

Pittsburgh Field Division – Harrisburg Office September 2005



2005 Pennsylvania Annual Evaluation Report



**Office of Surface Mining Reclamation & Enforcement
U.S. Department of the Interior**



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Report

for the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered by the Commonwealth

of

Pennsylvania

for

Evaluation Year 2005

(July 1, 2004 to June 30, 2005)

TABLE OF CONTENTS

I.	Introduction	1
II.	Overview of the Pennsylvania Coal Mining Industry	1
III.	Overview of Public Participation in the Program	3
	A. Public Involvement in PADEP’s Regulatory Process	3
	B. Outreach by OSM	8
IV.	Major Accomplishments/Issues/Innovations	9
V.	Success in Achieving the Purposes of SMCRA	20
	A. Off-Site Impacts	20
	B. Reclamation Success	23
	C. Customer Service	23
	D. 300 Foot Residential Barrier	25
	E. MSHA Class Impoundments	25
VI.	OSM Assistance	26
VII.	General Oversight Topic Reviews	35
VIII.	Conclusion	40

The cover photograph shows anthracite coal mining conducted on the Selkirk Mining Company permit that was issued in July of 1984 for 2207 acres. Under conventional bonding, a maximum of 71.4 acres is allowed to be affected at any one time. The box cut method of mining is being used with a Manitowoc 4600 shown in the background. The affected area is concurrently graded to approximate original contour and reclaimed to the post mining land use of forestland. Spruce tree seedlings are visible within the planted grass/legume species in the foreground.

APPENDIX A: Acronyms used in the ReportA

APPENDIX B: Tabular Summaries of Data Pertaining to Mining, Reclamation and Program AdministrationB

Table 1 - Coal Production T-1

Table 2 - Inspectable Units..... T-2

Table 3 - State Permitting Activity T-3

Table 4 - Off-Site Impacts..... T-4

Table 5 - Annual State Mining and Reclamation Results T-5

Table 6 - State Bond Forfeiture Activity..... T-6

Table 7 - Pennsylvania Staffing T-7

Table 8 - Funds Granted to Pennsylvania by OSM..... T-8

Table 9 - State of Pennsylvania Inspection Activity T-9

Table 10- State of Pennsylvania Enforcement Activity T-10

Table 11- Lands Unsuitable Activity T-11

APPENDIX C: PADEP Comments on Draft Report C

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Pennsylvania Program and the effectiveness of the Pennsylvania Program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the 2005 evaluation year, from July 1, 2004, to June 30, 2005. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at OSM's Harrisburg Office of the Pittsburgh Field Division (PFD).

The PFD Harrisburg Office develops an annual work plan in conjunction with the Pennsylvania Department of Environmental Protection (PADEP), to review and assess Pennsylvania's administration of its approved Abandoned Mine Reclamation, and Coal Mining Regulatory programs. The work plan also focuses on technical and program assistance activities jointly undertaken by OSM and PADEP staff to improve the effectiveness of Abandoned Mine Lands (AML) and Acid Mine Drainage (AMD) reclamation, and coal mining regulatory programs. A copy of the 2004 work plan is available from the PFD Harrisburg Office.

A list of acronyms used in this report is located in Appendix A.

II. Overview of the Pennsylvania Coal Mining Industry

The coal geology of Pennsylvania is dominated by the Appalachian Mountains running northeast to southwest and dividing the State into two distinct coal regions. The western bituminous region of the State, where the majority of mines are located, is characterized by mountains and gently rolling hills. Areas within this region containing acidic overburden often require special reclamation efforts. The bituminous coal seams underlay about 12,000 square miles in 28 counties of the State. The coal is found in four fields; the Main Bituminous Field in the southwest counties; the Georges Creek Field in the southern counties; the Broad Top Field in the south-middle counties; and the North-Central Field in the north-central counties of the State.

