

**OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT**

Annual Evaluation Summary Report

of the

Regulatory and AML Programs

Administered by the State

of

OHIO

for

Evaluation Year 2002

(October 1, 2001 to September 30, 2002)

**FINAL REPORT
December 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 OSM has approved as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Ohio Program and the effectiveness of the Ohio Program in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of October 1, 2001, to September 30, 2002. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Columbus OSM Office.

The following acronyms are used in this report:

ABS	Alternative Bonding System
ACOE	US Army Corps of Engineers
ACSP	Appalachian Clean Streams Program
AMD	Acid mine drainage
AMDAT	Acid mine drainage treatment and abatement plan
AML	Abandoned mine land
ATP	Authorization to Proceed
AWARE	Alliance for Watershed Action and Riparian Easements
BFO	Bond Forfeiture Order
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
EY	Evaluation Year
NEPA	National Environmental Policy Act
Ohio	Ohio Division of Mineral Resources Management or State of Ohio
OSM	Office of Surface Mining Reclamation and Enforcement
SMCRA	Surface Mining Control and Reclamation Act
TMDL	Total Maximum Daily Load
USFS	U.S. Forest Service
VER	Valid Existing Rights

II. Overview of the Ohio Coal Mining Industry

Forty-one mining companies produced 25.8 million tons of coal in 2001, an increase of nearly 15 percent over 2000 production. The total coal sold in 2001 was 25.2 million tons with a value of \$616.9 million. The average price per ton of coal was \$24.35, almost the same as in 2000.

The number of coal-producing companies in Ohio decreased from 44 in 2000 to 41 in 2001. The number of producing mines decreased from 113 to 112. During 2001, surface mining operations at 102 mines produced 12.5 million tons (48 percent of total production). Coal production from surface mines in 2001 increased by two million tons, about 19 percent from 2000. Underground mining at ten mines produced 13.3 million tons (52 percent of total production). Coal production from underground mines in 2001 increased by 1.4 million tons, about 12 percent from 2000. Longwall mining of 8.1 million tons accounted for 61.2 percent of the total underground production (32 percent of total production).

Ohio's coal industry employed 2720 people in 2001, almost the same as in 2000. Production employees, numbering 1587, accounted for 58 percent of the 2001 coal work force. Wages earned by all coal industry employees in 2001 totaled more than \$142.5 million, up slightly from 2000.

Ohio retained its 14th place rank of the 26 coal-producing States in the nation and produced 2.3 percent of the nation's coal in 2001, up from 2.1 percent in 2000. Ohio ranked third nationally in coal consumption, behind Texas and Indiana.

During this review period, mining operations permanently stopped at two large underground mines that had produced over four million tons annually. Longwall production began at a newly reopened underground mine that is expected to compensate for most, if not all, of the loss in production from the two closed mines.

Ohio nominated two mine sites for OSM's Excellence in Surface Mining Awards in a category for the special 25th anniversary of the surface mining law. One was the American Electric Power site known as "The Wilds." This site won the OSM Director's Award in 1991. The second site was Peabody Coal Company's Broken Aro Mine that won an OSM award in 1994. Both sites demonstrate extraordinary wildlife habitat as the post-mining land use and are available for the public to enjoy.

(Data source: Ohio Geological Survey, Reports on Ohio Mineral Industries)

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

As reported in previous oversight reports, the Ohio Division of Mineral Resources Management (Ohio) has continued several efforts to keep the public informed of activities related to mining and reclamation, in addition to the routine public participation opportunities specified in the Ohio program. Ohio did not implement any new public participation initiatives in 2002, but has continued the same outreach activities as reported in past years.

Ohio has continued to meet with a group of industry representatives on a quarterly basis to discuss field and program concerns and issues. This outreach effort began as the Permitting Workgroup. It has continued as a very effective way of communicating on many issues related to the regulation of coal mining.

Ohio has also continued to conduct outreach to local government agencies in conjunction with the Mine Subsidence Insurance Program regarding construction of buildings over underground mines and the potential for future subsidence. Ohio issued a publication called "Abandoned Mine Land Development Guide: ASK Before You Build." This guide provides detailed information about types of AML problems that should be considered before building or developing on or in the vicinity of AML areas.

In addition to outreach efforts by Ohio, OSM also conducts outreach to the public. OSM, likewise, did not implement any new public outreach initiatives during 2002. OSM continues to provide a periodic newsletter to interested parties that have requested to be on our mailing list. OSM also assisted Ohio by providing training to a local high school class that will be monitoring water quality improvements from an AML project site.

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

A. Program Accomplishments and Initiatives

On-the-Ground Accomplishments

Ohio continues to effectively administer SMCRA regulatory and AML programs to protect coal-field citizens and to restore land to pre-mining conditions. Overall industry compliance on active mine sites continues at a high level. The on-the-ground, end-result of the mining and reclamation process is predominantly restoration of mined lands to a pasture/grazing post-mining land use, with permanent water impoundments interspersed to support the land use.

OSM's evaluation of off-site impacts based, in part, on enforcement actions taken by Ohio, identified impacts outside permitted areas with eight occurrences classified by Ohio as major off-site impacts. Most of these occurrences were due to landslides from mine sites or spoil placement outside the permit boundary. Other off-site impacts were generally limited to minor or moderate hydrologic impacts as a result of mining.

Observations regarding industry compliance and off-site impacts are supported by OSM's findings from 222 site visits on regulated mine sites (65 of these were to gather water quality data on sites with potential to produce acid-mine drainage after reclamation) and other oversight evaluations conducted during this review period. In addition, OSM conducted 47 site visits on AML projects and AML emergency or potential emergency projects to monitor Ohio's AML activities. Section VII of this report contains additional information on the number of inspections and site visits conducted.

During the 2002 Evaluation Year (EY) (October 1, 2001, through September 30, 2002), the Ohio mining industry, in conjunction with the Ohio Division of Mineral Resources Management, achieved final reclamation (Phase III bond release) on 5888.3 acres, compared to 8154.7 acres last year; established soil replacement and vegetation for Phase II bond release on 3692.7 acres, compared to 7709.1 acres last year; and backfilled and graded mining areas for Phase I bond release on 3556.6 acres, compared to 6898.7 acres last year. Part of the decrease in the number of acres achieving bond release this year may be attributed to an unusually high number of acres released last year due to improvements in the administration of the bond release process and resulting approval of a backlog of releases last year. Ohio issued bond forfeiture orders on 32.1 acres and achieved final reclamation on 84 acres on five previous bond forfeiture sites.

Program Accomplishments and Initiatives

Regulatory Program Accomplishments

Strategic Plan

Ohio has developed a very extensive EY 2003 strategic plan with very detailed goals, objectives, strategies, and actions. The plan includes many new initiatives that will improve implementation of many aspects of the program. Managers meet on a quarterly basis to review their progress on

meeting each of the actions assigned to them. Development and implementation of the plan is very helpful to the overall management of four major program areas implemented by Ohio.

