

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report  
for the  
Regulatory and Abandoned Mine Land Reclamation Programs  
Administered by the State

of

WEST VIRGINIA

for

Evaluation Year 2000  
October 1, 1999 to September 30, 2000

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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 effectiveness of the West Virginia program in meeting the purposes of SMCRA specified in section 102. This report covers the period of October 1, 1999, to September 30, 2000. Detailed background information and comprehensive reports for the program elements evaluated are available at the Charleston Field Office, 1027 Virginia Street, East, Charleston, West Virginia, 25301, phone (304) 347-7158.

The following acronyms are used in this report:

ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
AML	Abandoned Mine Land
AMLR	Abandoned Mine Land Reclamation
AOC	Approximate Original Contour
ARCC	Appalachian Regional Coordinating Center
CFR	Code of Federal Regulations
CHIA	Cumulative Hydrologic Impact Assessment
CHFO	Charleston Field Office
COE	U.S. Army Corps of Engineers
CWA	Clean Water Act
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
EY 1999	Evaluation year 1999 (October 1, 1998 to September 30, 1999)
EY 2000	Evaluation year 1999 (October 1, 19998 to September 30, 2000)
FWS	U.S. Fish and Wildlife Service
GIS	Geographic Information System
HCPA	Hominy Creek Preservation Association
IBR	Incidental Boundary Revision
NOI	Notice of Intent to Sue
OSM	Office of Surface Mining
OVEC	Ohio Valley Environmental Coalition
SMCRA	Surface Mining Control and Reclamation Act of 1977
TMDL	Total Maximum Daily Load
USGS	Unites States Geological Survey
WCAP	Watershed Cooperative Agreement Program
WVDEP	West Virginia Division of Environmental Protection
WVHC	West Virginia Highlands Conservancy
WVSCMRA	West Virginia Surface Coal Mining Reclamation Act

## **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 before passage of the Surface Coal Mining and Reclamation Act (SMCRA) in 1977

resulted in many unreclaimed or under reclaimed areas within the State. Currently, the Abandoned Mine Land (AML) inventory contains a record of 2,371 such sites.

West Virginia's demonstrated coal reserve base totals 35.4 billion tons. The State's estimated recoverable coal reserves at producing mines totaled 1.9 billion tons in 1998. West Virginia ranks fourth in the country in demonstrated coal reserves and second in recoverable coal reserves. 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 15 percent of the Nation's total production. In 1998, West Virginia produced 171 million tons of coal, allowing it to retain its ranking as the second largest coal producing State (see Table 1, Appendix A for coal production based on sales). The average price per ton of coal mined in West Virginia during 1998 was \$27.07. The price of West Virginia coal rose slightly more than 1997, but it has declined steadily since 1989.

Underground mines produce approximately 68 percent of the State's total coal production. The State's underground mines had an average coal recovery of 61 percent. Longwall mining occurs in eleven States. Fourteen of the Nation's seventy-six longwall mining operations are in West Virginia. Longwall coal production continues to increase in the State. Longwall mining operations produced 30 percent of the State's total coal production in 1998. However, continuous mining operations continue 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. Surface coal production declined by 5.7 percent in 1998, whereas underground production increased by 0.6 percent. Since 1989, however, underground coal production in the State has increased by only 0.4 percent, but surface mine production has increased by 3.3 percent. Mountaintop and multiple seam mining operations are largely responsible for the increased surface coal production. At the end of the reporting period, WVDEP permitted 102 mountaintop mining operations in the State with variances from approximate original contour (AOC). Sixty of these were mountaintop removal and 42 were steep slope. The average mountaintop removal operation totaled 530 acres, and the average steep slope mining operation with an AOC variance totaled 561 acres. These operations affected 0.4 percent of the State's total land and water area. Mountaintop mining operations comprise only 12 percent of the State's total surface mining operations, but account for about 27 percent of the acres under surface mining permits.

West Virginia has approximately 2,500 inspectable units. The number of new permits issued annually by the State has declined, but the complexity and size of the operations have increased. Approximately 63 percent of the State's permits are active and require monthly inspections by the WVDEP. Underground mines account for about 42 percent of the total inspectable units and surface mines account for 33 percent. The remaining 25 percent consists of other facilities, including such things as preparation plants, refuse piles, loading facilities, and haulroads.

Approximately 79 percent of the coal produced in West Virginia is used domestically, with 21 percent of that coal being consumed within the State. Most coal produced in West Virginia is used to generate electricity. Coal produces 98 percent of the electricity generated in State. Water transports 54 percent of the coal produced in the State and railroads transport 40 percent.

West Virginia is the Nation's leading coal exporter with 48 percent of the country's foreign exports. Canada, Japan, Brazil, Italy and the United Kingdom continue to be the leading importers of West Virginia coal. These countries account for 59 percent of the Nation's exports. Metallurgical coal comprises 86 percent of West Virginia's coal exports to foreign countries.

About 400 companies produce coal in West Virginia. Due to increased mechanization and consolidation in the mining industry, more than 12,315 mining jobs have been lost in the State since 1989, although coal production has increased by 12 percent. Employment at both surface and underground mines has declined steadily since 1989. Most of the decline in employment has been at underground mines. The State's coal mining industry directly employs approximately 17,167 people with a payroll of about \$900 million. Total employment, including independent contractors, is nearly 53,000 employees. Seventy-seven percent of the miners in the State work in underground mines. Boone, Kanawha, Mingo, Raleigh and Logan Counties employ 49 percent of the miners in the State. Unions represent 49 percent of the miners in the State. The remainder are non-union. Since 1995, the number of union miners in the State has declined by nearly 34 percent. West Virginia's miners are among the most productive in the Nation producing approximately 4.5 tons of coal per miner per hour. Estimates are that the State's coal industry generates approximately 60,000 additional coal-related jobs.

Coal accounts for nearly 13 percent of the Gross State Product, a measure of the total value of all goods and services produced in the State. West Virginia's coal industry pays more than \$185 million annually in business and severance taxes to State and local governments and another \$180 million in Federal taxes. The coal industry accounts for nearly 27 percent of the State's business tax, and approximately 10 percent of the statewide property tax collections. Overall, it is estimated that every \$1 billion worth of coal production generates \$3.5 billion throughout the economy.

### **III. Overview of Public Participation in the Program**

Throughout the evaluation year, WVDEP and OSM officials met with representatives of various citizen, environmental, and industrial groups including:

- West Virginia Highlands Conservancy,
- West Virginia Mining and Reclamation Association,
- West Virginia Coal Association,
- Ohio Valley Environmental Coalition,
- Contractor's Association of West Virginia,
- River of Promise,
- West Virginia Watershed Network, and
- Plateau Action Network.

Additionally, OSM attended public meetings associated with the following activities:

- West Virginia Watershed Management Framework,
- Statewide TMDL Stakeholder's committee meetings,
- Friends of the Cheat Annual Festival, and
- Watershed Cooperative Agreement Grant Program.

The CHFO maintains a mailing list of organizations and individuals that have been active in regulatory and AML issues in West Virginia. Office staff routinely interacts with individuals and groups throughout the year. Besides the normal oversight activities, CHFO participated in public meetings related to the mountaintop mining controversy. These included public meetings regarding the mountaintop mining environmental impact statement (EIS), and the interim permitting process required by the *Bragg versus Robertson* litigation agreement. Representatives of the mining community and coal field citizens' groups attended these meetings.

West Virginia's approved regulatory program provides many additional opportunities for public participation. In the permitting process, the State must advertise each application for a new or revised permit and must provide interested citizens the opportunity to comment. Citizens may request that the WVDEP hold an informal conference to discuss the application before making a decision to issue or deny the permit. Filing written citizen complaints concerning specific issues also gives citizens the opportunity to participate in the inspection and enforcement process 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.

The WVDEP has aided in the development of the watershed management framework and other initiatives to preserve, protect, and restore stream water quality. The WVDEP's Office of Environmental Advocate also offers a means for public participation. This office works on a variety of environmental issues within the state. They encourage participation on the regulatory process by individuals and groups.

The approved Abandoned Mine Land Reclamation Plan provides 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 State Program**

##### **A. Accomplishments/Innovations**

###### *1. GIS Fill Inventory*

WVDEP, assisted by a cooperative agreement with OSM, has developed a geographic information system (GIS) inventory of valley fills or head-of-hollow fills in West Virginia. The WVDEP goal was to develop a GIS mapping inventory that would include several features digitized as layers. Besides the fill boundaries the layers include:

- permit boundaries,
- drainage structures,
- watersheds of the fills,
- mineral removal area,
- coal seams, and
- watershed boundaries of the permit.

The inventory contains information from 1,045 permits and 109 pending permit applications with planned structures other than sediment ponds located in streams. In addition to fills, these structures include refuse fills and refuse impoundments. The permits are primarily those not yet released from WVDEP jurisdiction after mining and reclamation or others for which WVDEP had retained a paper copy of the permit. Permit files for released permits that exist only on microfilm are not in the inventory. This is due to technical difficulties in digitizing the maps from those files. Since the inventory consists of planned structures, efforts are currently underway to verify the digitized structures using the most recent digital orthophoto quadrangles from USGS.

The data from the inventory is presently available to WVDEP technical personnel for use in permit reviews and impact analysis. The digital data is also linked to the WVDEP's ERIS database containing inspection and enforcement, permitting and bonding, and application tracking information.

## *2. Impact Assessment Model*

During the evaluation period, West Virginia University, in cooperation with WVDEP, worked on the development of a hydrologic assessment model. Planned uses for the model include:

- predicting mine impacts from surface and underground mines on surface waters that affect the hydrologic balance;
- preparing cumulative hydrologic impact assessments;
- assessing stream loadings;
- setting effluent limits; and
- conducting water quality investigations.

The assessment model is still in development and WVDEP has not implemented it. The WVDEP has upgraded the appropriate computers so they can run the software. They have conducted training for the appropriate employees, but they are not authorized to use the program until there are further improvements to the software. Included in proposed improvements is a groundwater component.

## *3. Watershed Management Framework and Clean Water Action Plan*

During the evaluation year, both WVDEP and OSM participated with other State and Federal agencies in efforts associated with the West Virginia Watershed Management Framework and the Clean Water Action Plan. The Watershed Management Framework is West Virginia's plan for coordinating the operations of existing water quality programs and activities. Its goal is to better achieve water resource management goals and objectives shared by multiple agencies. This management initiative involves using watersheds as a way to organize and focus Federal and State agency partners' activities.

A component of the West Virginia Watershed Management Framework is the Clean Water Action Plan. This is a Federal initiative introduced early in 1998 to help chart a course toward fulfilling the original goals of the Clean Water Act for restoring and protecting the nations's water resources. OSM and WVDEP jointly participate in this initiative.

