appropriations, as provided in section 705(a) of SMCRA. Any change to the grant period would require Congressional level approval. OSM prefers to focus on its move, along with other Department of the Interior bureaus, to a new electronic grants

system which is anticipated to further simplify the grants process, as well as generate some economies.

e. Implementing electronic permitting.

Response: Currently, there is substantial nationwide implementation of this initiative. OSM and the States continue to encourage the submittal of permits electronically, and OSM continues to provide the necessary tools through its TIPS program for States to accept and process electronic permits. The resulting incidence of electronic permit submission continues to increase annually, e.g., Virginia now processes over 93% of its permitting actions electronically.

f. Decreasing OSM inspections because they duplicate State work.

Response: OSM's oversight inspections in primacy States are not duplicative of the State's inspections as primary regulatory authority. The purpose of State inspections is to ensure that coal mining operations are in compliance with the mining and reclamation requirements of the State's approved program. The purpose of OSM's inspections is to ensure that the State fully implements its approved program. The requirement for OSM's oversight inspection activity is established in section 517(a) of SMCRA, which states that "the Secretary shall cause to be made such inspections ... as necessary to evaluate the administration of approved State programs" OSM Directive REG-8, Oversight of State Regulatory Programs, provides the general framework and the flexibility to tailor the annual oversight program for individual States.

Each OSM Field Office conducts a limited number of comprehensive oversight inspections in compliance with the SMCRA requirement. No absolute number of oversight inspections is required; and, generally the number, type and purpose of the oversight inspections to be conducted during an evaluation year is developed in each State as determined by the Field Office and included in the annual performance agreement.

g. Reducing travel costs by bringing OSM trainers to the States rather than transporting inspectors to out-of-State classes.

Response: We agree that courses should be scheduled to minimize travel time and costs for students. Courses are held as

close as practical to the home office of the largest number of students scheduled for the course, and, for many classes, few or no students need to travel. We will continue to bring trainers to students' home offices and to look for ways to minimize travel, while meeting course objectives which frequently require field work at mine sites.

h. Improving quality of underground mapping.

Response: Although the agency with responsibility for improving underground mapping is the Mine Safety and Health Administration (MSHA) in the Department of Labor, OSM continues to work with MSHA and the States to improve the quality of underground mapping. For instance, OSM has sponsored several meetings with the States, Tribes and general public over the last year and a half to share information about state-of-the-art mapping practices. Additionally, we are in the planning stages of developing a benchmarking session on mine mapping and also are discussing appropriate curriculum for one or more high-end computer courses on mapping.

Reporting of GPRA Performance Measures

Recommendations:

3. **Revise the bond release GPRA measure to ensure it is outcome-based to the extent possible and is under the control of OSM or State managers.**

Response: OSM does not concur with this recommendation. Our comments follow:

OSM Comments:

- OSM understands that neither OSM nor the State has complete control over this measure, but they certainly can and do exert influence – both positive (encouraging operators to seek Phase III bond release) and as a necessary deterrent (not allowing bond release until all standards of Phase III reclamation have been met). OSM does not believe that exerting such influence should be considered a reporting weakness. The fundamental intent of GPRA is to have measures that show program results, not to have measures that are fully controlled by Federal program managers.
- OSM also must disagree that the measure is not outcome-based. Coal mining is a temporary use of the land, and one of the major objectives of

SMCRA is to restore coal-mined land, so that it can be returned to the landowner. Achieving this objective results in land capability demonstrated by successful revegetation on acres where approved post-mining land uses have been achieved at the time of Phase III bond release – an outcome of a successful SMCRA regulatory program. While Phase III standards can be achieved without bond release, Phase III bond release is the mechanism which, under regulation, is used to indicate achievement of this outcome, i.e., that the land has been returned to the landowner, and the site is no longer considered a coal mining operation.

4. **Include a requirement in the performance agreements with primacy States that State inspection procedures result in the identification of off-site impacts and their severity for each inspectable unit and that sufficient supporting evidence is provided to OSM.**

Response: OSM does not concur with the recommendation, since we cannot require States to adopt procedures or processes not required by statute or regulation. We offer the following comments.

OSM Comments:

- While OSM cannot require States to adopt these procedures, we do agree with the intent of the recommendation, in that any data collection or data management shortcomings should be addressed. Further, we agree that the inspector of a site generally is the party best able to accurately identify any off-site impacts and their severity.
- As with any field observation by individuals, there always will be some variation owing to differences in experience, training and technical background. Since State staff are the primary inspectors, we will continue to rely on their observations and reports. Whether the State or OSM compiles the data shouldn't change the nature of the data.
- In accordance with guidance contained in OSM's Directive REG-8, "Oversight of Regulatory Programs," issued July 26, 1999, concerning off-site impacts and the need for data verification and validation, OSM will continue to conduct back-up reviews and work with the States to ensure that GPRA data reported by inspectors is accurate, well-documented and consistent. For instance, since this audit review was conducted, OSM has been working with Kentucky to receive sufficient supporting evidence on off-site impacts for all inspectable units and will incorporate the process developed into the performance agreement for the 2005 evaluation year.

- And finally, when OSM's own field observations or a sample indicate that State data may not be entirely accurate, adjustments can be made.

5. Ensure there is adequate disclosure of the sources and limitations of GPRA performance data.

Response: OSM concurs with this recommendation and offers the following comments.

OSM Comments:

- OSM agrees that adequate disclosure of the sources and limitations of GPRA performance data is critical. As the OIG staff noted in our conference call of August 13, 2003, this information was provided in the FY 2001 and FY 2003 Reports. OSM will continue providing this information in future reports.
- In addition, OSM's Directive REG-8 "Oversight of Regulatory Programs" issued July 26, 1999, contains guidance specific to off-site impacts and the need for verification and validation of the data provided. We will review data presented in annual reports and ensure that we note any data limitations in future performance reporting of measures.

6. Establish procedures to ensure that accountability for the accuracy of the performance data is shared by both staff and management.

Response: OSM concurs with this recommendation and offers the following comment.

OSM Comment:

OSM Directive REG-8 "Oversight of State Regulatory Programs" contains guidance on data to be included in annual State evaluation reports. Although we must be aware of the fact that verification standards applied by a number of individuals with differing backgrounds and experience will show some variation, OSM will work with staff and managers to develop procedures to ensure that data verification and validation is conducted at both staff and management levels and is identified in future documents.

Status of Audit Recommendations

<u>Recommendation</u>	<u>Status</u>	<u>Action Required</u>
2 and 5	Resolved and implemented.	No further action is required.
4 and 6	Resolved; not implemented.	No further response to the Office of Inspector General is required. The recommendation will be referred to the Assistant Secretary for Policy, Management and Budget for tracking of implementation.
1 and 3	Unresolved	Reconsider and provide a response that states concurrence or non-concurrence with the recommendation. If concurrence, provide a corrective action plan that includes the estimated target date and titles of officials responsible for implementation.

Report Fraud, Waste, Abuse, and Mismanagement



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