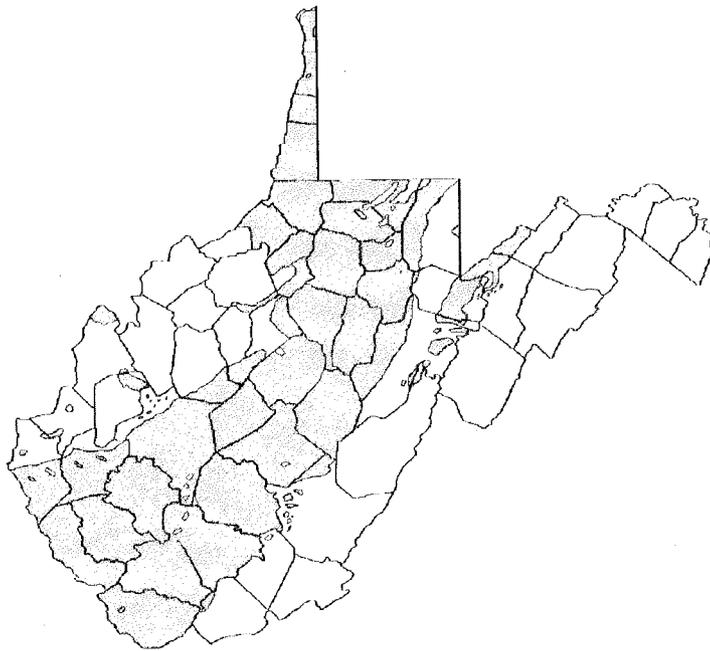


**1997
WEST VIRGINIA
ANNUAL EVALUATION
REPORT**



PREPARED BY

**Charleston Field Office
Office of Surface Mining Reclamation and Enforcement
Charleston, West Virginia**

December 1997

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory and Abandoned Mine Land Programs

Administered by the State

of

WEST VIRGINIA

for

Evaluation Year 1997

October 1, 1996 to September 30, 1997

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I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory and abandoned mine land programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the West Virginia programs and their effectiveness in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of October 1, 1996, to September 30, 1997. Detailed background information and comprehensive reports for the program element evaluations completed during the period are available for review and copying at the Charleston Field Office, 1027 Virginia Street, East, Charleston, West Virginia, phone (304) 347-7158.

The following acronyms are used in this report:

AMD	Acid mine drainage
AML	Abandoned Mine Land
CFR	Code of Federal Regulations
CHFO	Charleston Field Office
EPA	U.S. Environmental Protection Agency
ERIN	Environmental Resources Information Network
EY 1997	Evaluation Year 1997 (October 1, 1996, to September 30, 1997)
MSHA	Mine Safety and Health Administration
NPDES	National Pollutant Discharge Elimination System
OSM	Office of Surface Mining
SMCRA	Surface Mining Control and Reclamation Act
SMIS	Surface Mine Information System
WVDEP	West Virginia Division of Environmental Protection

II. Overview of the West Virginia Coal Mining Industry

Coal has been mined in West Virginia using underground methods since the early 1700's. Underground mining increased throughout the 1800's and into the 1950's. Surface mining began around 1916, but significant production did not occur until World War II. Mining activities occurring prior to passage of SMCRA in 1977 resulted in numerous unreclaimed or under-reclaimed areas within the State. Currently, the Abandoned Mine Land (AML) inventory contains a record of 2,970 such sites.

West Virginia's estimated coal reserves total 54 billion tons. The State's estimated recoverable coal reserves using current technology amounted to 19.6 billion tons as of January 1, 1995. Coal occurs in all but two of the State's 55 counties. Movable seams occur in 43 of the 55 counties. Of the 117 identified coal seams in the State, 62 seams are movable using current technology.

Coal production in West Virginia accounts for about 16 percent of the Nation's total production. In 1996, West Virginia produced 165.7 million tons of coal, making it the second largest coal producing State. The average price per ton of coal mined in West Virginia during 1996 was \$27. The price of West Virginia coal has declined steadily since 1991.

Underground mines produce approximately 68 percent of the State's total coal production. Twenty-three of the Nation's eighty-five longwall mining operations are in West Virginia. Longwall operations produced 23 percent of the State's total coal production in 1996. However, continuous mining operations continued to account for most of the State's underground production.

Contour, area, mountaintop removal, and multiple-seam mining operations are the most common methods of surface mining in the State. With advances in mining technology, surface mines are becoming larger and more complex. Thirty-two percent of the coal produced in West Virginia is by surface mining methods. Since 1991, underground coal production in the State has declined by 1 percent, but surface mine production has increased by 19 percent.

West Virginia has nearly 3,200 mining permits. The number of new permits issued annually by the State has declined, but the complexity and size of the operations have increased. Approximately 75 percent of the State's permits are active and require monthly inspections by the West Virginia Division of Environmental Protection (WVDEP). Underground mines account for about 40 percent of the total permits and surface mines account for 38 percent. The remaining 22 percent consists of other facilities, including such things as preparation plants, refuse piles, loading facilities, and haulroads.