MERIT Program

Ohio completed its Mineral and Energy Resources Inspector Training (MERIT) program that they started in January 2001. This program provided training to all field inspectors in three regulatory program areas: industrial minerals, oil and gas, and coal. The program provided two or more days of training per month in each program area over a six-month period. Ohio successfully completed the coal regulatory segment of this training during EY 2002. OSM representatives attended and participated in several segments of the training and found the session very beneficial. The cross-training between program areas has enabled faster transition when inspectors, previously unfamiliar with coal regulatory requirements, filled coal regulatory inspector vacancies. This has occurred frequently over the past two years.

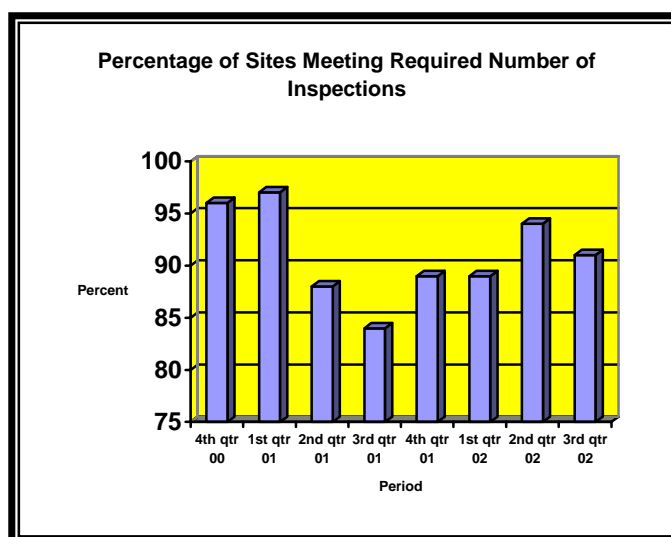
Off-Site Impact Data Collection

Ohio implemented its own process for collecting and reporting off-site impacts identified during their inspections. The process uses the existing civil penalty assessment process to identify any violations that result in off-site impacts and provides the degree of impact and the resources that were impacted. Ohio implemented this process in February 2003. OSM's EY 02 summary of off-site impacts reported later in this report combines data from Ohio's new system, OSM's review of Ohio's enforcement and citizen complaint files, and observations during OSM oversight inspections.

Inspection Management

Ohio has continued to effectively manage its inspection workload. Ohio provides OSM with quarterly summaries of the inspection history on each permit with a summary accounting of the percentage of sites that received the required number and frequency of inspections. The chart provides the overall average of sites receiving the required number of inspections over the past two years.

The percentage of sites that received the required number of inspections improved from 89 percent in the first quarter of 2002 to 94 percent in the second quarter and dropped slightly to 91 percent in the third quarter. Part of this improvement can be attributed to Ohio's completing its MERIT Program during the second quarter of 2002.



AML Program Accomplishments

Emergency Program

Ohio identified and abated 30 AML emergency conditions during EY 2002. The emergency projects addressed 24 subsidence-related problems, three dangerous landslides, two burning gob piles and one mine blow-out.

AMLIS Accomplishments

Ohio reported the following AML project completions as accomplishments in the Abandoned Mined Land Inventory System (AMLIS):

- 0.4 miles Clogged Stream (CS)
- 114.9 acres Clogged Stream Lands (CSL)
- 2950 lineal feet Dangerous Highwall (DH)
- 0.7 acres of Dangerous Landslide (DS)
- 3.0 acres gob (GO)
- 2 Hazardous Equipment and Facilities (HEF)
- 1 Hazardous Water Body (HWB)
- 17 Portals (P)
- 38 Polluted Water Human Consumption (PWHC) (Water Replacement)
- 12.7 acres Subsidence (S)
- 8.0 acres Surface Burning (SB)
- 6 Vertical Openings (VO)
- 3.0 acres of Priority 3 gobs



Appalachian Clean Streams Program (ACSP)

Ohio continues to actively participate in this initiative. Ohio continues to support and encourage local watershed groups who want to partner with various government agencies, industry, and others who have an interest in abating acid mine drainage (AMD). This year's activities are reported by watershed as follows:

Monday Creek: The Monday Creek Restoration Project continues to be Ohio's most active and well-organized watershed group involved in AMD abatement. Among the current activities of the group are the following:

AMD & ART Project – The conceptual design for this passive treatment system in Murray City has been completed, and the group is currently in contract negotiations with a consulting firm to complete the final design within 20 weeks. Construction will be bid as soon as the design is completed.

U.S. Army Corps of Engineers (ACOE) Feasibility Study - This study is combined with the Ohio Environmental Protection Agency's (OEPA) Total Maximum Daily Load (TMDL) study. West Virginia University is developing a draft hydrology model for the entire watershed that is based on the work done by the ACOE and the OEPA. This should be completed by mid-November.

Rock Run 24 Cooperative Agreement Project - This project was completed in mid-October of 2001. Initially the upper end of Rock Run was restored to a pH of 6.0+. However, the iron in the mine discharge, which had been sampled for over a year, has increased significantly, causing the limestone to become coated and less effective. The upper end of Rock Run has re-acidified, but is about one pH unit above what it was before the project was completed.

Salem Hollow Project - This project, which sealed off a stream-capture subsidence, was completed on June 13, 2002. The new channel is functioning well.

Essex and Orbiston Subsidence Projects – The U.S. Forest Service (USFS) has completed construction work on sealing off subsidence stream captures near the Essex AMD discharge and Orbiston.

Grimmet Project – The design for reclaiming a 2.3-acre gob pile and, installing 1600 lineal feet of limestone channel and an alkaline recharge trench has been completed. Once the site receives NEPA clearance, it will be bid for construction.

Jobs Doser – This project on USFS land was only recently cleared by the USFS for construction. Bidding for construction of this project should be completed in the near future.

Sunday Creek: The watershed group has elected not to proceed with the proposed ACOE Feasibility Study due to the time needed to complete such a study. However, they have completed a watershed management plan as required by their OEPA 319 planning grant. They have also obtained most of the information needed to apply for hydrologic unit approval for AMD set-aside funding. The group also applied to OSM for a watershed cooperative agreement for the Congo Subsidence Stream Capture project. OSM should issue this agreement in EY 2003.

Raccoon Creek: The Raccoon Creek Improvement Committee (RCIC) has completed the final draft of its management plan, and is awaiting OEPA approval of the document. OSM approved the headwaters AMDAT plan for set-aside funding in July 2002, and work is progressing to complete an AMDAT plan for the Middle Basin. OEPA has approved funding for the Middleton Run project, and the final designs for the Carbondale II and Mulga Run projects are nearly complete. The preliminary design for the Flint Run project has been completed.

Huff Run: The Farr Tipple AMD project was completed at the end of August, and the pH has greatly improved. However, higher than anticipated flows are not allowing all the iron to settle out. The Linden site was bid out and contracted after receiving a watershed cooperative agreement from OSM. The project was 65 percent complete as of September 30, 2002. The watershed group also obtained another watershed cooperative agreement from OSM for the Huff Run Acid Pit #1 project, which is currently being designed. Consulting firms are designing several other projects and the ACOE is working on a project design.