The anthracite coal region is located in the northeast quarter of Pennsylvania and covers approximately 3,300 square miles. The coal is found in four fields; the Northern Field; the Eastern-Middle Field; the Western-Middle Field; and the Southern Field. The Southern Field has the greatest amount of reserves that can be mined. The coal lies almost entirely in synclinal basins oriented in a general direction of N 70 degrees E. The more than 20 different coal seams vary in thickness from a few inches to 50 or 60 feet. The anthracite region is characterized by steeply pitching seams, some with dips in excess of 60 degrees. Such seams require highly specialized mining techniques, and present unique challenges for solving problems such as mine subsidence associated with abandoned anthracite mines.



Anthracite mine showing steeply dipping coal seam. Note yellow dozer at top of highwall.

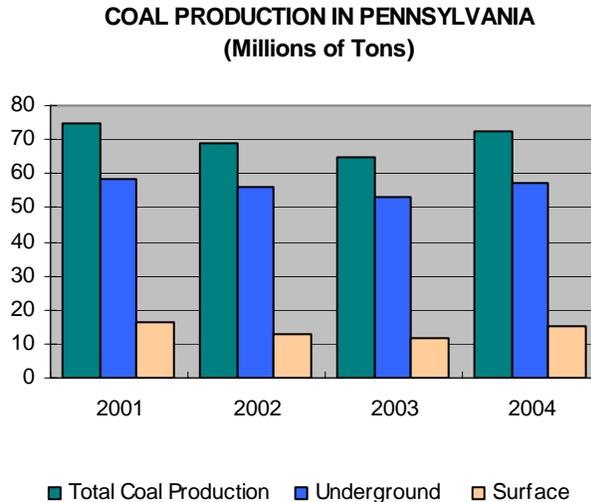
For more than a century, coal has played a major role in the economic and industrial development of Pennsylvania, particularly the steel making industry, and has historically employed thousands of workers. Although Pennsylvania has experienced a decline in coal production over the past decade, it continues to be a leading coal producing State, due to its estimated bituminous reserves that total 23 billion tons, or 5.3 percent of U.S. reserves, and anthracite reserves that total 7.1 billion tons, or 97 percent of U.S. anthracite reserves.

In calendar year 2004, Pennsylvania produced approximately 72.7¹ million tons of bituminous and anthracite coal, which is an eleven percent (11%) increase over last year (64.9 million tons). Of the total coal production, bituminous mining accounted for 70.4 million tons, and the remaining 2.3 million tons were mined in the anthracite region.

Bituminous underground mining continues to rise, as is evident in the increased number of tonnage produced, totaling approximately 57.2 million tons. This tonnage accounted for eighty-one percent (81%) of the total bituminous underground mining coal production. Of the 349 coal producing bituminous mines, forty-six (46) were underground mining operations. A large percentage of the underground mining occurred in Greene and Washington counties where approximately 47.2 million tons were mined by eight mining companies. Of the total 349 bituminous mines, 158 operators produced 13.2 million tons of coal on 303 surface coal producing mine sites. The largest surface coal production of 3.3 million tons occurred in Somerset County with Clearfield county in a close second, reporting 3.2 million tons.

1. This figure represents a compilation based on several reporting efforts by OSM Denver Financial Office; PADEP, and Mine Safety Health Administration (MSHA).

Conversely, underground mining in the anthracite region accounted for thirteen percent (13%) of the total 2.3 million tons produced, while the surface mining production rose to approximately 2.0 million tons during this period.



The graph above provides a four year snapshot of the fluctuations that occurred in the production of coal throughout Pennsylvania. Pennsylvania’s coal production decreased in 2003, but quickly rebounded in calendar year 2004. This increase is indicative of the overall change in economy and is reflective of the increase of coal production in North America during 2004. This buoyancy is forecasted to remain throughout the next decade.²

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

During this evaluation period PADEP and OSM continued several ongoing initiatives that provided opportunity for public involvement.