The number of firms producing coal in West Virginia has declined to about 400 companies. Due to increased mechanization and consolidation in the mining industry, more than 8,500 mining jobs have been lost in the State since 1991, even though coal production has increased by 4 percent. The State's coal mining industry directly employs approximately 18,900 people with a payroll of about \$900 million. Seventy-seven percent of the miners in the State work in underground mines. The State's coal

industry pays more than \$170 million annually in severance taxes and fees to State and local governments and another \$170 million in Federal taxes. Overall, it is estimated that every \$1 billion worth of coal production generates \$3.5 billion throughout the economy.

III. Overview of the Public Participation Opportunities in the Regulatory and Abandoned Mine Land Oversight Processes and the State Programs

During the evaluation year, new Directors were appointed to WVDEP, OSM, and the Charleston Field Office (CHFO) of OSM. As a demonstration of their commitment to interaction with citizen, environmental, and industry organizations, the new Directors met with various groups and individuals during the evaluation year to discuss issues of concern within the State. Throughout the year, all three of the new appointees met with representatives of various groups including:

- West Virginia Highlands Conservancy
- West Virginia Organizing Project
- West Virginia Mining and Reclamation Association
- West Virginia Coal Association
- Ohio Valley Environmental Coalition
- Contractor's Association of West Virginia
- Various watershed associations and local groups.

In order to provide information to the public, the Charleston Field Office (CHFO) maintains a mailing list of organizations and individuals that have been active in regulatory and AML issues in West Virginia. On several occasions during the evaluation year, OSM requested input from these groups and individuals on various oversight and program related documents. Office staff routinely interact with individuals and groups throughout the year. The Field Office Director also attended the Citizens Surface Mine Tour which was designed and implemented by citizen organizations with assistance from the Office of Mining and Reclamation and the Office of the Environmental Advocate of WVDEP.

In addition to those provided through OSM, the approved West Virginia regulatory program contains many additional opportunities for public participation. In the permitting process, each application for a new or revised permit must be advertised and interested parties given the opportunity to comment. The WVDEP may also be requested to hold an informal conference to discuss the application prior to making a decision to issue or deny the permit. Citizens are also given the opportunity to

participate in the inspection and enforcement process by filing written citizen complaints concerning specific issues at particular mine sites. They may also seek administrative review of WVDEP decisions by the West Virginia Surface Mine Board or judicial review through the State court system.

As discussed above, WVDEP's new Director held several meetings with citizen groups concerning issues directly affecting their communities. He and representatives of the WVDEP's Office of Mining and Reclamation have met with citizens to discuss blasting, dust control, subsidence, water loss, acid mine drainage and other issues. The WVDEP has also been instrumental in the development of the watershed management framework and the agency's efforts to preserve water quality were discussed during five regional meetings held by the Watershed Assessment Program. Other public participation efforts are provided through WVDEP's Office of the Environmental Advocate which works with individuals and groups on a variety of environmental issues within the State.

The approved Abandoned Mine Land Reclamation Plan also contains opportunities for public participation. These include public interaction during the processing of citizen complaints concerning abandoned mine land problems; publishing newspaper notices seeking comment on each proposed construction project before requesting funding approval from OSM; and, holding public meetings concerning proposed changes to the State AML Reclamation Plan.

IV. Major Accomplishments/Issues/Innovations in the West Virginia Regulatory Program

Accomplishments/Innovations

The State continued to make significant improvements to their data management capabilities during this evaluation period. For the past several years, inspection data has been maintained in the Surface Mine Information System (SMIS), while other regulatory data has been maintained in various independent databases supported by the responsible program staff. Last year, WVDEP combined all of this data in a new data management system called the Environmental Resources Information Network (ERIN). Continual upgrading of the new system has occurred since it was first put into usage. The new system captures and maintains data from the various programs administered by WVDEP. It is based on a computer platform which allows significantly greater flexibility than the previous mainframe-based SMIS system. For example, the new system provides the ability to obtain customized reports which previously were available only through extensive programming. As with the previous SMIS system, WVDEP has allowed access to the system by staff of CHFO.

The WVDEP is continuing the development of its electronic document management system through the Small Operator Assistance Program (SOAP). To date, the State has electronically filed more than 1,000 SOAP documents. The documents include general correspondence, initial applications, approvals, cost proposals, and final reports. Once fully functional, the system will provide for the electronic filing and retrieval of all SOAP related documents. This is the first phase in the development of an electronic permitting system for WVDEP. During the evaluation period, OSM approved an Electronic Permitting Cooperative Agreement for the State. Under the agreement, the WVDEP received \$32,000 to purchase Internet/Intranet equipment and software that will allow for the electronic submission and approval of surface mining permit applications within the State.

Issues

Several program issues identified during previous evaluations were addressed during this evaluation period.

Alternative Bonding System

In an effort to resolve past differences of opinion concerning the operation and solvency of the State's alternative bonding system, a joint WVDEP/OSM team was formed to evaluate the State's bonding program. Phase I of the evaluation determined that site specific bonding alone will not generate sufficient revenue to cover the estimated cost of land reclamation of all sites that may be forfeited in the future. The estimated land reclamation costs used in this review did not include any expenditures for the chemical or passive treatment of any acid mine drainage discharges that might exist at the site.