Moxahala Creek: The watershed group has received OEPA approval for its watershed-planning grant. Ohio University completed a study of the Black Fork sub-watershed in June 2000, that has much of the information needed for hydrologic unit approval by OSM. This should help in developing the watershed plan and implementing projects for construction.

Wills Creek: Ohio has continued to work with the ACOE on projects around Wills Creek Reservoir. Construction on the Linton Township Road project began in the summer of 2002 and will proceed through the fall. This watershed does not have any citizen-based group actively involved at the present time.

Kimble Creek: The USFS has contracted with a consultant to perform an engineering and ecological assessment for this project. The pyrolucite process will be tried in a pilot project to determine if it is the preferred alternative.

Lick Run: This project, located in the drainage of Piedmont Lake, was undertaken by the ACOE in coordination with the Ohio Division of Wildlife and the Division of Mineral Resources Management. ACSP funds were used for match. Construction began in August of 2001, and was completed this summer. Permanent access roads have been constructed into the site, and sediment ponds have been reconstructed to retain metals flocculant after the AMD is dosed with limestone. Monitoring is currently being done to establish the dosing rates needed for metal removal. The goal of this project is to restore a 32-acre embayment area on Piedmont Lake.

Yellow Creek: The watershed group has continued monitoring efforts and holding regular meetings. The ACOE has completed its initial study on the North Fork AMD discharge.

Aerobic treatment ponds were proposed. However, the site is being dropped as the study showed the AMD to have only minimal impacts on aquatic life. The group has identified its first project site, but progress has been slowed because the Soil and Water District assisting with project development has been short of staff.

Leading Creek: The Leading Creek Improvement Committee Advisory Council has continued to meet regularly. Several landowners in the watershed have been approved to install vegetation filter strips in the buffers of tributary streams to reduce sedimentation from farming activities. AMD is mostly encountered in the Thomas Fork tributary that enters Leading Creek near its mouth, and the impact of the AMD is less significant due to the backwaters of the Ohio River. Other tributaries contain AMD in lesser amounts, and are being evaluated for potential project sites. However, sedimentation, much of it from past mining, is the chief cause of impairment in Leading Creek. Most of the mines have been reclaimed, but the sediment is not scouring out of the lower sections of the tributaries or Leading Creek itself. Stream modifications and sediment removal are being considered. Ohio is proceeding with the design of the Titus Road Reclamation project.

Mahoning River Tributaries: The Alliance for Watershed Action and Riparian Easements (AWARE) is an existing group that recently has become involved with AMD in two tributaries to the Mahoning River, Mill Creek, and Yellow Creek. AWARE is active in Mahoning County and is affiliated with the Mahoning County Metro Parks. Ohio is slated to do exploratory drilling this fall at the largest AMD source in the watershed, as a result of last year's meeting with Dr. Paul Ziemkiewicz and Dr. Jeff Skousen.

B. Program Issues

AMD Prevention

As has been reported in several previous evaluation reports, OSM developed a regional inventory of long-term AMD producing sites in EY 99. The inventory included active and bond-forfeited sites with actual and potential long-term treatment liabilities. A preliminary inventory developed by OSM and Ohio contained 21 potential AMD-producing sites, including sites that are being actively mined and treating AMD, and those that are reclaimed but have a remaining AMD discharge. Of the 21 sites, 13 are associated with coal refuse disposal, five involve abandoned underground mine drainage, and three are caused by toxic materials in surface mines. Thirty-six other sites had indications that AMD production could potentially become a problem in the future.

This evaluation year, OSM continued to review and refine the AMD inventory by verifying conditions on the sites through site visits. OSM conducted sixty-five site visits to follow up on the previously identified AMD problems. Most of the actual inventory sites were reviewed twice, once during the low-flow period and once during the high-flow period, to better characterize the water chemistry and flow variations on the sites. As reported last year, one site from the long-term inventory will be removed due to improved site conditions. Four sites will be moved from the list of potential sites to the long-term inventory list based upon inspection findings after discussions with Ohio.

OSM will continue to evaluate these sites in addition to any new sites found during normal routine oversight inspections. OSM and Ohio will continue to work together to refine the site inventory and develop strategies for abating and/or treating sources of AMD on these sites during EY 2003.

Citizen Complaint Process

OSM's 2001 review of Ohio's citizen complaint process identified areas of the complaint process that needed improvement, especially regarding timely final resolution of water supply complaints. Ohio acknowledged that improvements are needed and has developed a database to track the status of all complaints. The database is being tested by one district office. Ohio is also reviewing all aspects of the complaint process and expects to implement the database and any necessary changes to the process by March 1, 2003.

Longwall Mining

As a result of OSM's EY 2001 report on longwall mining, Ohio agreed to review and revise their current public information regarding longwall mining and make it more available to landowners upon request. Ohio has developed a draft public information pamphlet, but has not yet made it available. Ohio provided a training session on the regulations and policies regarding longwall mining for inspectors responsible for underground mines. During this training, Ohio reiterated their current policies regarding water supply replacement and documenting and tracking all impacts resulting from longwall mining to ensure proper and timely mitigation. As a result of that training, several policy questions were raised that required follow up by Ohio managers. Ohio also developed an inspection checklist for underground mines. The main finding of the EY 2001 report concerned the timeliness of permanent replacement of agricultural water supplies. OSM did not conduct any follow-up during EY 2002 to determine if permanent water supply replacement is occurring more timely. However, OSM is aware that efforts to replace agricultural water supplies on several properties above one of the mines included in the study were underway during EY 2002.

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, OSM is collecting the findings from performance standard evaluations for a national perspective in terms of the number and extent of observed off-site impacts and the number of mined and reclaimed acres that meet the bond release requirements for the various phases of reclamation. Individual topic reports that provide additional details on how OSM conducted the following evaluations and measurements are available in the Columbus OSM Office.

A. Off-Site Impacts

OSM considers evaluating and reporting the number and extent of off-site impacts as one measure of the success of the Ohio regulatory program in controlling the adverse impacts associated with mining activities.

The period for this evaluation was from July 1, 2001, to June 30, 2002. OSM identified off-site impacts by reviewing all Ohio enforcement actions; all citizen complaints received by Ohio and OSM; and by conducting oversight inspections that considered impacts that may have occurred outside the areas authorized for mining and reclamation activities. New to this year's evaluation was the implementation of Ohio's own process for collecting data on the number and degree of off-site impacts. Ohio's process was implemented in February 2002, and improved the process of identifying and reporting off-site impacts. Ohio's staff was first trained in the process, and then began reporting impacts following the issuance of every enforcement action. Information related to an impact is provided on the inspector's violation assessment worksheet.