## **B. Issues**

### *1. Contemporaneous Reclamation*

OSM with assistance from the WVDEP conducted a review of contemporaneous reclamation on large surface operations. The study verified that the State is generally following its approved State program. The State program does contain more specific provisions than the Federal regulations. Some areas needed improvements, such as the documentation justifying the variance from contemporaneous reclamation standards and bonding adequacy. For further discussion of this issue see Section VII.A.

### *2. Acid Mine Drainage Treatment/Financial Guarantee/Bond Pool*

In the previous evaluation year, OSM reported that the State's alternative bonding system was not sufficient to meet the reclamation demands for both land reclamation and water treatment. OSM also reported that three significant program amendments concerning the bonding program had not been corrected. Although, the State did not resolve these bonding problems during this evaluation year, WVDEP continued to make progress toward the resolution of these issues.

As identified in last years annual evaluation report, OSM had contracted a consulting firm to develop options for funding long term treatment of polluted discharges and to develop a methodology for calculating annual treatment costs. One goal was to give Regulatory Authorities the necessary tools to develop adequate financial arrangements with permittees with long term water treatment responsibilities. A second goal was to assist in calculating site specific treatment costs. (OSM's contractor has since completed the work on this project and completed all documents. Copies of the final products have been distributed to the WVDEP.) During this year, WVDEP also contracted a consultant to work with OSM and its contractor in the development of these options. Additionally, WVDEP and its contractor initiated an independent review of those permits listed on the West Virginia Active Mine Drainage Inventory to determine the annual treatment costs for each mine site.

On August 31, 2000, WVDEP sent OSM a letter describing the actions that they were taking to identify acid mine drainage (AMD)treatment costs and to resolve related bonding issues. The letter further described WVDEP's intent to develop a comprehensive bonding plan to correct its bonding deficiencies and for addressing water treatment at bond forfeited sites. The WVDEP also explained that they would do an evaluation of the feasibility of their bonding plan and funding options through a contractual arrangement. They project that they will complete this evaluation by early January 2001. However, State law requires the State legislature to approve any resulting program revisions before enforcing any changes. Legislative approval may be difficult to secure before the end of 2001 as the WVDEP will have missed its opportunity to submit Regulatory changes to the 2001 Legislature. OSM must also approve any program changes before WVDEP carries out them.

OSM and WVDEP cooperated during the year to provide West Virginia data for OSM's Appalachian Region AMD Inventory of Active and Bond Forfeited Mine Sites. A draft report has been prepared analyzing the inventory data. At the end of this evaluation period, WVDEP and OSM had not agreed on those permits/sources that should appear on the AMD Bond Forfeiture Inventory. OSM continues to work with WVDEP to develop a complete and accurate Inventory of the Bond Forfeiture Sites with polluted discharges.

Near the end of this evaluation year OSM received a Notice of Intent to Sue from the West Virginia Highlands Conservancy. This included various assertions regarding the West Virginia bonding program and treatment of water at bond forfeited sites. Information concerning the NOI can be found in section IV.C.4. of this report.

### *3. Program Maintenance/Amendment Status*

#### Maintenance of the Approved Program

During the evaluation period, WVDEP satisfied nine required amendments. OSM modified three existing required amendments and added twenty-two new required amendments. At the end of the reporting period, the State had not satisfied forty-one required amendments. Sixteen of the required amendments do not have to be satisfied until after the end of this reporting period.

In addition, on February 8, 2000, OSM provided WVDEP a 30 CFR Part 732 notification regarding staffing. On August 22, 2000, OSM sent the State two more 30 CFR Part 732 notifications regarding subsidence and valid existing rights. OSM has informally notified the State that it plans to reissue its 30 CFR Part 732 notification regarding ownership and control early next year. In view of these developments, the State has thirty-one deficiencies resulting from 30 CFR Part 732 notifications they need to resolve.

On February 8, 2000, OSM provided the State a listing of its outstanding required amendments and 30 CFR Part 732 notifications. On August 3, 2000, WVDEP provided OSM an informal response to its letter of February 8. The State informed OSM that on June 30, 2000, they had submitted proposed rules to satisfy nine of the required amendments to the Legislative Rulemaking Review Committee. The State also submitted policy statements or made "as effective" arguments to address sixteen of the required amendments. The State plans to submit a formal response addressing all outstanding required amendments soon.

At the end of the evaluation period, the State had not submitted amendments or schedules to address the thirty-one 30 CFR Part 732 deficiencies. These submissions should occur soon. In summary, West Virginia has a total of seventy-two program amendments (forty-one required amendments and thirty-one 30 CFR Part 732 deficiencies) that need to be satisfied. OSM is working closely with the State in developing a program submission that will address these issues. Once submitted, OSM will announce receipt of the amendment in the *Federal Register* and seek public comment before rendering a final decision on it.

### Program Amendment Status

On May 11, 1998, the WVDEP submitted an amendment to its approved permanent regulatory program (WV-080-FOR). The amendment consists of revisions to the State's Surface Mining Reclamation Regulations that the Governor signed into law on April 12, 1998. OSM announced receipt and requested public comment on the amendment in the *Federal Register* on June 15, 1998. The revisions relate to the definitions of "coal remining operation" and "remined area," removal of abandoned coal refuse disposal piles, permit findings, disposal of excess spoil, special authorization for coal extraction incidental to development, and remining standards. Many changes are to start statutory revisions that OSM had approved earlier. On May 5, 2000, OSM published a final notice in the *Federal Register* approving the amendment with certain exceptions (65 FR 26130-26136). The approval resulted in the removal of one required amendment and the imposition of three more required amendments.

On March 25, 1999, the WVDEP submitted an amendment to its approved program (WV-081). On April 1, 1999, the WVDEP notified OSM that the Governor had signed Enrolled Senate Bill 681 into law. It creates a new Office of Explosives and Blasting within the WVDEP, creates an Office of Coalfield Community Development, and modifies the State's Stream Mitigation Law. OSM published a *Federal Register* notice on April 20, 1999, announcing the receipt of the amendment limited to the Office of Explosives and Blasting. On August 10, 1999, the WVDEP provided OSM additional clarification on the amendment. OSM published a notice in the *Federal Register* on October 8, 1999, announcing receipt of the information from the WVDEP and providing the public an opportunity to comment. On November 12, 1999, OSM published a notice in the *Federal Register* approving the creation of the Office of Explosives and Blasting and authorizing the amendment of certain State blasting regulations (64 FR 61507-61518). Three State statutory provisions were inconsistent with SMCRA, and OSM required the State to amend its program to correct these deficiencies.

On May 5, 1999, the WVDEP submitted revisions to its Surface Mining Reclamation Regulations that House Bill 2533 authorized (WV-082). The State also requested that OSM reconsider its disapproval of certain provisions in view of a U.S. Court of Appeals decision relating to subsidence. OSM published a notice of receipt of the amendment in the *Federal Register* on May 27, 1999. The amendment revises those State requirements relating to definitions of "area mining operations" and "mountaintop mining operations"; variances from approximate original contour in steep slope areas; subsidence control plans; permit issuance; construction tolerance; surface owner protection; and primary and emergency spillway designs. On October 1, 1999, OSM published a *Federal Register* notice announcing its approval of the amendment. Because of the amendment, OSM removed the required amendments regarding spillway design for coal refuse impoundments and allowable postmining land uses for steep slope mining operations.

On October 5, 1995, OSM approved an amendment to the State's Surface Mining Reclamation Regulations (60 FR 51900). Part of that amendment involved CSR 38-2-12.4.e. which provided that the operator, permittee, or other responsible party shall be liable for reclamation costs that are greater than the amount of the forfeited bond. On August 8, 1996, the

U.S. District Court for the Southern District of West Virginia in *Cat Run Coal Co. v. Babbitt*, Civil Action No. 2:95-1063 (S.D. W.Va.) vacated OSM's decision to approve CSR 38-2-12.4.e. To implement the U.S. District Court order, on November 12, 1999, OSM published a final correction notice in the *Federal Register* (64 FR 61506-61507). In that notice, OSM announced its decision to amend its approval of CSR 38-2-12.4.e. to disapprove the phrase "other responsible party." In addition, OSM required the State to delete the phrase from its rules.

On February 28, 2000, OSM published a *Federal Register* notice that corrects an earlier OSM decision concerning the State's subsidence regulations (65 FR 10388-10390). This correction notice complies with the decision of the U.S. Court of Appeals for the District of Columbia in *National Mining Association v. Babbitt*, Civil Action No. 98-5320 (D.C. Cir., April 27, 1999). In that decision, the U.S. Court of Appeals struck down two OSM coal mine subsidence regulations. On May 5, 1999, WVDEP requested that OSM reconsider its previous disapprovals of parts of the State's regulations at CSR 38-2-3.12 concerning subsidence control plans and CSR 38-2-16.2 regarding surface owner protection from subsidence damage. They requested that OSM remove the corresponding required amendments specified in the February 9, 1999, *Federal Register* notice. The correction notice resulted in the removal of four required amendments and the modification of another one.

On March 14, March 28, and April 6, 2000, WVDEP submitted an amendment to its program. The amendment concerned changes to the State's Surface Mining Reclamation Regulations made by the State Legislature in House Bill 4223, and changes made to the Code of West Virginia in Senate Bill 614. Most of the amendment was intended to comply with the Consent Decree agreed to in the Bragg v. Robertson case. On April 25, 2000, OSM announced receipt of the proposed amendment in the *Federal Register* and requested public comments (65 FR 24158-24162). To speed up the review of the amendment, OSM separated the amendment into two parts. The first part was the amendments to new section CSR 38-2-7.5 concerning "homesteading" as a postmining land use for permits meeting the requirements for a variance from AOC. The second part consisted of changes to the Code of West Virginia in Senate Bill 614 and the regulatory changes at CSR 38-2-7.4 concerning commercial forestry postmining land use for mountaintop removal mining operations receiving an AOC variance, and various other regulatory changes. On August 18, 2000, OSM published its final decision in the *Federal Register* on the proposed statutory revisions in Senate Bill 614 and the regulatory changes at CSR 38-2-7.4 regarding commercial forestry (65 FR 50409-50431). Because of that decision, OSM removed two required amendments, revised two existing required amendments and added fifteen more required amendments. Most of the required changes concern commercial forestry practices on mountaintop removal sites with AOC variances. OSM should publish a final decision on the State's proposed "homesteading" rules in EY 2001.

#### 4. Staffing

On February 8, 2000, OSM advised WVDEP that under 30 CFR 732.15, the approved program does not have " . . . sufficient legal, technical and administrative personnel and sufficient funding to implement, administer and enforce the provisions of the program . . . " In its 30 CFR Part 732 notification, OSM asked WVDEP to submit a plan to fill the 24 existing

vacancies identified in its Administration and Enforcement Grant, hire seven additional staffers for permit review purposes, add 15 additional staffers to operate the new Office of Explosives and Blasting, hire a hearings officer and provide an additional 11 staffers for database support and trend station monitoring. With the 58 additional positions, WVDEP staffing would total 286 employees. In their June 13 and August 21, 2000, responses to the 30 CFR Part 732 notification, WVDEP acknowledged that a staffing shortfall did exist. They committed to work with both the State legislative and executive branches to secure additional State matching funds to support and enhance the approved program.