Phase II of the evaluation is continuing in accordance with the work plan negotiated between the State and OSM. This portion of the review will evaluate the fiscal soundness of the alternative bonding system looking at total revenues, expenditures and liabilities and the timeliness with which the backlog of forfeited sites can be reclaimed.

Water Pollution Abatement relative to the Alternative Bonding System

The current review of the alternative bonding system primarily deals with the backlog of land reclamation requirements. It does not resolve the longstanding issue of the inadequacy of the bond pool to eliminate polluttional discharges from forfeiture sites.

OSM believes other States have similar inadequacies in their ability to treat or abate acid mine drainage on forfeiture sites with either a bond pool or conventional bonds. Over the summer of 1997 OSM convinced States that this is a major programmatic issue which must be addressed. A national team with State and OSM membership has been formed. CHFO and WVDEP are participating members of this team.

One agreement reached thus far is that an inventory of the existing and potential polluttional discharges is critical to the development of solutions to this issue. WVDEP has been a leader in this effort and has made progress on identifying and categorizing known polluttional or treated discharges from post-law mining. This inventory is discussed further in Section VII of this report.

Civil Penalty Assessments

Past evaluation of civil penalty assessment procedures revealed that the WVDEP was not providing notices of proposed assessment to operators within the time limits specified in the approved State program. WVDEP's plan for correcting this problem consisted primarily of automating the process for assessing civil penalties with ERIN, the new computer system. A current review of timeliness revealed that the average time-lapse between the issuance of a citation and the issuance of a notice of proposed assessment of a civil penalty is 36 days with over 60 percent exceeding the 30-day mandate. However, the review also revealed that notices of proposed assessments were being generated, on average, within 4 days of the required field information being entered into the system.

The documentation of the rationale for changes to civil penalty assessments made during informal conferences was also found to be inadequate during the previous evaluation. WVDEP has provided additional training for its assessment officers and implemented procedures for internal evaluation of assessment conference worksheets. A review of the documentation supporting changes is continuing into the current evaluation year.

Conflict of Interest

Previous evaluations identified problems with WVDEP's management of its conflict of interest program. During this evaluation period, the State continued its efforts to resolve these problems. WVDEP adopted formal procedures for employees to appeal final actions or orders concerning prohibited employment or financial interests. It also finalized procedures to ensure that members of the Surface Mine Board comply with the State's conflict of interest requirements. WVDEP is in the process of developing

written procedures for ensuring proper management of the program in the future and for disposing of statements of financial and employment interests in accordance with the State's Privacy Act. All previously identified conflicts involving stock or employment have been resolved and no new conflicts were identified during the current evaluation period.

Ownership and Control

Previous evaluation reports had discussed limitations of the State's violator database. Although the State has an inventory of permittees with unabated violations and bond forfeitures since the enactment of the SMCRA, many of the older violations had only basic information consisting of the name of the permittee and the principal offices and directors. Since these operations had not been investigated for other ownership and control relationships, the listing of violators was not complete and accurate.

On January 31, 1997, the United States Court of Appeals for the District of Columbia Circuit held that the OSM ownership and control rule was unlawful. The court also included the permit information rule and the permit recession rule in the decision since they were centered on the ownership and control rule. The court decision did not eliminate the responsibility of OSM or the State regulatory authorities to implement the requirements of sections 507(b) and 510(c) of the Act nor did it specifically address individual approved state programs. However, in consideration of that court ruling and the initiation of rulemaking by OSM and the State, further consideration of this issue is being suspended.

Permit Renewals

As discussed last year, OSM identified several problems with WVDEP's implementation of its permit renewal requirements. Most of the problems are procedural in nature and are not causing adverse environmental effects. The State is in the process of developing a checklist to ensure better documentation of permit renewal actions. They are also reviewing existing procedures to ensure that operators are submitting timely renewal applications and are not operating under expired permits. OSM will continue working with WVDEP in the resolution of these problems.

Required Program Amendments

WVDEP is overdue in satisfying several required amendments. The State has 21 required amendments outstanding. WVDEP has submitted a pending program amendment that may satisfy some of the required amendments and the existing Code

of Federal Regulations, Title 30, Part 732 notification regarding subsidence control and water replacement. Another Part 732 notification regarding incidental coal extraction is still outstanding. During the evaluation year, OSM issued two Part 732 notifications regarding ownership and control and other multiple topics. The State has not submitted schedules for satisfying these obligations.

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 - Regulatory Program

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

Off-Site Impacts

An evaluation was conducted of all State permits to evaluate the effectiveness of the State program in protecting the environment and the public from off-site impacts resulting from surface coal mining and reclamation operations. Most of the State's 3,199 mining permits were found to have no off-site impacts.

During the evaluation period, the State conducted 20,039 inspections resulting in the issuance of 1,196 enforcement actions. Of these, 280 involved off-site impacts at 205 permits (about 6 percent of all permits). The resources affected and the number of observations are identified in Table 4 of Appendix A.

Overall, the evaluation demonstrated that approximately one-fifth of the violations cited involved off-site impacts. This is a dramatic reduction from the one-third found during the previous evaluation period. Water was the resource involved in over 57 percent of the identified impacts this year and continued to be the single largest affected resource.