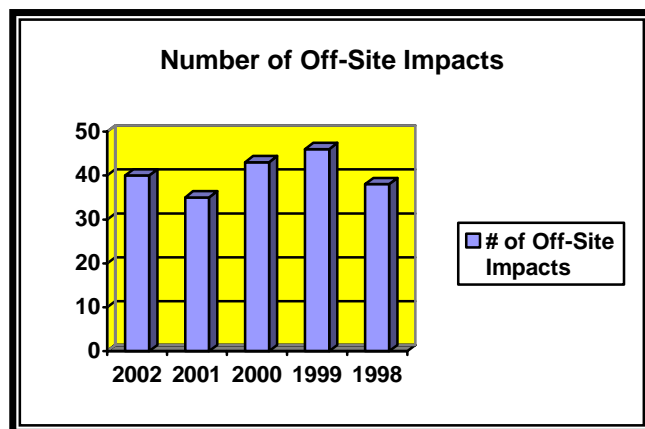
OSM reported a total of 40 off-site impacts on 28 mine sites, based on information gathered by OSM and Ohio. Ohio inspected approximately 333 mine sites during the EY 2002 evaluation period. Based on this review, 305 of the 333 mine sites, or 92 percent of the mine sites in Ohio, had no identified off-site impacts. There was no change in the percentage or the number of sites free of off-site impacts from EY 2001.

Table 4 summarizes the number of resources affected and the extent of the off-site impacts identified.¹ The 40 off-site impacts were reported as: eight causing a major impact, eight causing a moderate impact, and 24 causing minor impacts. These 40 off-site impacts affected 60 resources of people, land, water, or structures. The eight major impacts were due to landslides, road construction, spoil placement, and diminution of water supplies that occurred outside of the area authorized by the approved permit. Impacts were classed as major because of the affect landslides had on a public roadway or a landowner's property, problems created by affecting an area without prior approval and plan, the duration of water loss, and the difficulty in providing replacement. All eight major impacts were associated with two mining companies. Ohio took

¹ Table 4 data reflects a July 1, 2000 to June 30, 2001, review period. This review period is necessary for completing the off-site impact report by the end of the EY.

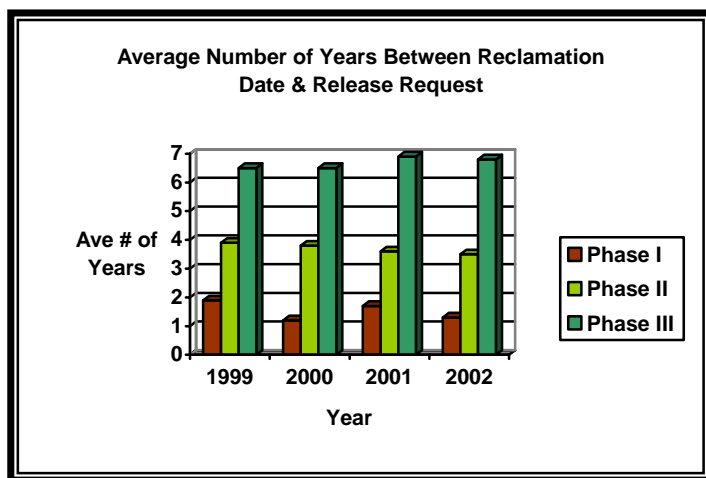
appropriate and reasonable measures to address the violations and the impacts that resulted. The moderate and minor impacts were related to a variety of issues, with most of the minor impacts related to water quality violations.

In comparison to the total number of violations (158) cited by Ohio, inspections conducted by Ohio and OSM (3,464 by Ohio and 206 by OSM), and the total number of citizen complaints received (99), the number of off-site impacts identified is small. However, this does not diminish OSM's goal of reducing the number of impacts by working with Ohio and pursuing improvements to the Ohio program. The chart shows that the number of off-site impacts over the past five years has remained relatively stable. The percentage of sites free of off-site impacts has also remained stable over the same period.



B. Bond Release/Reclamation Success

OSM conducted inspections on 73 segments on 44 permits or 28 percent of the reclamation segments that the Ohio District Offices approved for bond release between July 1, 2001, and June 30, 2002. OSM found that Ohio's approval of bond releases on these segments was proper with one exception. On one site, OSM identified permanent impoundments that had not maintained a stable water level and some highwall backfill that had settled. OSM and Ohio are reviewing these program areas to prevent bond release in the future should similar conditions exist on other sites. Table 5 in the Appendix tabulates information on bond releases processed by Ohio during the review period².



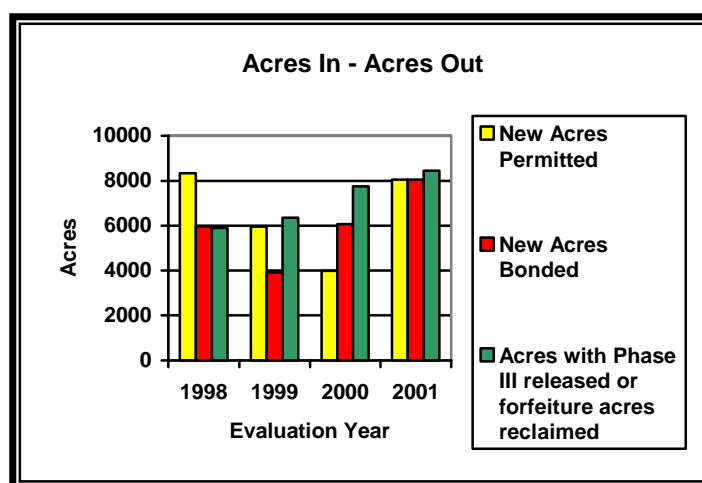
OSM measured contemporaneous reclamation using information provided by Ohio for all Phase I, II, and III bond releases the District Offices approved between July 1, 2001, and June 30, 2002. The information provided the date the permittee first identified a segment for reclamation and the date the permittee submitted a bond release request that DMRM approved for that segment. This portion of the evaluation is based on Ohio's approval of bond release on 261

² Table 5 provides data on bonds released by Ohio between October 1, 2001, and September 30, 2002. OSM's review of reclamation success covers the period from July 1, 2001, to June 30, 2002, to allow completion of the report by the end of the EY.

segments totaling 10,583.6 acres. The chart provides the average time frames for each phase of bond release over the last four years. Findings from this evaluation concluded:

- Time frames for completing Phase I reclamation ranged from 0.1 years to 14.8 years and averaged 1.3 years on 73 Phase I releases approved by DMRM. Bond release was requested within one year on 57 percent of the segments approved for phase I release.
- Time frames for completing Phase II reclamation ranged from 0.6 years to 14.8 years and averaged 3.5 years on 78 phase II releases approved by DMRM. Bond release was requested within two years on 36 percent and within three years on 52 percent of the segments approved for phase II bond release.
- Time frames for completing Phase III reclamation ranged from 0.1 years to 14.8 years and averaged 6.8 years on the 110 phase III releases approved by DMRM. Bond release was requested within seven years on 65 percent of the segments approved for phase III bond release.

The data chart shows that the number of acres receiving phase III bond release has equaled or exceeded the number of new acres being permitted and bonded over the past three years. This one measure of “acres-in to acres-out” demonstrates that for the overall program, final reclamation is being achieved on more acres than are being permitted.