A. Public Involvement in PADEP’s Regulatory Process

Citizens Advisory Council

PADEP solicits and/or receives public input on proposed changes to the Pennsylvania mining program from the Citizens Advisory Council (CAC). The Council consists of eighteen appointed citizen volunteers who serve staggered three year terms. These members are appointed by the Governor, the Speaker of the House of Representatives and the President Pro Tempore of

2. Coal Age, Coal Show 2005, Coal and Energy Division.

the Senate. No more than half of the appointees are from the same political party. Since its creation in 1971, the CAC has been actively involved in Commonwealth environmental issues. The Council is the only legislatively mandated advisory committee with the comprehensive charge to review all environmental legislation, regulations and policies affecting PADEP.

During this evaluation year, the CAC conducted ten meetings and provided comments to PADEP as indicated below.

The Council reviewed and commented on draft legislation to address the elimination of the hazards posed by existing abandoned mine lands and mine pools. In response to past abuses, Federal and State laws require coal operators to pump and treat the polluted drainage from the mines, however, many operators are struggling to meet these demands. The concern of operators abandoning their environmental obligations has become a priority, since an estimated 28 billion gallons of acid drainage is released annually. To address these issues on the abandoned mine lands and waters, the Council has concluded it would be advantageous to extend the concepts of the very successful Brownfields Program which is otherwise known as “grayfields” to include abandoned mine lands and waters.

The Council also reviewed the draft five year report required by Act 54 and submitted informal comments to PADEP. This is a provision of the Bituminous Mine Subsidence and Land Conservation Act that requires PADEP to collect and analyze data on the effects of deep mining on subsidence of surface structures/features and water resources.

Mining and Reclamation Advisory Board

The Mining and Reclamation Advisory Board (MRAB) was created in 1984 by Act 181, the Surface Mining Conservation and Reclamation Act (SMCRA), of the Pennsylvania General Assembly. The board’s purpose is to assist and advise the Secretary of the Pennsylvania Department of Environmental Protection on all matters pertaining to mining and reclamation. The advisory role of the board also covers Title IV of the Federal SMCRA, relating to abandoned mine land reclamation issues. The MRAB is comprised of the Citizen Advisory Council, the coal industry, county conservation districts, and the Pennsylvania General Assembly. The full board meets four times per year and the subcommittees meet regularly to address a number of coal program areas each year. The meeting minutes, handouts, and MRAB’s annual report are available on the PADEP website.

The Board conducted four meetings during this evaluation year. Topics addressed at these meetings include: water supply replacement issues/resolutions; mining reclamation fees and reclamation of bond forfeiture sites; and study results of bond rate guidelines.

The board reviewed the submission of proposed resolutions of issues regarding the payment of operation and maintenance costs of replacement water supplies, as these replacement obligations are not specifically addressed by the coal mining statutes, regulations or case law. These discussions resulted from feedback during outreach meetings with the citizen’s and industry.

PADEP will develop these regulations and will submit them to the board for review during the July 2005 meeting.

The board also authorized PADEP to move forward with a proposed rulemaking package presented during the April 28, 2005, meeting concerning several issues including: changes to the regulations governing the reclamation of bond forfeitures sites at 25 PA Code 86.187 through 86.190 and changes to the remining and reclamation incentives regulations at 86.283. These changes were previously directed by the Office of Surface Mining in a final rule published in the Federal Register. Secondly, the regulation package included language to delete the permit and reclamation fee at 25 PA Code 86.17.

The PADEP presented findings of a study conducted to review the bond rate guidelines at stage 2 bond release. The findings of this study substantiated the previous suggestion by members that the \$500 per acre bonding rate withheld was excessive. As a result of these findings, it was recommended that the rates be lowered to \$300 per acre.