On July 13, 2000, President Clinton signed Public Law 106-246 into law. This law provided OSM supplemental funding for \$9.8 million to improve the WV program. The supplemental appropriation bill authorized \$3.6 million for staffing, which requires State matching funds, and \$6.2 million in 100 percent Federal funds for State program enhancements.

On September 13, 2000, during a special legislative session, the State Legislature approved and the Governor signed into law a funding bill to provide WVDEP \$3.6 million from a sewer and water contingency fund until they have identified a permanent funding source. This money will be used to match the \$3.6 million in Federal funding for hiring staff. It will also help secure the additional \$6.2 million of 100 percent Federal funds for program enhancements, which include electronic permitting, software development and extensive database upgrades. On September 14, 2000, WVDEP submitted the necessary paperwork to acquire these funds through its grant and cooperative agreement program. OSM is reviewing the State's request. An award of \$9.8 million is anticipated early next fiscal year.

#### *5. Disallowed Costs*

An audit by OSM in EY 1999, revealed that WVDEP had been improperly billing inspection costs for the quarry inspection program to OSM regulatory grants. The State has provided records showing an overmatch in expenditures in the regulatory program and has requested that OSM accept these instead of returning the funds. Resolution is pending.

#### *6. Perimeter Protection*

Last year a perimeter protection study evaluated the perimeters of 10 mining complexes consisting of 26 large, active surface mine permits, totaling 24,045 permitted acres.

This study suggested the need for better perimeter protection, particularly in steep slope terrain. Mine site evaluations indicated 15 downslope spoil and related violations observed on 13 permits. Violation histories indicated some companies had more problems with downslope spoil and off-site disturbance than others.

Suggestions to improve perimeter protection and reduce off-site disturbance in last year's report included:

- Leaving natural barriers and requiring specifications for constructed barriers.
- Training inspection personnel to recognize and identify downslope spoil and off-site disturbance and instructing inspection personnel to properly cite all violations observed.

- Proper issuance and enforcement of show cause orders and consent agreements for patterns of violations.

To alleviate some problems associated with downslope spoil disposal, WVDEP submitted revisions to the Legislative Rulemaking Review Committee for consideration during the upcoming legislative session (December 2001). These provided design standards for constructed outcrop barriers. The WVDEP is also providing guidance to their field staff emphasizing the need to properly cite all violations observed during inspections.

In response to the issue on proper issuance and enforcement of show cause orders, OSM conducted a review of these actions in EY 2000. The results of this review are in Section VII D.

#### *7. Pattern of violations*

Last year's perimeter protection report suggested a problem with patterns of violations related to downslope spoil and off-site disturbance. As a follow-up to this finding, OSM evaluated the State's program for issuance of appropriate show cause orders and consent agreements for patterns of the same or related violations. The results of this review are in Section VII.D.

The WVDEP has agreed to instruct their field staff of the need to consider the number of previous violations of the same or related requirements of the Act as described in 38-2-20.4.b.1. of the approved regulations.

#### *8. Mountaintop Removal AOC/Postmining Land Use*

In last years annual report, OSM discussed the final oversight report entitled, "An Evaluation of Approximate Original Contour and Postmining Land Uses in West Virginia." This report found that AOC was not administered consistently in all applications. It noted significant problems with the appropriateness of postmining land uses associated with mountaintop and steep slope mining permits issued with waivers to AOC. During this evaluation period, WVDEP made additional progress to eliminate some of these problems. These items are discussed in detail in Sections VI-B., C., and E.

### **C. Litigation**

#### 1. *Bragg v. Robertson, Civil Action No. 2:98-636 (S.D. W.Va.)*

On July 16, 1998, the West Virginia Highlands Conservancy (WVHC) and ten other individuals sued the WVDEP and the U.S. Army Corps of Engineers (COE) in U.S. District Court. The law suit concerns the loss and degradation of West Virginia streams resulting from the construction of excess spoil fills associated with surface mining activities. These include mountaintop-removal, steep slope and multiple seam mining operations. A settlement agreement resolved all of the components of this lawsuit except the applicability of the stream buffer zone prohibitions to valley fills. On October 20, 1999, Judge Charles Haden ruled that the placement of excess spoil from surface mining operations in intermittent and perennial streams violates Federal and State surface mining laws and the CWA. The State appealed this ruling to the Fourth Circuit in Richmond and it is currently under review by the Fourth Circuit.

2. West Virginia Highlands Conservancy (WVHC) v. Babbitt, Civil Action No. 1:99CV01423 (D.C. D.C.)

On June 4, 1999, the WVHC and seven other citizens filed a suit in the U.S. District Court for the District of Columbia against Interior Secretary Bruce Babbitt. The complaint stated that Secretary Babbitt, acting through OSM, issued a document entitled "Summary Report -- West Virginia Permit Review -- Vandalia Resources, Inc. Permit No. S-2007-98" announcing that valley fills are excluded from the stream buffer zone requirements of 30 CFR 816.57. The suit alleges that the announcement is both a rule within the meaning of the Administrative Procedures Act and a regulation within the meaning of SMCRA. The complaint alleges that the Secretary unlawfully promulgated the rule without first publishing a *Federal Register* notice announcing it and providing for public participation. Also, OSM did not obtain the concurrence of the EPA Administrator as required by section 501(b) of SMCRA, and prepare an EIS as required by the National Environmental Policy Act. The plaintiffs have asked the Court to declare the announcement a rule and to vacate it. The Court took no action on this case during this reporting period.

3. Ohio Valley Environmental Coalition and Hominy Creek Preservation Association (HCPA) v. WVDEP, Civil Action No. 3:00-0058, (S.D. W.Va.)

On January 21, 2000, the Ohio Valley Environmental Coalition (OVEC) and the Hominy Creek Preservation Association (HCPA) filed suit in U.S. District Court for the Southern District of West Virginia at Huntington. The suit alleges that certain obligations under SMCRA are non-discretionary legal obligations and asking that the WVDEP be compelled to perform those functions. The suit alleges that the WVDEP has failed to perform adequate cumulative hydrologic impact assessments (CHIAs) and to require adequate hydrologic monitoring plans.

On June 27, 2000, Judge Chambers granted OVEC/HCPA's request for a preliminary injunction with respect to WVDEP's decision to grant Incidental Boundary Revision (IBR) No. 7 for Green Valley Coal Company and denied such request regarding IBR No. 6. Judge Chambers directed the State to conduct additional assessments to learn if the proposed mining activities are likely to cause material damage to the hydrologic balance.

4. Notice of Intent to Sue (NOI)

Citizens Coal Council

On April 6, 2000, the Citizens Coal Council filed an NOI with the WVDEP. The NOI incorporated by reference the allegations made in the OVEC/HCPA complaint filed on January 20, 2000.

West Virginia Highlands Conservancy

On July 14, 2000, the West Virginia Highlands Conservancy (WVHC) filed an NOI with the Department of the Interior, OSM, and WVDEP for the State's failure to implement, enforce and maintain its approved program. The primary issues relate to the State's failure to: (1) make thirty required program amendments and respond to eight 30 CFR Part 732 notifications, (2) maintain an adequate staffing level, and (3) properly administer its alternative bonding system (Special Reclamation Fund).

On October 6, 2000, OSM advised the WVHC that their NOI highlights some significant issues with the State's administration of its approved program that OSM has been working on with WVDEP for the past several years. The record reflects that both agencies have undertaken efforts to address the issues, and starting a 30 CFR Part 733 action would duplicate existing efforts. These efforts reaffirm the State's capability and intent to administer its approved program. Therefore, OSM advised the WVHC that it would not initiate 30 CFR Part 733 action against WVDEP at this time.

V. **Success in Achieving the Purposes of SMCRA as Determined by Measuring and Reporting End Results**

To further the concept of reporting end results, the findings from performance standard and public participation evaluations are being collected for a national perspective in terms of the number and extent of observed off-site impacts, the number and percentage of inspectable units free of off-site impacts, the number of acres that have been mined and reclaimed and which meet the bond release requirements and have been released for the various phases of reclamation, and the effectiveness of customer service provided by the State. Individual topic reports are available in the Charleston Office which provide additional details on how the following evaluations and measurements were conducted.

**A. Off-Site Impacts**

OSM conducted an evaluation of all West Virginia non-forfeited coal mining permits to determine 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. The evaluation revealed that 95 percent of the State's 2,477 permits were off-site impact free.

During this evaluation period, the State conducted 25,178 inspections and issued 952 enforcement actions. Of these enforcement actions, 152 off-site impacts were found on 117 permits. In comparison to last years 257 impacts on 179 permits, the State has improved the number of impacts off-site by 41 percent, and the number of permits with off-site impacts by 35 percent. Most of the off-site impacts (97 percent) were minor. The figures representing resources affected, degree of impact, and type of impact can be found on Table IV.

Hydrology, representing 73 percent of the type of impact affected this year, remains the most common type of impact affected by the mining operations. This category has increased 11 percent from last year's 62 percent.

The State's Special Reclamation group conducted an off-site impact evaluation of the forfeited permits for the review period of July 1, 1999, through June 30, 2000. During this review period, 55 sites were added to the inventory. One company, Royal Scot Minerals, Inc., was responsible for 33 bond forfeitures. Two of these sites have off-site impacts - one of moderate degree and one of major degree - relating to hydrology.

The State reported that they reclaimed 60 bond forfeiture sites during the review period, resulting in seven off-site impacts relating to water quality problems being corrected. These additions and deletions decrease the forfeited permit inventory by five to 334 with 71 off-site impacts.

Of the 71 off-site impacts nine are land problems and 62 are water quality problems.

The Special Reclamation group continues to maintain the inventory of the State's forfeited permits and are responsible for the reclamation of these sites. They are monitoring some sites with off-site impacts with plans being prepared to bring these sites into regulatory compliance. Others are in various planning stages for remedial work. Overall, the State has reduced the off-site impact inventory of the forfeited sites by 6 percent during this evaluation period.

## **B. Reclamation Success**

This study evaluated the effectiveness of the WVDEP program in ensuring successful reclamation. Team members conducted inspections at a random sample of sites receiving phase III or final bond release. They decided the number of acres that met the bond release standards during the evaluation year and had been granted phase III bond release by the WVDEP. Overall, the inspections of 24 sites granted phase III release showed that the WVDEP had properly applied the reclamation standards of the West Virginia program and that they had successfully reclaimed the sites. One exception was found where they had not eliminated the highwall. That instance involves other program related issues and is currently pending a response from the WVDEP for the ten day notice issued by OSM. Further discussion of the OSM inspections is found in section VII.B.