Ohio has continued to monitor sites where mining has been completed for more than two years and the entire site has not achieved a phase II bond release. As of August 2002, there were 35 sites that met these criteria, reduced from 38 permits the previous year. Ohio also monitors sites where mining has been completed for more than six years and but the site has not achieved a phase III bond release. There were 35 permits that met these criteria as of August 2002, reduced from 42 permits the previous year.

Land use statistics gathered during 57 OSM inspections continued previous trends with 68 percent of the permitted acres having an undeveloped pre-mining land use and 83 percent of the land having a pasture/grazing post-mining land use. Crop productivity records reviewed on 26 segments approved for phase III bond release that required a demonstration of restored crop productivity indicated the reported average hay production on the total of the released acreage was 3.44 tons per acre, exceeding the total reported county average by 28 percent.

Remining proposed on 43 permits reviewed during OSM site visits is planned to address the following AML problem areas:

- Remove about 70 miles of abandoned highwalls
- Reclaim about 4700 acres of unreclaimed mine spoil
- Eliminate about 48 mine openings or entries

As of the date of the OSM site visit, remining on these 43 permits had:

- Eliminated about 60 miles of highwalls
- Reclaimed about 2800 acres of unreclaimed mine spoil
- Eliminated about 100 mine entries or openings.

The data shows the important role that remining plays in eliminating AML conditions.

VI. OSM ASSISTANCE

During the evaluation period, OSM provided assistance to Ohio on different initiatives. The purpose of this assistance was to help Ohio more efficiently implement their program. Both OSM and Ohio found that working together cooperatively on teams to resolve problems has been positive and successful. Listed below are brief descriptions of the specific areas where OSM assisted Ohio this year.

MERIT Training

OSM assisted Ohio with their MERIT Program. The purpose of this program was to train current coal, industrial minerals, and oil and gas inspectors in all three program areas. OSM assisted with the coal regulatory training segment during 2002 by making presentations on contemporaneous reclamation requirements and OSM inspections and by assisting with field exercises.

Large Impoundment Review

Ohio and OSM have continued to work together by conducting field reviews of four large impoundments that overlie underground mines in Ohio. As part of the investigation, Ohio has requested specific information from the permittees for the impoundments. Two permittees have submitted the requested information that Ohio and OSM are currently reviewing. Information from a third permittee is due in November 2002.

Assistance on Bond Forfeiture Database

OSM assisted Ohio in developing an electronic database application to track reclamation on bond forfeiture permits. The application provides information to Ohio to evaluate and rank forfeited permits based on reclamation costs, time since forfeiture, and environmental impacts. This information will enable Ohio to systematically complete reclamation on sites to minimize environmental impacts while maintaining control of older forfeiture sites with fewer environmental impacts.

VII. General Oversight Topic Reviews

OSM Oversight Inspections

OSM completed 72 site visits for general compliance monitoring of coal mining operations during the evaluation period to assess compliance with performance standards; 54 site visits to evaluate bond releases approved by Ohio; 65 site visits to obtain seasonal water quality and quantity data at sites with potential for AMD; 19 site visits to collect information to support OSM's topical review of Ohio's bond forfeiture program, 12 other mine site visits to follow up on past issues, and five complaint referrals without site visits. Over 29 percent of OSM's site visits were to collect water quality data in support of OSM/Ohio's AMD inventory initiative. In addition, OSM conducted 32 site visits to monitor AML reclamation project construction and 15 site visits to evaluate potential AML emergencies or to monitor AML emergency project construction.

OSM conducts general compliance monitoring oversight inspections to learn how well Ohio is implementing its program by reviewing the on-the-ground impacts of mining operations. Other inspections are directed at very specific program areas such as bond releases or special oversight studies. OSM inspections identified issues related to permanent impoundments, AMD, highwall backfill settlement, and hydrologic impacts. Hydrology issues like AMD and impacts to water supplies continue to be the cause of most off-site impacts, and are a focus of both agencies for improvement.

Citizen inquiries and complaints to OSM alleged violations associated with blasting, protection of a historic structure, impact to a municipal water supply, approximate original contour, and objection to bond release. Whenever a written complaint was received, OSM transmitted the complaint to Ohio through the formal Ten-Day Notice process. All but one complaint received during EY 2002 have been resolved. Although Ohio has completed its investigation on the one remaining complaint, OSM is conducting further technical evaluation of Ohio's response concerning alleged impacts to a municipal water supply.

The results of OSM inspections related to OSM special studies concerning bond release, drainage control, coal waste disposal, contemporaneous reclamation, bond forfeiture, and off-site impacts are further discussed under separate topics elsewhere in this report.

Bond Forfeiture Program

OSM completed a review of Ohio's bond forfeiture process including the effectiveness of the Ohio alternative bonding system (ABS) and the timeliness of reclamation of bond forfeiture sites. The scope of the review primarily focused on Ohio's bond forfeiture activity between January 1993 and January 2002, on permanent program coal mining sites. However, the review acknowledges that Ohio's ABS has responsibility for pre-interim and interim program coal mining sites and non-coal sites. OSM's last in-depth oversight review of this program area was completed in July 1993. An actuarial report on the condition of Ohio's ABS was also completed in 1993 as a result of a 1991 OSM 732 notification.

Ohio receives about \$1.7 million annually from the Reclamation Forfeiture Fund to supplement the bond collected. About \$1.25 million is available annually for construction with the remaining \$450,000 used for administrative and design costs. The current estimated total liability to the Reclamation Forfeiture Fund is about \$9.6 million, including \$3.9 million for initial construction on coal forfeiture sites and about \$5.7 million for maintenance projects, pre-permanent program forfeitures, and non-coal forfeitures. Based on current revenue and projected expenditures, it would take over three years to complete construction if Ohio worked only on the currently unreclaimed coal mine forfeiture sites. Ohio's five-year plan includes many projects in addition to new construction on forfeited coal sites. It will take more than seven years to eliminate the current total liability considering annual income to the fund available for construction. This estimate does not consider the possibility that surety companies may not reclaim all of the current surety projects and that additional bond forfeitures will occur.

It has been an average of four years since bond forfeiture orders were issued on most of the unreclaimed coal forfeiture sites. Adding up to seven years before all current coal forfeitures are reclaimed means that some sites will not be reclaimed for well over eleven years. There are a few examples where eleven or more years have already passed since bond forfeiture orders (BFO) were issued.

Ohio has ensured that reclamation of forfeiture sites complies with the general performance standards. Ohio's strategic plan assigns a high priority to completing reclamation of bond forfeiture sites. Ohio has developed a five-year plan for prioritizing and reclaiming most of the



current forfeiture sites. However, Ohio has no mechanism to adjust bond rates. The ABS cannot be managed or adjusted for inflation, added liability, decreased coal/mineral production, or other changes to income or liability. Therefore, as liabilities increase, the time it takes to accomplish reclamation of forfeited sites will also increase.