Bond Release

Reclamation success was measured by determining the number of acres reclaimed to required standards as identified by State bond release data. Based on this data, in EY 1997 mine operators restored approximate original contour and replaced topsoil on

11,375 acres (Phase I released). Surface stability and vegetation was established on 8,389 acres (Phase II released) and surface and groundwater quality and quantity, groundwater recharge, successful revegetation and implementation of the post-mining land use was achieved on 6,592 acres (Phase III released)

Verification that State bond release data could be used to measure reclamation success was determined by random inspections conducted on 61 permits to evaluate the effectiveness of the bond release program. Sixty of the sites fully met release requirements. These sites consisted of approximately 2,740 disturbed acres. The one site which did not meet release requirements consisted of 64 disturbed acres and had requested a Phase III final bond release. The State took appropriate action to correct the deficiencies by denying the bond release for the site.

Overall, the inspected sites demonstrate satisfactory reclamation and show that West Virginia is conducting its bond release program in accordance with applicable law, regulations, and policies. The results of OSM's oversight inspections indicate that the standards of reclamation success are being achieved.

Table 5 of Appendix A contains additional information relating to State bond release activity.

VI. OSM Assistance - Regulatory Program

During the evaluation period, WVDEP provided training to 40 State employees through OSM's Technical Training Program. State personnel attended 58 courses dealing with a variety of topics including abandoned mine land reclamation design, acid-forming materials, engineering, expert witness procedures, hydrology, and spoil handling. Additionally, \$35,472,764 in Federal funds were made available to the State during the evaluation period. Table 8 in Appendix A identifies the specific amounts awarded for each program.

On July 29, 1996, WVDEP requested technical assistance from OSM in investigating potential discharges from inundated mine voids within the Pittsburgh Coal Seam in the Monongahela River Basin. Abandoned mine workings in northern West Virginia and southwestern Pennsylvania contain significant amounts of poor quality water. As additional mines in the area are closed, the potential exists for surface discharges. During the evaluation period, WVDEP, OSM and the U.S. Environmental Protection Agency (EPA) cooperated in an effort to identify the extent and cause(s) of the problem, and to provide an assessment of the environmental impact of the potential discharges.

WVDEP, OSM, and EPA also cooperated in the evaluation of the impacts of a specific section of the study area known as the Fairmont Pool. This underground mine pool is located within the abandoned workings of several mining operations to the north and west of Fairmont, West Virginia. Late in 1996, a discharge of water with a high concentration of iron was imminent and EPA, using the authority of the Clean Water Act, issued an Order to the former operator of the mines to prevent the discharge. The operator is now pumping the water to an adjacent abandoned mine where the water is removed and treated prior to release.

OSM also provided technical assistance and/or participated in joint investigation of several other complex issues during the evaluation period. Many of the investigations involved alleged blasting violations, subsidence damage, or water loss resulting from underground mining operations. OSM also provided testimony before the Surface Mine Board in support of State actions on several occasions. Technical assistance was also provided in several controversial large scale evaluations related to specific technical issues, including blasting complaints in Blair, West Virginia and in the Beech Creek area of Mingo County, and flooding situations in Cartwright Hollow in Logan County and near Hodgesville in Upshur County. OSM also assisted in extensive investigations of water pollution in the Guyses Run and Grassy Run areas near Fairmont in Marion County. OSM has also worked with the State in the identification of remaining opportunities.

VII. General Oversight Topic Evaluations - Regulatory Program

Acid Mine Drainage Inventory

During EY 1997, WVDEP and CHFO agreed to re-evaluate 890 water discharge outlets that were reported in a 1994 inventory as treating water, and to evaluate and inventory all outlets on permits issued since October 31, 1994, the end date of the 1994 inventory.

State inspection personnel collected water quality information for the updated inventory during October 1996. The data has been provided to CHFO and is presently being evaluated by WVDEP. Discussion of the data is expected to take place in the Fall of 1997. Consequently, this evaluation report does not include the full scope of conclusions from the inventory. A comprehensive report on this topic will be available for inclusion in the EY 1998 Annual Evaluation Report.

Preliminary assessment of the data collected during the inventory shows that 816 of 16,800 discharge points at permitted mining sites exhibit water quality problems. The

816 discharge points exist on 450 mining permits. As a result of new permit issuances, more outlets were evaluated in the 1996 inventory than were identified as treating water in the 1994 inventory. However, many of the 890 sources from the earlier inventory were deleted for a number of reasons, including 35 that were associated with permits revoked since the initial inventory. A list of revoked permits is being maintained as a separate inventory by the State. Approximately 200 of the permits revoked by the State since 1977 exhibit some water quality discharge problems. Assessment of the impacts from these areas is also continuing.

Inspection Reporting

During EY 1996, CHFO conducted an evaluation of the accuracy of inspection data contained in WVDEP's electronic data system. The review found that only seven percent of the reviewed data files were totally complete. Although the omissions were considered minor [primarily relating to missing Mine Safety and Health Administration (MSHA) and National Pollutant Discharge Elimination System (NPDES) numbers] the State revised their procedures to require review and correction of these numbers during the next inspection of all permits.