During the evaluation year, WVDEP granted 9,145 acres phase III bond release based on the successful completion of all reclamation requirements. Phase I and Phase II bond releases during the year were 4,526 acres and 4,589 acres respectively. Also during this evaluation year, new permits added 6,729 acres and acreage adjustments to existing permits added 3,563 acres for a total of 10,292 newly permitted acres. At the end of the evaluation year, the total permitted acreage in West Virginia was 283,560. More information on the acreage of permits is available in Table 2.

## **C. Customer Service**

The CHFO undertook this review to decide if the WVDEP enforces water replacement and subsidence-related provisions of the Energy Policy Act of 1992 (EPACT). The review team first obtained a list from the State's ERIS system of all citizen complaints received between January 1, 1997, and July 26, 2000, alleging water loss or subsidence due to underground mining activities. The team further refined this list by eliminating complaints that were not mining related. The team sampled twenty-five complaints from this list to determine if they were resolved according to EPACT. The complaints reviewed represented all regions and impact types (subsidence and water loss). An assessment of the findings by impact type follows.

### Water Loss

When the State determined that water loss was the direct result of mining operations, they promptly notified the operator of their responsibility to provide replacement water to the citizen. Water replacement occurred in all complaints reviewed. The reviewers were not able to confirm the time

frames for a water hookup in all the files. In all instances reviewed, the permittee supplied the landowner with replacement water as required by EPACT.

### Subsidence

Once the State determined that damage to structures or property was due to subsidence, they promptly notified the operator of their responsibility to correct the damage. Once notified, the companies repaired the structures as required by EPACT.

Not all of the maps reviewed contained both the 15 degree and 30 degree angles of draw specified in the OMR General Procedures on Subsidence dated May 22, 1996. The WVDEP does not require the updating of old maps unless there is a significant revision or permit renewal.

One important note is that this review did not evaluate complaints that the WVDEP deemed not mining related. This is often the point at which citizens and WVDEP disagree, and is often the most contentious decision involved in this process.

## **VI. OSM Assistance**

OSM granted Federal funds for \$7,373,026 to the State during the evaluation period. Table 7 in Appendix A shows the State staffing to enforce the approved State program. Table 8 identifies the specific amounts awarded for each program.

### **A. Site Specific Technical Assistance**

OSM provided site specific technical assistance to the WVDEP regulatory program in three areas during this evaluation year. Staff from the Appalachian Regional Coordinating Center (ARCC) in Pittsburgh provided technical assistance in complaints dealing with landslides and water quality. The CHFO staff provided technical assistance in reviewing a watershed for flooding impacts from mining.

### **B. Mountaintop Mining Environmental Impact Statement**

On December 23, 1998, attorneys for the WVHC, EPA, FWS, COE, WVDEP and OSM signed a settlement agreement to resolve all claims brought against the federal defendants. The agreement requires the federal agencies to prepare an environmental impact statement (EIS) on the effects of mountaintop mining. Specifically, the agencies are, "to consider developing agency policies, guidance, and coordinated agency decision-making processes to minimize, to the maximum practicable extent, the adverse environmental effects to waters of the United States and to fish and wildlife resources affected by mountaintop mining operations, and to environmental resources that could be affected by the size and location of excess spoil disposal sites in valley fills." WVDEP and OSM have both been participating in this EIS process. The EIS is still under development.

### C. Mountaintop Mining Assistance

As discussed in last year's annual report, the CHFO released its final oversight report entitled, "An Evaluation of Approximate Original Contour and Postmining Land Uses in West Virginia," on May 4, 1999. The report emphasized the two primary issues surrounding mountaintop mining - approximate original contour (AOC) variances and postmining land use determinations.

The final report contained a draft guidance document that the State developed, in cooperation with OSM, to assist permit reviewers in making AOC determinations. To resolve the issue concerning postmining land use, OSM agreed to develop policy guidance to clarify what postmining land uses they allow for mountaintop removal and steep slope mining operations with AOC variances. In addition, the report outlined measures to address other areas of concern. These include stream buffer zone findings and variances, riparian vegetation, damage to natural water courses, hydrologic reclamation plans, and contemporaneous reclamation.

Part of the report was a joint agreement between OSM and WVDEP to resolve the outstanding issues. The plan addressed the issues raised in the draft oversight report, and the other mountaintop mining issues brought to OSM's attention through litigation, public participation or from oversight. The following summarizes the fifteen components of that action plan and the status of each.

- WVDEP was to develop, with OSM assistance, criteria for assessing excess spoil calculations for determining AOC and begin implementing the concept on a pilot basis.

WVDEP published its AOC criteria on March 18, 1999, and began using it in evaluating permit applications. Negotiations later led to the development of the AOC Process Guidance Document, which is commonly called the AOC Plus Guidelines. Those guidelines were to further clarify the process of determining when AOC has been achieved and optimizing spoil placement for excess spoil fills. OSM approved the guidelines on March 24, 2000, with certain exceptions, and WVDEP began implementing them on June 5, 2000. OSM plans to select recently approved permit applications where the State has not included OSM in application coordination to evaluate the implementation of those guidelines and determine if similar guidance would be suitable on a regional or national basis. OSM is working with the WVDEP on use of these guidelines on large surface mining applications as part of the permitting technical assistance.

- WVDEP was to review current permit applications to assure that they reflected the proper classification of mining type and applicable AOC variance in the State's permitting database, Environmental Resources Information System (ERIS). OSM agreed to continue working with WVDEP to improve its data collection efforts.

Before the completion of the final report, WVDEP updated AOC variance and postmining land use data in ERIS for all mountaintop mining permits. During this evaluation period, OSM sampled 37 permits to verify the accuracy of the data. OSM's review of the permit applications found the type of postmining land use and the AOC variance listed in ERIS for several mountaintop mining permits

to be questionable. The State is verifying the data for these permit applications with its inspectors and will modify ERIS, if necessary.

- WVDEP was to ensure that mountaintop mining permit applications with AOC variances required information regarding expected need and market data.

During the last evaluation period, the State revised its permit application form to require the submission of information regarding expected need and market data. Under the January 3, 2000, Consent Decree that settled the remaining counts in the *Bragg v. Robertson* litigation, WVDEP agreed to develop statutory revisions regarding expected need and market data and allowable postmining land uses for mountaintop removal mining operations with AOC variances. WVDEP submitted the statutory revisions regarding expected need and market data in March 2000, and OSM approved the amendment on August 18, 2000 (65 FR 50410). OSM is working with the WVDEP on large surface mining applications as part of the technical assistance. OSM plans to review three randomly selected mountaintop removal permit applications where OSM has not been involved in application coordination to ensure compliance with these requirements.

- WVDEP was to clarify how it interpreted its "commercial woodland" requirements and submit other criteria showing that "commercial forestry" was an acceptable postmining land use for mountaintop mining operations with AOC variances.

Last year, WVDEP submitted information clarifying its "commercial woodland" postmining land use requirements. During this evaluation period, the State submitted regulations including "commercial forestry" as an acceptable postmining land use for mountaintop removal mining operations. In addition, the State removed "commercial woodlands" as an approvable postmining land use for mountaintop removal mining operations. OSM approved the revisions on August 18, 2000 (65 FR 50410). No further action is required.

- WVDEP agreed to modify its program to clarify that they will interpret the term "public use" the same as "public facility use" at Section 515(c)(3) of SMCRA. In addition, the State agreed to stop approving "fish and wildlife habitat and recreation lands" as an allowable postmining land use for mountaintop mining operations.

During the evaluation period, the State submitted a program amendment to delete "fish and wildlife habitat" as an approvable postmining land use for mountaintop removal mining operations. WVDEP also revised the term "public use" to "public facility including recreational uses."

OSM approved the changes on August 18, 2000, to the extent that "public facility including recreational uses" is interpreted to mean the same as the SMCRA term "public facility (including recreational facilities) use" (65 FR 50410). WVDEP needs to submit an amendment clarifying its use of the term, "recreational uses."

- WVDEP agreed to review mountaintop removal mining permits with inappropriate postmining land uses. The State also agreed to revise

existing permits that allow for unauthorized postmining land uses of "forestry" and "fish and wildlife habitat and recreation lands." To assist the State in its evaluation, OSM agreed to publish a postmining land use policy document for mountaintop mining operations with AOC variances.

Last year, WVDEP stopped approving mountaintop removal mining permit applications with unauthorized postmining land uses. During this evaluation period, WVDEP revised its program to clarify the acceptability of "forestry" and "fish and wildlife habitat" as approvable postmining land uses for mountaintop removal mining operations. WVDEP's review of existing mountaintop removal mining permits was delayed pending the approval of the program revisions and the development of postmining land use guidelines by OSM. On June 26, 2000, OSM issued its final policy clarifying allowable postmining land uses and related permitting requirements for mountaintop removal and steep slope mining operations with AOC variances. On August 18, 2000, OSM approved the State's program amendment with certain exceptions (65 FR 50409-50431). "Commercial forestry" is now allowed, but "fish and wildlife habitat" is no longer an acceptable postmining land use for mountaintop removal mining operations. Neither postmining land use is allowed for steep slope mining operations with AOC variances. In July, OSM reviewed ERIS and identified thirteen mountaintop removal mining permits and eight combination mountaintop removal and steep slope mining permits with AOC variances that require further evaluation by the State. WVDEP has not completed its review of the permits. Depending on the outcome of its evaluation, the State may require revisions to some of these permits.

- WVDEP agreed to modify its permit application form and review document to include specific findings for mountaintop-removal and steep-slope mining AOC variances.

Last year, WVDEP modified its permit application form to require the specific findings. WVDEP has agreed to provide OSM a list of permits that used the revised forms. OSM will sample three randomly selected permits to ensure compliance with the revised forms and procedures.

- WVDEP agreed to modify the West Virginia program to limit approval of steep-slope AOC variances to specific postmining land uses authorized under SMCRA.

During the last evaluation period, WVDEP submitted a program amendment that limited the approval of steep slope AOC variances to specific postmining land uses. On October 1, 1999, OSM approved the State's amendment to CSR 38-2-14.12.a.1. This limits the postmining land uses approvable for steep slope mining operations with AOC variances to industrial, commercial, residential or public use, including recreational facilities (64 FR 53201). No further action is required for this element.

- WVDEP agreed to review permits with steep-slope mining AOC variances to decide the appropriateness of the variance and the postmining land use.

The State's review of existing steep slope mining permits with AOC variances was delayed pending the approval of the program amendment discussed above and the development of postmining land use guidelines by OSM. On June 26, 2000, OSM issued its final policy clarifying allowable postmining land uses and related permitting requirements for mountaintop removal and steep slope mining operations with AOC variances. In July, OSM reviewed ERIS and identified sixteen steep slope mining permits and eight combination mountaintop removal and steep slope mining permits with AOC variances that require further evaluation by the State. WVDEP has not completed its review of the permits. Depending on the outcome of this evaluation, the State may require revisions to some of these permits.