The current ABS does not support timely reclamation of all forfeited sites. Based on statistics developed since 1982, Ohio's ABS cannot provide timely reclamation of forfeited sites until it is revised to provide a managed fund that is monitored, audited, and adjusted to reflect changes in liability and income or the bond rate is adjusted to reflect the actual cost of reclamation.

Ohio has met with the coal and non-coal industries regarding the condition of Ohio's ABS and the need to make changes. This review should provide information that will help encourage needed changes to take place.

OSM recommended the following:

- The report was not based on an actuarial analysis and provides no long-term projection of the solvency of Ohio's ABS. The report describes the current condition of the ABS and projects how long it will take Ohio to eliminate the current liability under current funding. Based on the limitations of this report, Ohio needs to consult with a state agency or other sources with actuarial expertise to develop a sound, long-term funding mechanism for Ohio's ABS that supports timely and complete reclamation of all forfeited sites. The goal should be that the ABS and/or site-specific bond provide adequate funding so that Ohio can reclaim all forfeited sites within two years or less of the BFO.
- In addition to funding changes, the ABS program should include a formal process or charter that describes how the ABS will be administered and by whom. The process should provide Ohio the authority to adjust bond rates to reflect changes to mining and reclamation conditions on individual mine sites based on an assessment of reclamation liability. It should provide authority to periodically adjust taxes/fees that support the ABS based on audit and analysis of the fund. The process should include mandatory periodic audits and formal reporting of the condition of the ABS, based on sound actuarial and accounting principles, that demonstrate assets and liabilities and the need for adjustments.
- Ohio must revise the current ABS or develop other funding mechanisms that will address long-term treatment of AMD that may be identified on mine sites. Although Federal rulemaking is anticipated on this issue, Ohio should consider potential funding mechanisms as they contemplate changes to its ABS.
- Ohio has changed its interpretation of Ohio Revised Code 1513.18(B) regarding the priority of completing reclamation of forfeited coal mine sites from that on which OSM based its approval of that program provision. Therefore, Ohio must submit a program amendment to OSM. The amendment must explain this change and demonstrate how Ohio's ABS will provide sufficient resources to ensure timely reclamation of forfeited coal mine sites, with full consideration of the additional liability placed on the ABS for reclamation of non-coal forfeiture sites.
- Ohio and OSM should revisit the terms of the Improvement and Monitoring Plan in light of other actions that may result from this review.

OSM will continue to work with Ohio as they develop necessary changes to the bonding program to ensure timely reclamation of forfeited sites.

AML Emergency Program

OSM completed a review of Ohio's AML Emergency Program. The objective of the review was to determine the amount of time Ohio takes to respond to and abate AML emergency conditions. The scope of the review included 261 AML emergency projects completed between October 1, 1992, and August 1, 2001.

OSM's review determined that, on average, Ohio conducts an initial site investigation within two

Event	Average Days	Range of Days
Initial Investigation of Complaint	2	0-4
District Processing	2.9	2-10
Columbus Processing to receipt of Scope of Work by OSM	22.6	10-50
OSM Processing	2	1-10
Contract Time OSM Approval to Start of Construction	37.7	0-146
Complaint received Until Construction Started	67.7	28-121
Amount of Time for Construction (Abate the Emergency)	37.7	1-146

days of receiving a complaint of a potential AML emergency. Ohio's District Offices refer the complaint to the Columbus office for processing within 2.9 days, on average. The Columbus office processed the projects in an average of 22.6 days. Processing includes initiating engineering design, contracting procedures, initiating consultations with the Ohio Historic Preservation Office and the Ohio Division of Natural Areas and Preserves, geo-technical investigation, preparing the finding of fact, and obtaining an eligibility determination. A

scope of work is then forwarded to OSM for a determination on whether the site conditions meet the requirements for declaring the project an emergency. OSM provided Ohio an emergency declaration in an average of two days.

After Ohio receives OSM's declaration it takes an average of 37 days to issue the authorization to proceed for a contractor to begin work. The average time between receiving a complaint and beginning construction is 67.7 days. On average, it takes an additional 37.7 days for a contractor to complete construction and abate a typical AML emergency.

OSM suggested and Ohio agreed to improve monitoring and tracking of their current processes and asked OSM to assist in developing improvements to the tracking system.

Distribution of Personnel and Fringe Benefits Costs

OSM reviewed Ohio's procedures for distribution of personnel and fringe benefits costs among their various programs. OSM found no instances where Ohio had charged the wrong program area for personnel and fringe benefits.

OSM did find that Ohio does not have any written procedures or guidance concerning their payroll system and how employees should charge their time. Some of the supervisors are providing oral guidance to their employees as to what account(s) they should charge. The Fiscal Staff has agreed to work with OSM to develop this written guidance.

OSM found that Ohio did not have documented justification to support the percentages they use in their salary distributions with the Fiscal and Administration sections in the Columbus office.

Rather, they use percentages based on their budget or percentages that were established in the past. The Fiscal Staff has agreed to work with OSM to establish an acceptable method for establishing these procedures.

Ohio does not properly draw down Federal funds on their Regulatory Grant for personnel and fringe benefit costs in accordance with generally accepted methodology. Ohio is working with the State payroll systems programmers to modify their system to allow an automatic split funding. In the interim, OSM recommended that Ohio alternate pay periods between the State and the Federal funds.

Ohio's AML Construction Monitoring

OSM reviewed Ohio's construction monitoring on eight completed, non-emergency AML projects. The review showed that inspection frequency and the level of documentation was adequate in most instances. The review also found that the inspection diary being used was inadequate due to lack of space and a lack of durability due to broken binders and water staining.



OSM recommended to Ohio that contractors be required to notify inspectors in advance of beginning construction; AML supervisors identify critical inspection items and review reports; and that the diary be replaced with a better method of documentation. Ohio has revised its bid documents to require inspector notification, instructed its supervisors to routinely review inspection reports, and is trying different methods of documenting construction inspections.

Public Participation in Ohio's AML Program

A review of public participation in Ohio's AML Program showed that Ohio has continued to follow its State Plan by holding annual meetings regarding its program and list of proposed projects. However, the review also showed that these meetings were not well attended. OSM recommended that Ohio consider amending its plan so that meetings can be scheduled when there is an increased level of interest, or Ohio should explore ways to improve attendance. The review also evaluated coordination with landowners on AML project sites. It showed that Ohio was doing a good job of obtaining and documenting landowner "rights-of-entry" prior to construction. However, other conversations with landowners were not documented. This study has not yet been finalized, and Ohio has not yet responded to these recommendations.

AML Construction Program

OSM reviewed Ohio's non-emergency AML construction processes for productivity and timeliness as compared to the previous year. OSM did this by maintaining a project database, conducting routine AML oversight inspections, and conducting special studies on environmental compliance and Ohio's AML design process.