The previous evaluation was conducted prior to implementation of the State's ERIN system, discussed in Section IV of this report. In order to determine that the previous omissions had been corrected and that the new system was collecting the required data, a follow-up evaluation was conducted. The evaluation focused on the accuracy of the data in ERIN compared to the data contained on the paper copy of a sample of ten complete inspection reports.

Of the ten data files reviewed, only one was found to contain a data input error. This related to a field that was completed on the electronic record when no data was contained in this field on the original paper report. All of the MSHA and NPDES numbers were found to be accurate since this data is now provided by ERIN directly from the permit data base and is no longer entered for each individual inspection.

OSM Inspections

During the evaluation period, CHFO conducted a total of 430 inspections, including 72 complete and 183 partial random sample oversight inspections. The partial inspections concentrated on hydrologic balance and backfilling and grading. The additional 175 inspections included 30 citizen complaint, 29 Federal Notice of Violation follow-up, 23 reclamation fee, 61 bond release, and 32 various other type of inspections.

A total of 103 state program violations were observed on 72 permits. The State took appropriate action prior to issuance of a ten-day notice on all but one violation. The State's response to the ten-day notice was determined to be appropriate. Two other ten-day notices were issued as a result of citizen complaints alleging permitting deficiencies. The State's response to these were still pending at the end of the evaluation period.

CHFO also issued an additional 33 actions involving the non-payment of Federal reclamation fees. Based on previous agreement, WVDEP does not issue enforcement actions for Federal reclamation fee violations.

Other Evaluations Planned for the Evaluation Period

Evaluations of other topics were planned for the evaluation period. A brief discussion of these evaluations follows.

Alternative Enforcement Actions

By mutual agreement of the State and OSM, the evaluation of the use of alternative enforcement actions planned for EY 1997 was eliminated.

Show Cause Process

During the evaluation period, OSM, in cooperation with the WVDEP, revised the work plan and collected data to evaluate the timeliness and effectiveness of the State's show cause process. An evaluation of the data will be completed during the upcoming evaluation period.

VIII. Abandoned Mine Land Reclamation Program

General

The mission of the AML program is to reclaim abandoned mine sites by abating hazards, reducing/mitigating adverse effects of past mining, and restoring adversely affected lands and water to beneficial uses. WVDEP's Office of Abandoned Mine Lands is successfully accomplishing this mission in West Virginia.

The State conducts all AML reclamation in West Virginia. OSM has approved four primary AML components:

- The regular construction program abates high priority, non-emergency problems. OSM approved it on February 23, 1981.
- The emergency program abates emergency problems caused by abandoned coal mining practices. OSM approved it on August 26, 1988.
- Water supply provisions allow the State to repair or replace water supplies where the damage results from mining occurring primarily before August 3, 1977. OSM approved them on July 25, 1990.
- The acid mine drainage set aside program allows the State to use 10 percent of its annual grant allocation to reclaim watersheds impacted by acid mine drainage. The program was approved on March 26, 1993, and WVDEP funded the first project on August 23, 1995.

In addition to the acid mine drainage set aside program, West Virginia obtains support for its stream improvement efforts from a variety of other sources. These include the Appalachian Clean Streams Initiative and relationships with local community groups, local, State and Federal agencies, academia, and industry. In the 1996 evaluation year, Congress approved funding for three Appalachian Clean Streams projects in West Virginia. The State received \$975,000 for projects on Sovern Run of the Cheat River, Paint Creek of the Kanawha River, and Abram Creek of the North Branch of the Potomac River. The State is currently developing plans for these projects.

WVDEP is also participating with the U.S. Army Corps of Engineers on projects to evaluate three watersheds and develop remediation projects. These projects are on the Cheat, North Branch of the Potomac, and Tygart Rivers. The West Virginia Office of Water Resources, the U.S. Environmental Protection Agency and the U.S. Geological Survey are providing additional assistance and/or funding to improve water quality.

Noteworthy Accomplishments

In the non-emergency program, West Virginia started 36 construction projects during this evaluation period at a total cost of \$11,874,000. During the same period last year (October 1, 1995, to September 30, 1996) the State started 36 projects for a total cost of \$15,637,853. The decrease in the dollar amount this year is due to the inclusion of a large water supply system during the previous period. These types of projects generally cost more than typical AML projects. During the evaluation period, 12 projects were completed at a final cost of \$3,140,022.

During this evaluation period, the State received approval for 53 emergency projects at a total cost of \$5,841,000.

Results of Enhancement and Performance Reviews

In Evaluation Year 1997, WVDEP and OSM completed the evaluations of four topics. A brief description of these reviews and their results follows.

Abandoned Mine Land Inventory System

The purpose of this review was to determine if the WVDEP is complying with the provisions of OSM Directive AML-1 (AML Inventory). WVDEP and OSM reviewed 19 individual problem areas to see if the Problem Area Data Sheets (PADS) were correctly prepared. The PADS information was then compared to data in the National Abandoned Mine Land Inventory System (AMLIS).

On two sites, one keyword on the PADS was not present. In both instances, the landowner had eliminated the problem after the State's last visit to the site. We did not find any evidence of a systemic problem in the State's AMLIS procedures.