- WVDEP agreed to work with OSM to further clarify how they will apply SMCRA and WVSCMRA to protect riparian vegetation, natural watercourses and the buffer zones of intermittent or perennial streams while allowing the disposal of excess spoil in streams.

On October 20, 1999, U.S. District Chief Judge Charles Haden issued an order prohibiting the State from approving stream buffer zone variances without making the required findings. The order also prohibited the State from allowing the placement of excess spoil in intermittent and perennial streams for the primary purpose of waste disposal. On October 29, 1999, Judge Haden stayed his order regarding the applicability of the State's stream buffer zone rules to surface mining operations with valley fills. They have appealed Judge Haden's decision to the 4th U.S. Circuit Court of Appeals in Richmond, Virginia. This has delayed the completion of these tasks pending resolution of the appeal.

- WVDEP agreed to participate with OSM in the evaluation of the probable hydrologic consequences determinations, cumulative hydrologic impact assessments and hydrologic reclamation plans of large mountaintop mining operations to ensure that adequate steps are being taken to minimize disturbances to the hydrologic balance.

During the evaluation period, the WVDEP revised its permit application form to include a section entitled, "hydrologic reclamation plan." In cooperation with OSM, WVDEP is developing guidance documents and making other procedural changes to improve the evaluation of the hydrologic portion of permit applications. See VI.E. of this report for further discussion of this ongoing effort.

- WVDEP agreed to participate with OSM in the evaluation of mountaintop mining permits to ensure compliance with the contemporaneous reclamation requirements of the approved State program.

In cooperation with WVDEP, OSM conducted permit and field reviews to ensure compliance with the State's contemporaneous reclamation requirements. The field reviews were completed in January 2000. In March 2000, WVDEP submitted a program amendment to OSM increasing the bond for mining operations with contemporaneous reclamation variances. OSM approved the amendment on August 18, 2000 (65 FR 50424). Simultaneously, OSM provided WVDEP a draft report outlining

its contemporaneous reclamation findings. See IV.B.1. of this report for a discussion of these findings. Pursuant to the January 3, 2000, Consent Decree, WVDEP agreed to make site-specific written findings for permits with contemporaneous reclamation variances. OSM is working with the WVDEP on contemporaneous reclamation requirements on large surface mining applications pursuant to OSM's technical assistance. The State has modified its permitting procedures to comply with this requirement. In addition, OSM plans to evaluate some permits to ensure that WVDEP is making the required findings.

- WVDEP agreed to cooperate with OSM and allow Federal oversight and technical assistance activities to occur before the issuance of surface mining permits.

OSM and WVDEP are still conducting interagency reviews of applications before permit issuance to ensure compliance with SMCRA and CWA requirements. For further discussion of these efforts, see VI.D. of this report.

#### **D. Permitting Technical Assistance**

Since April 1999, OSM has provided technical assistance to WVDEP in the review of surface mining applications determined likely to require the issuance of a CWA Section 404 Individual Permit. Assistance has also been provided in implementing State Cumulative Hydrologic Impact Assessment standards revised in 1999. The OSM team providing this assistance during EY 2000 consisted of three geologists/hydrologists, two engineers, a manager, and other staff as needed.

Currently, the OSM team is providing assistance on 18 permit applications that were initially determined likely to require a CWA Section 404 Individual Permit. While the size of many of these permits has been reduced and may no longer require CWA Individual Permits, OSM is continuing to provide assistance until the WVDEP can reach a permit decision. A monthly report to the West Virginia Congressional Delegation provides the current status of SMCRA and CWA permit reviews. WVDEP, OSM, EPA, COE, and FWS prepare this. Each month's report is available for viewing on OSM's Web Page under the heading "Mountain Top Mining."

OSM is also continuing to coordinate with the EPA, FWS, COE, and WVDEP to find better ways to coordinate the reviews necessary to begin a surface mining operation.

#### **E. Guidance Development Technical Assistance**

In April 2000, OSM and WVDEP began an effort to update agency guidance documents to reflect current requirements and policies of WVDEP. Six areas were chosen for development of revised policy documents during EY 2000. These areas chosen were: probable hydrologic consequences and hydrologic reclamation plans; cumulative hydrologic impact assessment; geology; topsoil and revegetation; subsidence; and, approximate original contour. The work plan for each of these areas also includes development of a training program for WVDEP personnel and industry personnel involved in permit preparation. AOC guidance has been developed and training has been provided to WVDEP and industry staffs. Topsoil guidance has been

drafted and will be released for comment in the near future. The remaining topics are in process and should be ready for comment by early 2001.

#### **F. OSM Technical Training**

As part of our technical transfer program, OSM conducted courses throughout the year in the latest technology related to active and abandoned mine reclamation. During EY 2000, OSM provided technical training to 44 WVDEP regulatory personnel through this program.

#### **G. Underground Mine Pools**

OSM continued to conduct technical analysis regarding the flooding of underground mine voids. Many decades of underground mining on the Pittsburgh Coal Seam have left voids that are either flooded or in the process of flooding. In 1996, these mine voids filled to a near-land surface. Mounting concern that the pool would start discharging into the Monongahela River prompted various agencies, including OSM, EPA, WVDEP, and the National Mine Land Reclamation Center (NMLRC), along with Consolidated Coal Company, to collaborate on the problem during EY 1998. These agencies are developing a work plan to study the effects of a mine pool buildup and to consider possible solutions to the problem. Part of the overall work plan included developing a drilling program to install monitoring wells into several mines. Information gathered from the wells will augment information from existing boreholes and provide information about the parts of the mine pool where there are no known boreholes.

In EY 2000, OSM continued to monitor and collect data from the existing boreholes. Data analysis continued through the year, and OSM initiated contracting for some additional boreholes. These should be drilled and additional monitoring conducted during EY 2001.

### **VII. General Oversight Topic Reviews**

#### **A. Contemporaneous Reclamation**

During the previous evaluation period, a review was initiated to evaluate the contemporaneous reclamation requirements and related waivers for large scale mines. The evaluation was a component of the WVDEP/OSM Approximate Original Contour/Post Mining Land use Action Plan, signed in April of 1999. As reported last year, the study was not completed by the end of the evaluation year but would be completed and reported on in this annual report.

The purpose of the study was to ensure that WVDEP is applying its contemporaneous reclamation requirements consistent with its approved program and is appropriately granting variances from these standards.

To evaluate the program, twenty-two active large scale mining permits, each exceeding 500 permitted acres, were selected to review. A team of Federal and State inspectors conducted file and field reviews of the permits to determine each operation's compliance with the provisions of the approved permit and with the regulatory requirements. These operations involved a variety of mining methods and types of equipment including; mountaintop removal, contour mining, steep slope, multiple

seam, augering and highwall mining operations. Several permits incorporated multiple spreads of equipment in their mining operation and the use of large draglines.

Eighteen of the twenty-two permits were consistent with the contemporaneous reclamation requirements and with the approved mining and reclamation plan. The study did not find any broad "entire mine" disturbances allowed, although the State's regulations give the WVDEP Director broad discretion in approving waivers from the contemporaneous reclamation requirements. However, at some operations the contemporaneous reclamation activities either were not consistent with the permittee's approved plan or did not correspond to the approved program. Where necessary, the WVDEP took appropriate corrective actions.

The study identified several areas that require WVDEP to improve its implementation of the contemporaneous reclamation provisions of its program. WVDEP did not always correctly consider cleared and grubbed areas when exempting acreage from the disturbed area calculation for determining contemporaneous reclamation. Additionally, it was found that improper classification of mining methods or changes in mining methods allowed excessive acreage to remain unreclaimed. The reviewers also observed that some permit applications either did not have sufficient information to justify a variance according to the applicable regulations or were absent such supporting documentation.

WVDEP and OSM had differing interpretations of the "conventional fill" definition for exempting acreage from the disturbed area calculations. They did not agree on the issue at the conclusion of the study. OSM proposes to monitor this part of the State program closely and will resolve any issues through the ten-day notice process.

WVDEP increased the bonding rate for permits with variances from the contemporaneous reclamation requirements to the maximum per acre allowed by regulation. However, OSM remains concerned about the adequacy of the bond pool. As a program issue, OSM will continue to work with WVDEP to address the overall inadequacy of the bond pool.

A complete report of this study is available from the OSM Charleston Field Office.

## **B. Oversight Inspections/Aerial Inspections**

This evaluation focused on sites that received a Phase II or Phase III bond release since October 1, 1998. The reviewers conducted the review in counties that have a high probability for AMD. They reviewed the sites to see if previously unidentified seeps were present and to see if the operator achieved the approved postmining land use.

Team members randomly selected review sites from a list of sites that had received a Phase II or Phase III release between October 1, 1998, and November 15, 1999.

Thirty-one sites, which had received Phase II or Phase III bond release, were reviewed. They observed potential problems on eight of these sites. They observed discoloration that suggested the possible presence of AMD. From the air, it is impossible to tell if the water is actually discolored or if stains are present on the ground and rocks from previous discharges.

The team conducted on-the-ground follow-up inspections on each of the eight sites. On-site testing showed that the water was within acceptable limits on all but one site. Water quality was not within acceptable limits for pH on one site. OSM is currently investigating to decide if the site was out of compliance at the time of bond release or if water quality was within limits at the time of release and deteriorated to current levels after release. All of the sites appear to have achieved the approved postmining land use.

### **C. Acid Mine Drainage Inventory/ABS Adequacy**

Issues previously raised concerning the adequacy of the WVDEP bonding system were not corrected during this evaluation year. However, WVDEP is working on developing a comprehensive bonding plan to correct its bonding deficiencies and for addressing water treatment at bond forfeited sites. They should finish this report by early January 2001.

WVDEP and OSM cooperated on upgrading the West Virginia Active Mine Drainage Inventory and developing an inventory of forfeited permits with polluted mine drainage. At the end of this evaluation period, WVDEP and OSM had not agreed on those permits/sources that should appear on that inventory. A comprehensive inventory of those sites will be completed early in the next evaluation period.

### **D. Pattern of Violations**

OSM conducted this review to: (1) evaluate for proper determination of patterns of the same or related violations resulting from downslope spoil and offsite disturbance; and (2) evaluate for issuance of appropriate show cause orders and consent agreements for patterns of these same or related violations.

Of the 24 permits reviewed, all had a history of the same or related violations from downslope spoil and/or offsite disturbance. In only one case, did WVDEP issue a show cause letter. OSM found a variety of ways that they write similar violations, yet WVDEP chose not to consider all of them in the potential pattern decision. The WVDEP managers will reiterate the necessity to consider all same or similar violations within a twelve-month period for determination of a pattern.

State regulations provide that the WVDEP may consider a pattern if there are two or more of the same or similar violations in the same year. Since this regulation is discretionary, the WVDEP has opted not to consider two of the same or similar violations in their determination of a pattern of violations, except for significant offsite issues.