- National Environmental Policy Act (NEPA) Compliance

OSM issued 19 "Authorizations to Proceed" (ATP) during EY 2002 compared to 13 for EY 2001. Seven of this year's ATP's were submitted as "Environmental Assessments" (EA's) and the remaining 12 were submitted as "Categorical Exclusions" (CE's). Oversight inspections showed that NEPA submittals accurately described the project sites and any mitigation required. Ohio is doing a good job of screening its portal closure projects for potential bat habitat, by consulting with the Ohio Division of Wildlife or consulting firms before deciding on a closure method. Bat gates are installed on all openings that provide suitable bat habitat, regardless of whether or not bats are present. This is particularly important because Ohio's coalfield is within the range of the endangered Indiana Bat, which requires mines or caves for winter hibernation.

- Design Productivity

Ohio completed 26 project designs during the review period compared to 28 for the previous year. Ohio's in-house design staff completed 17 of the 26 designs, with consultants designing the remaining nine projects. Another 28 designs started by Ohio's design staff were in various stages of completion as of the end of the evaluation period. Ohio's effort to do more in-house designs and rely less on consultants appears to be successful as there were nine consultant designs completed this year compared to 20 last year. Conversely, there were 17 in-house designs completed this year compared to eight for last year. OSM will continue to monitor Ohio's progress in this area, and assist Ohio in their efforts to improve their design productivity.

- Construction Contracting

Ohio authorized 14 contracts totaling \$3.8 million dollars in construction contracts during the review period compared to 18 contracts totaling \$2.7 million last year. The contracted amount exceeds the average over the previous ten years. The time between the bid openings and the authorization of construction contracts went from an all-time low of 48 days in 2000 to 52.6 days this year. This average was the second lowest average in the history of Ohio's program. This shows that Ohio has continued to issue contracts in a timely manner. Ohio has also expanded its use of unit-price contracts to include water well replacements, portal closures, and maintenance work in addition to backfilling subsidence. This has eliminated the need to design and administer each project separately in order to bid construction. Under unit-price contracts, multiple projects are constructed under one contract.

- **AML Project Construction Completions**

Ohio completed 23 projects during the review period compared to 19 last year. There was only one significant delay due to contractor negligence or non-performance, involving the improper abandonment and re-drilling of three new wells on a water replacement project. The contractor appealed these findings, but has since been ordered to complete the work. Another project that had precise compaction requirements was delayed due to an unusually wet spring and early summer.

This was further complicated by the contractor's financial problems, but the work was completed satisfactorily before the end of summer. There were no significant delays due to design changes or cost overruns.



**Freedom III Project
Correction of Clogged Stream Lands
Noble County**

Coal Waste Disposal

OSM continued with its study of the disposal of coal-processing wastes that began in 2000. The purpose of this study is to:

- Assess the effectiveness of permitting requirements;
- Evaluate the operator's implementation of the approved plans; and
- Review environmental impacts of the disposal of coal-processing waste at surface coal mining operations.

The study identified significant differences between application requirements for disposal plans for coal-waste disposal structures and plans for coal-waste disposal in the backfill area of the mine using mixing or cells. The backfill disposal method has less required design information and provides little specific monitoring, certification, or inspection requirements. OSM concluded that all coal-waste disposal areas have a risk of causing impacts to the hydrologic regime. However, properly developing, implementing, and improving coal-waste disposal plans can reduce the risk of unanticipated discharges.

OSM provided Ohio a draft report which includes a number of recommendations relating to identification of the exact location of refuse disposed within the backfilled areas and procedures to assist inspectors in assessing implementation of approved disposal plans. Ohio and OSM continue to discuss the study findings and recommendations and work toward a final report.

Drainage Control Evaluation

During the year, OSM began a study of drainage control features constructed, operated, and maintained on coal-mining operations. This study is undertaken to evaluate how well the drainage-control structures comply with permit requirements and the effectiveness of those structures at controlling drainage from the permitted area to prevent off-site impacts.

The study reviewed a sample of the following drainage control features: sediment ponds, diversions, reconstructed streams, and areas with exemptions from directing drainage to a sediment pond. Using standard data collection forms, OSM collected information on 75 separate drainage control structures. We collected the field data during the normal wet period of December 2001, through May 2002. Currently, analysis of this information is underway, with a final report expected during the next evaluation period.

Study of Stream Impacts from Longwall Mining

OSM began a study of stream impacts from longwall mining in 2002. The study uses qualitative benthic sampling as a possible means of detecting water loss in perennial and intermittent streams overlying longwall panels. Sampling begins upstream of the longwall panels and progresses downstream until the last sampling is done downstream of the last longwall panel. The results of these samplings are compared to see if there are any notable differences in the relative numbers, or types of organisms present in areas over longwall panels versus areas upstream or downstream of those panels. A significant decrease in the numbers of organisms or an absence of multiyear organisms over the panels could indicate a potential water loss. Five streams over completed longwall panels were sampled in Eastern Ohio during April and May of 2002. These samples are still being analyzed for taxa identification and relative abundance. OSM plans to conduct additional sampling during the spring of 2003 in new areas over proposed longwall panels and in different geographical areas over completed panels. OSM also plans to test the premise of the study by sampling above, across, and below a stream section that was known to go dry during this year's extremely dry summer. If anomalies are detected over the formerly dry section, it will re-enforce the theory that benthic sampling can be useful as a screening tool for detecting water loss. OSM will report the results of this study upon its conclusion.

OSM Part 732 Notices to Ohio

Program Condition

Ohio has one program condition remaining at 30 CFR 935.11 from OSM's 1982 approval of the Ohio permanent regulatory program. Ohio must demonstrate that its ABS will ensure timely reclamation at the sites of all operations for which bond has been forfeited. OSM also issued a Part 732 letter to Ohio on this issue on October 1, 1991. The letter notified Ohio that it must revise the Ohio program to ensure that the ABS will have sufficient funds to complete the reclamation plans for any areas in default at any time. An actuarial analysis of Ohio's ABS as of December 31, 1992, found that Ohio's ABS is

solvent if certain assumptions are fulfilled. In February 1994, Ohio reported that its ABS continues to have a \$1.5 million deficit. On June 30, 1995, Ohio and OSM updated an Improvement and Monitoring Plan for the Ohio ABS. OSM's review of this program area in EY 2002 again identified that Ohio's inability to complete timely reclamation of forfeited sites remains a significant issue. There has been little improvement in timeliness of reclamation in the last 20 years. OSM and Ohio will continue to work to resolve this issue, including aspects of AMD treatment that may impact Ohio's program.

Program Amendment 75

In 1998, OSM approved proposed revisions to the Ohio Revised Code concerning award of attorney fees. This issue has been a long-standing legal issue with the Ohio Program. OSM expected that Ohio would have a sponsor introduce this revision, along with other statutory changes, to the Ohio Legislature during 2000, 2001, and again in 2002. The proposed revisions have not been introduced. Ohio is again considering attaching this revision to other statutory changes being considered by the Department of Natural Resources or other entities during EY 2003.