Core Drilling Study

In response to a citizen request, OSM reviewed the WVDEP's use of core drilling to determine subsidence from underground mining. WVDEP conducted 46 core drilling studies between January 1, 1995, and June 30, 1996. The review team evaluated the investigation reports for five of these studies. Since the issue raised in the citizen's request related to negative determinations of subsidence, the team only evaluated reports with a negative determination. These complaints were from individuals who had subsidence insurance. One site was in Wheeling, two in Fairmont, one in Oak Hill and one in Crab Orchard.

The review team visited each of the five sites and examined all information in the report files. After evaluating the information, the team decided if the State's determination of non-mining related damage was technically sound and correct. After reviewing all of the sites, the team agreed with the State's decisions that the damages to the sites were not mining related. There is no evidence of a failure to conduct extensive geotechnical investigations of the five sites. All investigations represented sound, geotechnical approaches for the resolution of mining or non-mining related complaint sites.

The review team recommended that WVDEP inspectors use professional judgement rather than core drilling in situations where it is obvious that mine subsidence has not occurred. In three of the five sites reviewed by the team, they concluded that core drilling would not have been necessary to determine that the damages were not mining related.

In response to this report, the State has revised their core drilling procedures to reduce some dependence on core drilling.

Data Management

In 1995, the WVDEP-AML requested that OSM conduct an oversight review of their data management. The joint OSM-WVDEP oversight team reviewed the state's management information systems (MIS). Their goal was to define the information that both OSM and the WVDEP need to fulfill their respective duties. Since the data in the system only covered the previous six months, this review would verify the adequacy of the State's MIS before they entered historical data from previous years.

First, team members randomly selected 20 complaints to study. They compared the information in these complaints with OSM grant reporting requirements. Additionally, the team compared this information with the information collection requirements in the State Reclamation Plan. WVDEP has established data collection fields for all necessary information required by their approved AML Reclamation Plan. This information also meets the grant reporting needs of OSM.

Next, team members evaluated the accuracy of the information in the files. They selected seven data fields of the AML electronic database and compared the database with the data in the complaint files. In 140 items of data there were two differences between the electronic data fields and the paper files.

The State is now entering historical AML complaint and grant information. Once this is complete, the MIS should provide an excellent tool for managing the AML program and reporting program accomplishments.

Project Selection

The State Legislative Auditor reviewed WVDEP's Abandoned Mine Land Program and suggested that West Virginia was not following the correct procedures in selecting projects for reclamation. The OSM/WVDEP oversight team examined ten high priority complaints and ten approved construction projects and found that they are complying with their approved reclamation plan. However, the operating procedures

do not define the process by which WVDEP selects a final list of projects for submission on a grant.

In response to this finding, WVDEP is proposing a project tracking system list that will contain inventory sites and new complaints. Complaint investigators and other AML staff will periodically review this list. Planning staff will rank the projects based on comments received from the other reviewers. Once the Chief of the Office of Abandoned Mine Lands and Reclamation has approved this list, projects will be selected based upon their ranking. WVDEP will continue to abate emergencies as they develop without consideration of the priorities on this list.

Accomplishments and Inventory Reports

The State records the accomplishments of their abandoned mine land program in the Abandoned Mine Land Inventory System. Table 9 of Appendix A lists the cumulative accomplishments in West Virginia. A comparison of this table with the EY 1996 West Virginia Annual Evaluation Report reveals that West Virginia reclaimed 1,340 lineal feet of dangerous highwall and 171 acres of dangerous piles and embankments during this evaluation period. Other significant accomplishments include the elimination of 29 impoundments, 19 acres of slides, 51 portals, and 8 vertical openings.

Appendix A - Tabular Summaries

The following tables present data pertinent to mining operations and State and Federal regulatory and abandoned mine land activities within West Virginia. They also summarize funding provided by OSM and WVDEP staffing. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1996, to September 30, 1997. Additional data used by OSM in its evaluations of West Virginia's performance is available for public review in evaluation files maintained by CHFO.

TABLE 1

COAL PRODUCTION (Millions of short tons)			
Period	Surface mines	Underground mines	Total
Coal production ^A for entire State:			
Calendar Year			
1994	48.9	110.0	158.9
1995	52.8	112.4	165.2
1996	55.4	118.3	173.7
	157.1	340.7	497.8
<p>^A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used, or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.</p>			