In addition, the State may not be applying appropriate criteria in determining that the operator caused the violations willfully or through an unwarranted failure to comply. For example, the speed at which a company abates a violation has no relationship to the determination whether they should have been more diligent in preventing the violation in the first place. The WVDEP has agreed to instruct their field staff not to consider this aspect when reviewing for a pattern of violations.

Finally, there is no evidence of consideration of previous years' history of violations in making the determinations. The WVDEP has agreed to instruct their field staff of the need to consider the number of previous

violations of the same or related requirements of the Act as described in 38-2-20.4.b.1. of the approved regulations.

This review shows a need for closer review of patterns of the same or related violations resulting from downslope spoil and/or offsite disturbance and perhaps other types of violations as well.

### **VIII. Abandoned Mine Land Reclamation Program (AMLR)**

#### **A. General Program Information**

The mission of the AMLR 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 AML 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 AMD set aside program allows the state to use 10 percent of its annual grant allocation to reclaim watersheds impacted by AMD. OSM approved the program on March 26, 1993, and WVDEP funded the first project on August 23, 1995.

#### **B. ACSI**

In 1995, OSM started a new program within the AML program called the Appalachian Clean Streams Initiative (ACSI). The ACSI original goals were to raise awareness about the condition of streams and rivers polluted by AMD from abandoned coal mines, to coordinate with researchers, academia, the industry and others to improve AMD remediation technology, and to facilitate and provide assistance to State and Federal agencies and private organizations in addressing and remediating AMD problems.

Beginning in 1997, OSM received funding from Congress for the ACSI. They then distributed this money to State AML Programs to fund clean up of abandoned sites causing pollution to streams and rivers. Over the past four years, West Virginia has received \$3,635,814 for ACSI projects. The WVDEP has earmarked these funds for AMD remediation at ten abandoned coal mine sites. To date, WVDEP has expended \$2,005,200 of the total award amount and completed construction on five of the ten projects (Browns Creek, Grass Run, Bull Run, Fickey Run and Piney Swamp). Three of the last five projects are under construction (Chief Logan, Johnson Knob, and Abram Creek/Emmoryville). Designs have been completed for the two remaining sites (Sovern Run and Kanesh Creek South). They will begin construction in the Spring of 2001.

Measures to improve water quality at the five completed projects involved construction of various passive treatment systems including wetlands, open limestone channels and successive alkalinity producing systems (SAPS). Additionally, land reclamation accounted for a significant portion of any water quality improvement as several sites involved covering and vegetating exposed toxic refuse material. WVDEP had not completed the assessments to determine reduction of pollutants or improvements to the receiving stream water quality when this report was prepared. For baseline purposes, they conducted water quality analyses for all sites before any construction activity. These analyses will determine post construction improvements. Most of the sites are in watersheds where multiple abandoned sites are contributing to the degradation of the receiving streams. Therefore, additional projects need to be completed before measurable improvements to the receiving streams can be determined.

The WVDEP office of AML is also cooperating on three AMD clean up projects with Watershed Organizations that received funding from OSM's Watershed Cooperative Agreement Program (WCAP). The partnering organizations include Friends of the Cheat, Lower Paint Creek Association and Friends of Deckers Creek. With their WCAP grant monies, these organizations will contribute nearly \$240,000 toward the cost of water quality improvement at three project sites. All three projects should be completed during 2001.

### **C. Noteworthy Accomplishments**

#### *1. Construction Activities*

Table 9 of Appendix A lists the cumulative accomplishments in West Virginia. A comparison of this table with the EY 1999 West Virginia Evaluation Report shows that during EY 2000 West Virginia reclaimed:

- 3.9 miles of clogged streams;
- 9,916 linear feet of dangerous highwalls;
- 75 dangerous impoundments;
- 366 acres of dangerous piles and embankments;
- 41 acres of dangerous slides;
- hazardous equipment and facilities;
- 128 portals;
- 3 sites of polluted waters;, agricultural, and industrial;
- 29 polluted water sites;
- 9 acres of subsidence;
- 14 acres of surface burning;
- 1 acre of underground mine fire;
- 6 vertical openings;
- 29 acres of gob piles;
- 38,988 linear feet of highwall;
- 20 acres of spoil areas.

In administering the program, the WVDEP conducted the following activities:

- Bid and awarded at least 43 separate AML reclamation projects for an estimated cost of \$13,560,531.
- Employed consulting engineers to design 33 of these projects for a total cost of \$2,503,585.

- The associated consultant engineering cost for 30 of the 42 contracts was 20 percent. These values reflect projects that mainly went to design about three years ago. This is a 2 percent improvement in the administration of the consultant engineering project costs.

## *2. Emergencies*

During EY 2000 a WVDEP abated 49 AML Emergencies at an estimated construction cost of \$2,696,978.

Twenty-three projects were subsidences, seven were surface burnings, six were dangerous slides, four were underground mine fires, four were dangerous portals, three were dangerous impoundments and two were vertical openings. One dangerous impoundment also dealt with AMD which they treated during construction. Field checked projects were accomplished according to approval documentation.

## **D. OSM Technical Assistance**

### *1. Technical Training*

OSM provided technical training to 15 WVDEP staff during EY 2000.

### *2. Site Specific Assistance*

OSM provided technical assistance to the WVDEP AML program in two instances. The CHFO staff assisted in a determination of mining relatedness on the Robert Hall complaint in Monongalia County. In the second instance, staff from the ARCC in Pittsburgh provided borehole camera assistance in the Laurel Creek subdivision in Raleigh County.

## **E. Results of Enhancement and Performance Reviews**

### *1. Abandoned Mine Land Emergency Oversight*

In EY 2000, OSM visited nine emergency projects in the field. On these nine sites, OSM conducted five reviews at prebid conferences, along with two final inspections. OSM reviewed one site before a prebid conference and three sites during construction.

The reviewer attempted to review only projects with cost estimates exceeding \$100,000. Six of the reviewed projects met this restriction. The remaining projects reviewed were less costly.

### *2. NEPA Review*

Normal oversight visits did no reveal any problems with NEPA compliance.

### *3. Maintenance Contracts*

This study's objective was to determine the effectiveness of the AML regular construction program (i.e., through the review of any additional work performed on completed construction projects), to identify any expenditure trends, and to further identify any recurring construction costs or related construction problems.

In all instances, the maintenance work did not exceed the original scope of work. There was no indication of any trend, pattern, or policy of using maintenance funds to subsidize any questionable construction practices. In the projects reviewed, the State used maintenance funds for authorized repair purposes. The report did recommend that WVDEP continue to use the best available technology, as appropriate, to abate AMD.

#### *4. Drawdown Analysis*

During EY 2000, OSM conducted one draw down analysis. The review found \$172.94 in hospitality costs that OSM subsequently disallowed. Because of the analysis, OSM deducted part of one employee's salary from the grant, and required a second employee to maintain time sheets for a short time to figure out the percentage of their time to credit to the regulatory and AML grant. These were minor problems stemming primarily from some bookkeeping confusion.

#### *5. Site Inspections (AML)*

During EY 2000, the CHFO conducted partial oversight field reviews at five projects: two mine drainage sites, two mine refuse sites, and one waterline extension.

The team reviewed two of the sites before a contract award. Reviewers found no problems with work scope or NEPA review. The team reviewed one project at final inspection, and did reviews after final inspection at projects with AMD effluents. The minor objective in these projects was the reduction of AMD loads. Observations show that they succeeded in reducing AMD loads to some extent. All other reclamation aspects appeared fully successful.

They reviewed one waterline project before a bid advertisement. It was determined that the project followed the scope and content in the approved documentation.

Field visits were made to three OSM Watershed Cooperative Agreement (WCAP) projects. None were under construction when observed.

## **Appendix A: Tabular Summary**

These tables present data pertinent to mining operations and State and Federal regulatory activities within West Virginia. They also summarize funding provided by OSM and West Virginia staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of West Virginia's performance is available for review in the evaluation files maintained by the Charleston OSM Office.

**TABLE 1**

<b>COAL PRODUCTION (Millions of short tons)</b>			
<b>Period</b>	<b>Surface mines</b>	<b>Underground mines</b>	<b>Total</b>
Coal Production <sup>A</sup> for entire State:			
<u>Calendar Year</u>			
1997	57.3	120.6	177.9
1998	54.7	118.0	172.7
1999	54.3	103.4	157.7
Total	166.3	342.0	508.3

<sup>A</sup> 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.

TABLE 2

INSPECTABLE UNITS As of September 30, 2000												
Coal mines and related facilities	Number and status of permits									Permitted acreage <sup>A</sup> (hundreds of acres)		
	Active or temporarily inactive		Inactive		Abandoned		Totals		Insp. Unit			
	IP	PP	Phase II bond release									
			IP	PP	IP	PP	IP	PP	IP	PP	Total	
STATE and PRIVATE LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	439	4	255	12	139	16	833	849	11.8	2,067.6	2,079.4
Underground mines	0	673	0	249	2	137	1	1,059	1,060	.1	322.1	322.2
Other facilities	0	483	1	71	3	64	4	618	622	.5	426.0	426.5
Subtotals	0	1,595	5	575	16	340	21	2,510	2,531	12.4	2,816	2,828.1
FEDERAL LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0
Underground mines	0	2	0	2	0	1	0	5	5	0	0.6	.6
Other facilities	0	0	0	4	0	0	0	4	4	0	0.5	1.5
Subtotals	0	2	0	6	0	1	0	9	9	0	1.1	1.1
ALL LANDS <sup>B</sup>												
Surface mines	0	439	4	255	12	139	16	833	849	11.8	2,067.6	2,079.4
Underground mines	0	675	0	251	1	138	1	1,064	1,065	0.1	322.7	322.8
Other facilities	0	483	1	75	3	64	4	622		0.55	426.5	427.0
<b>Totals</b>	0	1,597	5	581	16	341	21		2,540	12.4	2,816.8	2,829.2
Average number of permits per inspectable unit (excluding exploration sites) . . . . .											<u>1</u>	
Average number of acres per inspectable unit (excluding exploration sites) . . . . .											<u>111</u>	
Number of exploration permits on State and private lands: . . . . .											<u>0</u>	
Number of exploration notices on State and private lands: . . . . .											<u>465</u>	
On Federal lands: . . . . .											<u>0</u>	
On Federal lands: . . . . .											<u>0</u>	
<b>IP:</b> Initial regulatory program sites. <b>PP:</b> Permanent regulatory program sites.												
<sup>A</sup> When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.												
<sup>B</sup> 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.												