Program Amendment 76

In 1997, OSM notified Ohio of Federal rule changes that have occurred over the past several years. The provisions affecting Ohio include:

- \$ Permitting and performance standards on siltation structures and impoundments
- \$ Variances from approximate original contour
- \$ Prime farmland
- \$ Affirmation by the applicant that reclamation requirements are met when applying for bond release

Ohio submitted a program amendment to address these provisions in late 1997. OSM approved the amendment in late 1998. Since 1998, the coal industry and Ohio have been discussing implementation of the rules and attempting to resolve differences of interpretation. Ohio conducted a public hearing on the rules at the end of September 2001, to begin the rule promulgation process after resolving industry's objections. However, during the promulgation process, someone objected to a reference in the proposed rule to another standard. At that time, there was an Ohio statutory provision that prohibited references to other standards without inclusion of the entire standard in the rule. The statute was changed in mid-2002. Ohio expects to begin the promulgation process by re-filing the rules in late October 2002.

Valid Existing Rights

OSM notified Ohio on August 22, 2000, of recent changes to Federal regulations pertaining to valid existing rights (VER). Ohio is deferring its final response pending the outcome of legal challenges to OSM's VER rule. Challenges to OSM's VER rule have not yet been resolved.

Appendix A

Table 1

COAL PRODUCTION (Millions of short tons)			
Period	Surface mines	Underground mines	Total
Coal production ^A for entire State:			
Annual Period			
1999	11,062,705.94	12,104,574.96	23167280.900
2000	10,689,959.14	11,840,976.99	22530936.130
2001	12,779,952.000	12,848,549.000	25628501.000
Total	34532617.080	36794100.950	71326718.030

A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production. **Provide production information for the latest three full calendar years to include the last full calendar year for which data is available.**

Table 2**INSPECTABLE UNITS****As of September 30, 2002**

Coal mines and related Facilities	Number and status of permits								Insp. Units^D	Permitted acreage^A (hundreds of acres)		
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals					
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	Total
	STATE AND PRIVATE LANDS REGULATORY AUTHORITY: STATE											
Surface mines	197		83		2	24	2	304	306	868		868
Underground mines	14		3				0	17	17	44		44
Other facilities	30		6		1	3	1	39	40	43		43
Subtotals	0	241	0	92	3	27	3	360	363	0	955	955
FEDERAL LANDS REGULATORY AUTHORITY: STATE												
Surface mines	1		1				0	2	2	4		4
Underground mines							0	0				0
Other facilities	1						0	1	1	1		1
Subtotals	0	2	0	1	0	0	0	3	3	0	5	5
ALL LANDS^B												
Surface mines	197		83		2	24	2	304	306	868		868
Underground mines	14		3				0	17	17	43		43
Other facilities	30		6		1	3	1	39	40	43		43
Totals	0	241	0	92	3	27	3	360	363	0	954	954
Average number of permits per inspectable unit (excluding exploration sites)								<u>1</u>				
Average number of acres per inspectable unit (excluding exploration sites)								<u>254</u>				
Number of exploration permits on State and private lands:								On Federal lands ^C : _____				
Number of exploration notices on State and private lands:								On Federal lands ^C : _____				
IP: Initial regulatory program sites												
PP: Permanent regulatory program sites												
^A When a unit is located on more than one type of land, include only the acreage located on the indicated type of land.												
^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.												
^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.												
^D Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.												

Table 3

STATE PERMITTING ACTIVITY												
As of September 30, 2002												
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	42	41	3,897							42	41	3,897
Renewals	26	9	0							26	9	0
Transfers, sales and assignments of permit rights	7	12								7	12	
Small operator assistance	7	2								7	2	
Exploration permits	0	0								0	0	
Exploration notices ^B		1									1	
Revisions (exclusive of incidental boundary revisions)		192									192	
Incidental boundary revisions		57	263								57	263
Totals	82	314	4,160	0	0	0	0	0	0	82	314	4,160

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions. _____

^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	0												
	Land Stability	10			1			4			4			1
	Hydrology	25	1	1		5			16	2				
	Encroachment	20			1	3	4	5			3		1	3
	Other	5				3			2					
Total	60	1	1	2	11	4	9	18	2	7	0	1	4	
Total number of inspectable units:						<u>333</u>								
Inspectable units free of off-site impacts:						<u>305</u>								
OFF-SITE IMPACTS ON BOND FORFEITURE SITES														
RESOURCES AFFECTED			People			Land			Water			Structures		
DEGREE OF IMPACT			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting													
	Land Stability													
	Hydrology				1			2			2			
	Encroachment													
	Other													
Total	0	0	0	1	0	0	2	0	0	2	0	0	0	
Total number of inspectable units:						<u>37</u>								
Inspectable units free of off-site impacts:						<u>2</u>								

Refer to the report narrative for complete explanation and evaluation of the information provided by this table.

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	3,556.60
Phase II	- Surface stability - Establishment of vegetation	3,692.70
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	5,888.30
	Bonded Acreage Status^A	Acres
Total number of acres bonded at end of last review period (September 30, 2001) ^B		n/a
Total number of acres bonded during this evaluation year		4,161.30
Number of acres bonded during this evaluation year that are considered remining, if available		n/a
Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)		32.10

^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.

^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).

OPTIONAL TABLE(S) 6

Not Applicable

Table 7

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)		
Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Acres
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 2001 (end of previous evaluation year) ^A	Audit underway	
Sites with bonds forfeited and collected during Evaluation Year 2002 (current year)	2	31.20
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2002 (current year)	0	0.00
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2002 (current year)	5	84.00
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 2002 (end of current year) ^A	Audit underway	
Sites with bonds forfeited but uncollected as of September 30, 2002 (end of current year)	14	1,040.60
Surety/Other Reclamation (In Lieu of Forfeiture)		
Sites being reclaimed by surety/other party as of September 30, 2001 (end of previous evaluation year) ^B	5	582.00
Sites where surety/other party agreed to do reclamation during Evaluation Year 2002 (current year)	0	
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2002 (current year)	0	
Sites with reclamation completed by surety/other party during Evaluation Year 2002 (current year) ^C	2	465.40
Sites being reclaimed by surety/other party as of September 30, 2002 (current evaluation year) ^B	2	415.80
^A Includes data only for those forfeiture sites not fully reclaimed as of this date ^B Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date ^C This number also is reported in Table 5 as Phase III bond release has been granted on these sites		

Table 8

OHIO STAFFING (Full-time equivalents at the end of evaluation year)	
Function	EY 2002
Regulatory Program	
Permit review	6.90
Inspection	11.76
Other (administrative, fiscal, personnel, etc.)	13.55
Regulatory Program Total	32.21
AML Program Total	41.73
TOTAL	73.94

Table 9

FUNDS GRANTED TO OHIO BY OSM (Millions of dollars) EY 2002		
Type of Grant	Federal Funds Awarded	Federal Funding as a Percentage of Total Program Costs
Administration and Enforcement	\$2,134,540.76	50
Small Operator Assistance	\$100,000.00	100
Totals	\$2,234,540.76	

Appendix B

Ohio had no comments on the draft report.