TABLE 2

**INSPECTABLE UNITS
As of September 30, 1997**

Coal mines and related facilities	Number and status of permits								Insp. Unit	Permitted acreage ^A (hundreds of acres)		
	Active or temporarily inactive		Inactive		Abandoned		Totals			IP	PP	Total
	IP	PP	Phase II bond release		IP	PP	IP	PP				
			IP	PP						IP	PP	
STATE and PRIVATE LANDS REGULATORY AUTHORITY: STATE												
Surface mines	1	778	4	136	16	248	21	1,162	1,183	12.5	2,148.8	2,161
Underground mines	0	1,030	0	73	11	171	11	1,274	1,285	0.6	306.8	307
Other facilities	0	614	1	28	8	70	9	712	721	0.2	393.7	393
Subtotals	1	2,422	5	237	35	489	41	3,148	3,189	13.3	2,849.3	2,862
FEDERAL LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0
Underground mines	0	4	0	0	0	2	0	6	6	0	0.7	1
Other facilities	0	4	0	0	0	0	0	4	4	0	0.5	1
Subtotals	0	8	0	0	0	2	0	10	10	0	1.2	2
ALL LANDS^B												
Surface mines	1	778	4	136	16	248	21	1,162	1,183	12.4	2,148.8	2,161
Underground mines	0	1,034	0	73	11	173	11	1,280	1,291	.7	307.5	308
Other facilities	0	618	1	28	8	70	9	716	725	.2	394.2	395
Totals	1	2,430	5	237	35	491	41	3,158	3,199	13.3	2,850.5	2,864
Average number of permits per inspectable unit (excluding exploration sites)												1
Average number of acres per inspectable unit (excluding exploration sites)												89.5
Number of exploration permits on State and private lands: <u>3</u>												On Federal lands: <u>0</u> ^c
Number of exploration notices on State and private lands: <u>306</u>												On Federal lands: <u>0</u> ^c
<p>IP: Initial regulatory program sites. PP: Permanent regulatory program sites.</p> <p>^A When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.</p> <p>^B Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.</p> <p>^C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.</p>												

TABLE 3

STATE PERMITTING ACTIONS
As of September 30, 1997

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	43	41	18,143	45	46	676	11	19	1,373	99	106	20,193
Renewals	76	57	19,924	135	86	2,612	211	104	9,846	422	247	32,382
Incidental boundary revisions	110	101	<618>	191	183	687	90	84	509	391	368	587
Revisions (exclusive of incidental boundary revisions)	212	203		180	177		123	121		515	501	
Transfers, sales and assignments of permit rights	112	71		130	81		83	47		325	199	
Small operator assistance	11	11								11	11	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices ^B										161	150	
Totals	564	484		681	573		518	375		1,924	1,582	53,769

^A Includes only the number of acres of proposed surface disturbance.

^B State does not differentiate between surface, underground, and other. 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		
		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	32	0	0	15	0	0	0	0	0	11	1	0
	Land Stability	50	16	0	34	15	0	1	0	0	0	1	0
	Hydrology	160	0	0	26	2	0	154	5	1	2	0	0
	Encroachment	30	8	0	24	0	1	1	0	1	3	0	0
	Other	8	7	0	7	0	0	0	0	0	1	0	0
Total		280	25	16	106	17	1	156	5	2	17	2	0

Total number of permits or mine sites with observed off-site impacts: Permits 205 Or Mine Sites _____

Total number of permits or mine sites evaluated: Permits 3,199 Or Mine Sites _____

Total number of observations made to evaluate mine sites or permits for off-site impacts: Approximately 20,039 complete and partial State inspections.

More than one resource may be affected by each type of impact. Therefore, the total number of impacts will likely be less than the total number of resources affected; i.e. the numbers under the resources columns will not necessarily add horizontally to equal the total number for each type of impact. Number of observations is based upon the criteria developed between the State and OSM.

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	<ul style="list-style-type: none"> ● Approximate original contour restored ● Topsoil or approved alternative replaced 	11,375.4
Phase II	<ul style="list-style-type: none"> ● Surface stability ● Establishment of vegetation 	8,389.0
Phase III	<ul style="list-style-type: none"> ● Post-mining land use/productivity restored ● Successful permanent vegetation ● Groundwater recharge, quality and quantity restored ● Surface water quality and quantity restored 	6,592.1
	Disturbed Acreage Status ^A	Acres
	Total number of disturbed acres at end of last review period (December 31, 1996) ^B	283,244
	Total number of acres disturbed during this evaluation year	20,192
	Number of acres disturbed during this evaluation year that are considered re-mining	N/A ^C
<p>^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.</p> <p>^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).</p> <p>^C Information not available.</p>		

TABLE 6

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits) July 1, 1996 - September 30, 1997			
	Number of Sites	Dollars	Acres
Bonds forfeited as of June 30, 1996 ^A	228	\$6,757,666	7,041 ^D
Bonds forfeited during EY 1997	64	\$1,288,745	2,176 ^B
Forfeited bonds collected as of June 30, 1996 ^A	144	\$3,148,042	5,136 ^B
Forfeited bonds collected during EY 1997	44	\$1,602,841	2,377 ^B
Forfeiture sites reclaimed during EY 1997	26	\$2,705,000 ^C	1,106 ^D
Forfeiture sites repermited during EY 1997	0		
Forfeiture sites unreclaimed as of September 30, 1997	266		10,259 ^B
Excess reclamation costs recovered from permittee	0	0	
Excess forfeiture proceeds returned to permittee	0	0	
^A Includes data only for those forfeiture sites not fully reclaimed as of this date. ^B Permitted acres. ^C Cost of reclamation, excluding general administrative expenses. ^D Disturbed Acres			

TABLE 7

STATE STAFFING (Full-time equivalents at end of evaluation year)	
Function	EY 1997
Abandoned Mine Land Program	70.0
Regulatory Program	255.0
Permit review	41.5
Inspection	74.0
Other (administrative, fiscal, personnel, etc.)	139.5