TABLE 3

STATE PERMITTING ACTIVITY												
As of September 30, 2000												
Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres <sup>A</sup>	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	37	19	5,384	42	35	804	12	7	640	91	61	6,729
Renewals	47	38	16,967	61	64	2,084	39	40	3,991	1,470	142	23,042
Transfers, sales and assignments of permit rights	XX	76		XX	70		XX	39		XX	185	
Small operator assistance										0	0	
Exploration permits	—	—		—	—		—	—		109	105	
Exploration notices <sup>B</sup>		0			0			0			0	
Revisions (exclusive of incidental boundary revisions)		137			119			60			316	
Incidental boundary revisions		81	2,221		158	811		63	530		302	3,563
<b>Totals</b>	<b>84</b>	<b>351</b>	<b>24,472</b>	<b>103</b>	<b>446</b>	<b>3,699</b>	<b>51</b>	<b>209</b>	<b>5,161</b>	<b>347</b>	<b>1,111</b>	<b>33,334</b>
OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions <u>166</u>												
<sup>A</sup> Includes only the number of acres of proposed surface disturbance.												
<sup>B</sup> State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 4

<b>OFF-SITE IMPACTS</b>														
DEGREE OF IMPACT		RESOURCES AFFECTED												Total
		People			Land			Water			Structures			
		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting				1	1	0	0	0	0				2
	Land Stability				20	1	0	0	0	0				21
	Hydrology				0	0	0	109	2	0				111
	Encroachment				18	0	0	0	0	0				18
	Other													0
	Total	0	0	0	39	2	0	109	2	0	0	0	0	152
Total number of inspectable units: <u>2,477</u>														
Inspectable units free of off-site impacts: <u>2,360</u>														
<b>OFF-SITE IMPACTS ON BOND FORFEITURE SITES</b>														
DEGREE OF IMPACT		RESOURCES AFFECTED												Total
		People			Land			Water			Structures			
		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting													0
	Land Stability				8		1							9
	Hydrology							3	30	29				62
	Encroachment													0
	Other													
	Total				8		1	3	30	29				71
Total number of inspectable units: <u>334</u>														
Inspectable units free of off-site impacts: <u>263</u>														

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

**TABLE 5**

<b>ANNUAL STATE MINING AND RECLAMATION RESULTS</b>		
<b>Bond release phase</b>	<b>Applicable performance standard</b>	<b>Acreage released during this evaluation period</b>
Phase I	<ul style="list-style-type: none"> <li>• Approximate original contour restored</li> <li>• Topsoil or approved alternative replaced</li> </ul>	4,526
Phase II	<ul style="list-style-type: none"> <li>• Surface stability</li> <li>• Establishment of vegetation</li> </ul>	4,589
Phase III	<ul style="list-style-type: none"> <li>• Postmining land use/productivity restored</li> <li>• Successful permanent vegetation</li> <li>• Groundwater recharge, quality and quantity restored</li> <li>• Surface water quality and quantity restored</li> </ul>	9,145
	<b>Bonded Acreage Status <sup>A</sup></b>	<b>Acres</b>
	Total number of bonded acres at end of last review period <sup>B</sup>	279,680
	Total number of acres bonded during this evaluation year	10,292
	Number of acres bonded during this evaluation year that are considered remaining, if available	NA
	Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)	4,360
<sup>A</sup>	Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.	
<sup>B</sup>	Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).	

**TABLES 6(A)**

<b>STATE OF WEST VIRGINIA INSPECTION ACTIVITY PERIOD: OCTOBER 1, 1999 - SEPTEMBER 30, 2000</b>		
Inspectable Unit Status	Numbers of Inspections Conducted	
	Partial	Complete
Active*	10,067	5,275
Inactive*	1,262	3,586
Abandoned*	2	16
Exploration*	172	334
<b>Total</b>	<b>11,503</b>	<b>9,211</b>

\* Use terms as defined by the approved State program.

**TABLES 6(B)**

<b>STATE OF WEST VIRGINIA ENFORCEMENT ACTIVITY</b>		
<b>PERIOD : OCTOBER 1, 1999 - SEPTEMBER 30, 2000</b>		
Type of Enforcement Action	Number of Actions*	Number of Violations*
Notice of Violation	1,061	1,061
Failure-to-Abate Cessation Order	188	188
Imminent Harm Cessation Order	22	22
* Does not include those violations that were vacated.		

**TABLES 6(C)**

<b>STATE OF WEST VIRGINIA LANDS UNSUITABLE ACTIVITY PERIOD: OCTOBER 1, 1999 - SEPTEMBER 30, 2000</b>			
Number of Petitions Received	0		
Number of Petitions Accepted	0		
Number of Petitions Rejected	0		
Number of Decisions Declaring Lands Unsuitable	0	Acreage Declared as Being Unsuitable	0
Number of Decisions Denying Lands Unsuitable	0	Acreage Declared as Being Unsuitable	0

TABLE 7

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
	Number of Sites	Dollars	Disturbed Acres
Bonds forfeited as of September 30, 1999 <sup>A</sup>	296	15,730,259	11,446 <sup>C</sup>
Bonds forfeited during EY 2000	64	4,134,024	4,360
Forfeited bonds collected as of September 30, 1999 <sup>A</sup>	201	4,939,088	5,195
Forfeited bonds collected during EY 2000	18	1,326,790	673
Forfeiture sites reclaimed during EY 2000	32	712,083 <sup>B</sup>	902 <sup>D</sup>
Forfeiture sites repermited during EY 2000	1		40
Forfeiture sites unreclaimed as of September 30, 2000	322		15,356 <sup>C</sup>
Excess reclamation costs recovered from permittee	0	0	
Excess forfeiture proceeds returned to permittee	0	0	
<sup>A</sup> Includes data only for those forfeiture sites not fully reclaimed as of this date. <sup>B</sup> Cost of reclamation, excluding general administrative expenses. <sup>C</sup> Permitted acres. <sup>D</sup> Disturbed acres.			

**TABLE 8**

<b>WEST VIRGINIA STAFFING (Full-time equivalents at end of evaluation year)</b>	
<b>Function</b>	<b>EY 2000</b>
Abandoned Mine Land Program Total	67
Regulatory program	
Permit review <sup>A</sup> .....	48
Inspection <sup>B</sup> .....	75
Blasting <sup>C</sup> .....	15
Other (administrative, fiscal, personnel, etc.) <sup>D</sup> .....	148
Total for Regulatory Program	286
<sup>A</sup> Includes 15 vacant positions.	
<sup>B</sup> Includes 17 vacant positions.	
<sup>C</sup> Includes 10 vacant positions.	
<sup>D</sup> Includes 31 vacant positions.	

TABLE 9

<p>FUNDS GRANTED TO WEST VIRGINIA BY OSM                      (Millions of dollars)                      EY 2000</p>		
Type of grant	Federal funds awarded	Federal funding as a percentage of total program costs
Administration and Enforcement	7,517,645	50%
Abandoned Mine Lands	26,497,436	100%
Small Operator Assistance	152,670	100%
Mountaintop Removal/Valley Fill Cooperative Agreement	30,000	100%
Totals	34,197,751	

Two cooperative agreement applications for \$9.8 million have been received but have not yet been awarded.

**TABLE 10**

<b>ABANDONED MINE LAND RECLAMATION NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL</b>					
<b>Problem Type</b>	<b>Units</b>	<b>Unfunded</b>	<b>Funded</b>	<b>Completed</b>	<b>Total</b>
<b>Priority 1 &amp; 2 (Protection of public health, safety, and general welfare)</b>					
Clogged streams	Miles	24.1	0.1	43.9	68.1
Clogged stream lands	Acres	164.8	0.0	160.3	325.1
Dangerous highwalls	Lin. Feet	1,355,922.0	4,800.0	225,698.0	1,586,420.0
Dangerous impoundments	Count	669.0	5.0	380.0	1,054.0
Dangerous piles & embankments	Acres	1,556.2	147.0	4,369.6	6,072.8
Dangerous slides	Acres	341.2	2.0	471.7	814.9
Gases: hazardous/explosive	Count	0.0	0.0	4.3	4.3
Hazardous equip. & facilities	Count	786.0	14.0	470.0	1,270.0
Hazardous water bodies	Count	24.0	1.0	8.0	33.0
Industrial/residential waste	Acres	7.1	1.0	33.8	41.9
Portals	Count	1,778.0	20.0	1,986.0	3,784.0
Polluted water: agric. & indust.	Count	141.0	1.0	32.0	174.0
Polluted water: human consumption	Count	1,811.0	0.0	1,063.0	2,874.0
Subsidence	Acres	771.5	29.9	248.9	1,050.3
Surface burning	Acres	86.4	11.0	432.9	530.3
Underground mine fires	Acres	1,937.5	0.0	19.3	1,956.8
Vertical openings	Count	152.0	1.0	127.3	280.3
<b>Priority 3 (Environmental restoration)</b>					
Benches	Acres	221.8	0.0	27.0	248.8
Dumps	Acres	49.5	0.0	2.0	51.5
Equipment/facilities	Count	130.0	0.0	9.0	139.0
Gob piles	Acres	1,918.9	0.0	270.0	2,188.9
Highwalls	Feet	3,324,293.0	0.0	63,462.0	3,387,755.0
Haulroads	Acres	13.6	0.0	0.0	13.6
Mine openings	Count	32.0	0.0	9.0	41.0
Pits	Acres	47.1	0.0	11.0	58.1
Spoil areas	Acres	744.3	0.0	223.5	967.8
Slumps	Acres	13.0	0.0	0.0	13.0
Slurry ponds	Acres	35.3	0.0	0.0	13.0
Water problems	Gal./min.	13,613.5	0.0	722.0	14,335.5
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 the Report



Director's Office  
#10 McJunkin Road  
Nitro, WV 25143-2506  
(304) 759-0515  
(304) 759-0526

DEPT OF INTERIOR

West Virginia Division of Environmental Protection 1:33

Cecil H. Underwood  
Governor

2001 JAN 11 PM 1:33  
OSM - CHARLESTON  
Michael Cagle  
Director

January 5, 2001

Roger C. Calhoun, Director  
Office of Surface Mining  
U.S. Department of Interior  
Reclamation and Enforcement  
1027 Virginia Street, East  
Charleston, West Virginia 25301

Dear Roger:

The following reflects the WV DEP's comments to the draft Annual Evaluation Summary Report for West Virginia's Regulatory and Abandoned Mine Land Reclamation Programs.

1. Page 2, 2<sup>nd</sup> paragraph: Remove 3<sup>rd</sup> sentence. Statement is not definable.
2. Page 2, 3<sup>rd</sup> paragraph: What is the relevance of reference to union or non-union? Reference should be deleted.
3. Page 2, 5<sup>th</sup> paragraph: There are 102 operations with AOC variances, 60 mountaintop removal, and 42 steep slope.
4. Page 2, 5<sup>th</sup> paragraph: Last sentence - statement cannot be verified.
5. Page 2, last paragraph: Number of inspectable units is incorrect. ERIS is tracking frequency for  $\pm 1960$ .
6. Page 6, B.1: 2<sup>nd</sup> bullet should be deleted. The documentation issue was taken care of in late 1999. The points reviewed were taken care of prior to that time. Should this be brought up again?
7. Page 6, B.1: Last bullet should be deleted. This was not in the work plans. It was not an issue until OSM received the NOI

"To use all available resources to protect and restore West Virginia's environment in concert with the needs of present and future generations."



West Virginia  
Division of  
Environmental Protection

Roger C. Callhoun, Director

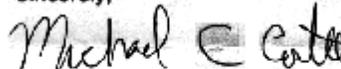
Page 2

January 5, 2001

8. Page 8, #3, 3<sup>rd</sup> paragraph: DEP officials provided OSM with a draft response to the February 8 letter during a Spring 2000 meeting in Pittsburgh.
9. Page 8, B.3, 4<sup>th</sup> paragraph: The state submitted its response to outstanding program amendments in August of 2000 and submitted clarification of its initial response in November of 2000.
10. Page 14, C.3, last paragraph: The last sentence is not accurate because it relates to what Judge Chambers directed.
11. Page 15, A, 1<sup>st</sup> paragraph: Again, ERIS is tracking frequency for  $\pm 1960$  inspectable units.
12. Page 27, C.1: Does this data reflect the accomplishments of the Emergency Program? OAMLR does not have a copy of Appendix A and, therefore, could not confirm these figures.
13. Page 29, #4: Drawdown Analysis--AML has no state match requirement.
14. Page 29, #5: Site Inspections. Did we actually reduce pH levels in our attempt to raise them?

Should you have any questions or require additional information regarding the above, please do not hesitate to contact me.

Sincerely,



Michael C. Castle  
Director

MCC/gb

cc: Charles Stover  
John Alles

**Appendix C: OSM Response to State Comments**

## APPENDIX C - OSM RESPONSE TO STATE COMMENTS

### ***WVDEP Comment #1***

Page 2, 2<sup>nd</sup> paragraph: Remove 3<sup>rd</sup> sentence. Statement is not definable.

### ***Response to WVDEP Comment #1***

OSM noted that 79 percent of the State's coal reserves are recoverable through underground mining methods. The WVDEP stated that this statement is not definable. This statistic was computed using data from the U.S. Department of Energy's Coal Industry Annual 1998. Similar information was contained in last year's Annual Report. At WVDEP's request, OSM has agreed to remove the statement.

### ***WVDEP Comment #2***

Page 2, 3<sup>rd</sup> paragraph: What is the relevance of reference to union or non-union? Reference should be deleted.

### ***Response to WVDEP Comment #2***

OSM stated that 53 percent of the coal produced in the State is produced at non-union mines and the remainder is produced at union mines. The WVDEP questioned the relevance of the reference to union or non-union coal production. The overview is intended to give the reader an insight into the history, production, employment, and economic effects of the State's coal mining industry. Because this was the first year in recent history that non-union coal production has exceeded union coal production, OSM thought that it was important to note this development. However, at WVDEP's request, OSM has agreed to remove the reference.

### ***WVDEP Comment #3***

Page 2, 5<sup>th</sup> paragraph: There are 102 operations with AOC variations, 60 mountaintop removal, and 42 steep slope.

### ***Response to WVDEP Comment #3***

OSM noted in the draft report that 102 mountaintop mining operations were permitted in the State with variances from approximate original contour (AOC). The WVDEP commented that there are 102 operations with AOC variances, 60 mountaintop removal, and 42 steep slope. OSM notes that the term "mountaintop mining" includes both mountaintop removal and steep slope mining operations with AOC variances. OSM agrees with the State and has modified this section to clarify that there are 60 mountaintop removal and 42 steep slope mining operations with AOC variances.

### ***WVDEP Comment #4***

Page 2, 5<sup>th</sup> paragraph: Last sentence - statement cannot be verified.

**Response to WVDEP Comment #4**

OSM stated that mountaintop mining operations comprise only 12 percent of the State's total surface mining operations, but account for about 27 percent of the acres under surface mining permits. The WVDEP commented that the statement cannot be verified. This statement was derived from information in ERIS and Table 2. It is important to note that even though mountaintop mining operations comprise a relatively small number of the State's surface mining operations, they constitute a large percentage of acres under permit, but perhaps less than what most people think, given the recent controversy over mountaintop mining.

**WVDEP Comment #5**

Page 2, last paragraph: Number of inspectable units is incorrect. ERIS is tracking frequency for ±1960.

**Response to WVDEP Comment #5**

The ERIS inspection frequency report for the last quarter of calendar year 2000 identifies 1,961 permits. The OSM inspectable units table and the permits identified in the ERIS report were compared. The OSM inspectable units was found to have 20 sites which should not have been included for September 30, 2000. These were removed and the total number of inspectable units is now 2,540. The difference of 579 sites is made up of the following: 51 post 9/30/00 final bond releases; 165 sites with the NS (not started) status in ERIS; 354 bond forfeiture sites with reclamation liability or insufficient time to determine if reclamation has been successful; 5 sites without bond release status in ERIS but without any inspections during EY 2000; 2 sites with bond forfeitures that occurred after 9/30/00; 1 site currently subject to a surety agreement; and, 1 site currently being inspected but not identified on the WVDEP list. Sites in all of these categories are included as "inspectable units." The ERIS list did not include any sites that were not included in the OSM table.

Inspectable unit numbers in the off-site impacts discussion and Table 4 do not match up exactly with the figures in Table 2. Due to tighter time constraints for submitting the off-site impact report, these figures were collected from July 1, 1999, to June 30, 2000, instead of from October 1, 1999, to September 30, 2000. This results in different numbers for inspectable units. The figures used in the off-site impacts discussion and Table 4 are the same ones transmitted to WVDEP in the off-site impact report on September 18, 2000. OSM acknowledges that additional coordination with WVDEP may be needed in developing these numbers for our annual reports due to the complexity of the databases WVDEP uses.

**WVDEP Comment #6**

Page 6, B.1: 2<sup>nd</sup> bullet should be deleted. The documentation issue was taken care of in late 1999. The points reviewed were taken care of prior to that time. Should this be brought up again?

**Response to WVDEP Comment #6**

OSM made no changes in the report related to these comments for the following reasons.

The issues identified in this Annual Summary Report, regarding *Contemporaneous Reclamation*, are merely excerpts from the expanded report entitled "The Evaluation of West Virginia's Implementation of the Contemporaneous Reclamation Provisions of Its Approved Program." This report was provided to WVDEP for review and comment on October 20, 2000, and suggested changes adopted, pertaining to these issues. The report does reflect changes the WVDEP has made or is making to correct this matter, and a future oversight review of this issue may be appropriate to evaluate the success of these permitting operational changes.

**WVDEP Comment #7**

Page 6, B.1: Last bullet should be deleted. This was not in the work plans. It was not an issue until OSM received the NOI.

**Response to WVDEP Comment #7**

OSM made no changes related to this comment for the following reason. OSM disagrees with the WVDEP's recollection of the Work Plan content. The Review Methodology of the Workplan for the Contemporaneous Reclamation study notes that "This review will also consider if bond amounts have been set to reflect greater areas of disturbance where applicable." The response for comment #6 also applies to this comment. Further, OSM disagrees that this was not an issue until receipt of the NOI. OSM has been concerned about the adequacy of the West Virginia bonding program since 1991.

**WVDEP Comment #8**

Page 8, #3, 3<sup>rd</sup> paragraph: DEP officials provided OSM with a draft response to the February 8 letter during a Spring 2000 meeting in Pittsburgh.

**Response to WVDEP Comment #8**

OSM stated in the draft report that WVDEP was provided a listing of all outstanding required amendments and 30 CFR Part 732 notifications on February 8, 2000, and the State provided an informal response on August 3, 2000. The WVDEP noted that the State provided OSM a draft response to the February 8 letter during a Spring 2000 meeting in Pittsburgh. OSM acknowledges that the State submitted a draft response in March 2000, but the informal response was not submitted until August 3, 2000. The State's formal response to most of its outstanding required amendments was submitted on November 30, 2000.

**WVDEP Comment #9**

Page 8, B.3., 4<sup>th</sup> paragraph: The state submitted its response to outstanding program amendments in August of 2000 and submitted clarification of its initial response in November of 2000.

**Response to WVDEP Comment #9**

OSM stated in the draft report that WVDEP had not submitted amendments to address the thirty-one 30 CFR Part 732 deficiencies at the end of the evaluation period. The State noted that it had submitted a response to the outstanding program amendments in August of 2000 and submitted

clarification of its initial response in November of 2000. OSM agrees with this comment, but the paragraph in question concerns outstanding 30 CFR Part 732 notifications, not the required amendments that are codified at 30 CFR 948.16. WVDEP submitted a formal response to most of its outstanding 30 CFR Part 732 notifications on December 20, 2000.

**WVDEP Comment #10**

Page 14, C.3, last paragraph: The last sentence is not accurate because it relates to what Judge Chambers directed.

**Response to WVDEP Comment #10**

In its summation of litigation pertaining to OVEC and HCPA v. WVDEP, Civil Action No. 3:00-0058, OSM stated in the draft report that Judge Chambers directed the State to conduct additional assessments to determine if the proposed mining activities are likely to cause material damage to the hydrologic balance. The State commented that the last sentence is not accurate because it relates to what Judge Chambers directed. OSM disagrees and believes that the statement is accurate. In his preliminary injunction order of June 22, 2000, with regard to IBR No. 6, Judge Chambers stated that since frequent noncompliance with iron limits is clearly demonstrated in the data relied on for the CHIA, Defendant Castle must further investigate the current source to determine whether the cumulative impact of that source and the proposed project will cause material damage.

**WVDEP Comment #11**

Page 15, A, 1<sup>st</sup> paragraph: Again, ERIS is tracking frequency for ±1960 inspectable units.

**Response to WVDEP Comment #11**

See response to Comment #5.

**WVDEP Comment #12**

Page 27, C.1: Does this data reflect the accomplishments of the Emergency Program? OAMLR does not have a copy of Appendix A and, therefore, could not confirm these figures.

**Response to WVDEP Comment #12**

OSM provided a summary table of AMLR program accomplishment. The WVDEP asked if this data included the accomplishments of the AML Emergency Program. All data is from the National Abandoned Mine Land Inventory System (AMLIS). The WVDEP staff enter and update all data into this system.

**WVDEP Comment #13**

Page 29, #4: Drawdown Analysis--AML has no state match requirement.

**Response to WVDEP Comment #13**

OSM referred to state match in a discussion of the drawdown analysis. The WVDEP correctly pointed out that there is no requirement for state match in the AML program. The reference to State match is deleted.

**WVDEP Comment #14**

Page 29, #5: Site Inspections: Did we actually reduce pH levels in our attempt to raise them?

**Response to WVDEP Comment #14**

OSM incorrectly referred to a drop in pH as a result of reclamation. In response to the State's comment, this has been changed to a drop in AMD loads.