TABLE 8

<p align="center">FUNDS GRANTED TO West Virginia BY OSM (Millions of dollars) FY 1997</p>		
Type of Grant	Federal Funds Awarded	Federal Funding as a Percentage of Total Program Costs
Abandoned Mine Land		
Administrative Costs	8.7	100%
Emergency Costs	4.7	100%
Non-Emergency Costs	13.8	100%
Regulatory		
Administration and Enforcement	1.0	100%
Small Operator Assistance	7.2	50%
Totals	35.4	
<p><u>Note:</u> An additional \$16,000 in Federal funds was provided to the State for development of electronic permitting. This represented 50% of the total project cost.</p>		

TABLE 9

ABANDONED MINE LAND RECLAMATION NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL					
Problem Type	Units	Unfunded	Funded	Completed	Total
Priority 1 & 2 (Protection of public health, safety, and general welfare)					
Clogged streams	Miles	21.5	0.1	36.9	58.5
Clogged stream lands	Acres	163.6	0.0	158.8	322.4
Dangerous highwalls	Lin. Feet	1,371,315.0	4,800.0	187,483.0	1,563,598.0
Dangerous impoundments	Count	600.0	5.0	216.0	821.0
Dangerous piles & embankments	Acres	1,975.4	147.0	3,592.3	5,714.7
Dangerous slides	Acres	336.6	2.0	392.4	731.0
Gases: hazardous/explosive	Count	0.0	0.0	0.0	0.0
Hazardous equip. & facilities	Count	772.0	14.0	367.0	1,153.0
Hazardous water bodies	Count	24.0	1.0	4.0	29.0
Industrial/residential waste	Acres	6.1	1.0	28.5	35.6
Portals	Count	1,689.0	21.0	1,723.0	3,433.0
Polluted water: agric. & indust.	Count	107.0	1.0	21.0	129.0
Polluted water: human consumption	Count	1,994.0	0.0	428.0	2,422.0
Subsidence	Acres	719.4	29.9	228.5	977.8
Surface burning	Acres	116.2	11.0	356.5	483.7
Underground mine fires	Acres	75.5	0.0	18.0	93.5
Vertical openings	Count	142.0	1.0	97.0	240.0
Priority 3 (Environmental restoration)					
Benches	Acres	221.8	0.0	27.0	248.8
Dumps	Acres	49.5	0.0	2.0	51.5
Equipment/facilities	Count	139.0	0.0	9.0	148.0
Gob piles	Acres	1,881.0	0.0	187.0	2,068.0
Highwalls	Feet	2,214,680.0	0.0	1,894.0	2,216,574.0
Haul roads	Acres	12.1	0.0	0.0	12.1
Mine openings	Count	29.0	0.0	9.0	38.0
Pits	Acres	36.1	0.0	11.0	47.1
Spoil areas	Acres	667.3	0.0	49.6	716.9
Slumps	Acres	13.0	0.0	0.0	13.0
Slurry ponds	Acres	35.3	0.0	0.0	35.3
Water problems	Gal./min.	16,345.5	0.0	602.0	16,947.5
Other	-	155.0	0.0	0.0	155.0
NOTE: All data in this table are taken from the Abandoned Mine Land Inventory System (AMLIS).					

Appendix B - State Comments on Draft Report

State comments on the draft annual report provided for review on October 31, 1997, are attached.



DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

10 McJunkin Road
Nitro, WV 25143-2506

JOHN E. CAFFREY
DIRECTOR

November 19, 1997

Roger W. Calhoun, Director
Charleston Field Office
United States Department of the Interior
Office of Surface Mining
Reclamation and Enforcement
1027 Virginia Street, East
Charleston, West Virginia 25301

DEPT. OF THE INTERIOR
97 NOV 21 PM 12:02
JEM-R&E CHARLESTON

Dear Mr.  Calhoun:

We appreciate the opportunity to review the draft annual report for the 1997 evaluation year. The agency feels that the 1997 evaluation year was successful with continuing strides being made in most program areas. We also have sought to improve on or continue to work towards resolution on certain aspects of the program as pointed out by the draft report. We do not have any specific comments on this years annual report other than to say we feel it is a fair and accurate representation of our program.

Once again, we appreciate the opportunity to comment and look forward to another successful year.

Sincerely,

John C. Ailes, Chief

JCA/cm

cc: Jack Caffrey, Director
Ed Griffith
Rocky Parsons
HQ Managers



DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

10 McJunkin Road
Nitro, WV 25143-2506

DEPT. OF MINE
97 NOV 26 PM 12:54
OSM-R & E CHARLESTON
JOHN E. CAFFREY
DIRECTOR

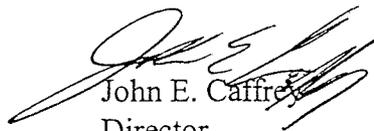
November 20, 1997

Mr. Roger Calhoun
Office of Surface Mining
Enforcement & Reclamation
1027 Virginia Street, East
Charleston, WV 25301

Dear Mr. Calhoun,

The staff of the Office of Abandoned Mine Lands and Reclamation program has reviewed the draft Evaluation Year 1997 West Virginia Annual Evaluation Report and submit no comments.

Sincerely,


John E. Caffrey
Director

JEC/JEP:bt

cc: James E. Pitsenbarger, Chief-AML&R

Appendix C - OSM Response to State Comments

No comments were made by the State which required response by OSM. See State letters of November 19 and 20, 1997, in Appendix B.