Environmental Hearing Board

The Environmental Hearing Board (EHB) is an independent quasi-judicial agency that includes a Chairman and four members. Members are administrative law judges with a minimum of five years of relevant legal experience. The EHB has the sole power to hear and decide appeals of PADEP's actions. Litigants have the right to appeal EHB decisions to the Commonwealth Court. During this evaluation period, the EHB issued a number of decisions pertaining to the approved state program. Opinions were rendered in two coal mining related cases as indicated below.

In *UMCO Energy Inc. (United Mine Workers of America, Intervenor), v. DEP (Citizens for Pennsylvania's Future, Intervenor)*, EHB Docket No. 2004-245-L (Opinion issued November 30, 2004), the Board was constrained to deny a petition for supersedeas of an underground mining company from an order of the Department prohibiting the company from longwall mining an area in the vicinity of a stream. After carefully considering the environmental consequences of dewatering the stream and the economic harm to the mining company and its employees, the Board concluded that the mining company had failed to demonstrate that it had any likelihood of prevailing on the merits of the appeal. On December 13, 2004, the Board also denied UMCO's petition to amend the supersedeas order to certify it for interlocutory appeal. Finally, on June 15, 2005, DEP and the Citizens for PennFuture filed motions in limine, which were opposed by UMCO Energy, Inc, and by the Intervenor to the extent that the motions sought exclusion of testimony. The judge rescheduled the June 20, 2005 hearing to September 19, 2005.

In *Fred W. Lang, Jr, Joyce E. Schuping, Delores Helquist and Sherry L. Wissman v Commonwealth of Pennsylvania Department of Environmental Protection and Maple Creek Mining, Inc, Permittee*, EHB Docket No. 2003-145-R (Opinion issued July 21, 2004), Judge Renwand held that in a third party appeal, the Board has the power and authority to vacate all or part of a consent order and agreement (CO&A) or to amend its terms where it finds that the Department's entry into an agreement is an abuse of discretion. The judge explained that if the

board finds that any of the terms of the CO&A constitute an abuse of discretion by the Department, the board may substitute its discretion for that of the Department and either vacate or change the terms thereof. In terms of this case, the Board agreed with the Appellants and denied the summary judgment.

Environmental Quality Board

The Environmental Quality Board (EQB) is a 20 member independent board that adopts all PADEP Regulations. The Board, which is chaired by the Secretary of PADEP, includes members from 11 state agencies, the CAC and the State Senate and House of Representatives. PADEP, through the EQB, requests comments on all proposed regulations and holds public hearings or public meetings to provide citizens with the opportunity to provide input. The EQB addresses all comments received on proposed rules in the preamble of the final rules that are published in the *Pennsylvania Bulletin* and are available for public review on the PADEP Internet site. As part of the development of the regulations required by statute or by regulatory initiatives, PADEP holds outreach discussions or other public meetings to explain regulatory initiatives, where there is significant public interest. On April 19, 2005, the EQB adopted changes to the PA Bituminous Mine Subsidence and Land Conservation Act and the associated regulations at 25 PA Code Chapters 86 and 89. These regulation changes were forwarded to the Independent Regulatory Review Commission and received on July 1, 2005. Upon final approval, these changes will be published in the *Pennsylvania Bulletin*. This regulatory package is discussed in further detail later in this report.

Public Comment in Permit Review Process

PADEP received 538 applications for permitting related actions that provided for public comment. The applicant is required to publish notice of the permit application in the local newspaper. PADEP publishes notices of permit applications and major permit revisions in the *Pennsylvania Bulletin*; notifies local municipal governments of permit applications; and holds public meetings with citizens to discuss pending applications.

PADEP Electronic Mail (E-Mail) Notice

PADEP provides electronic notification to residents when new permit applications are received for review. After registering their e-mail addresses with PADEP, citizens receive e-mail notices of all permit applications received by PADEP. The citizens can limit their notices to selected geographic areas, specific application types, etc. Additional notices are also sent at other important milestones in the review process. In the fall of 2003, the e-mail notice system was expanded to provide citizens with electronic notification of environmental regulations under consideration in the Commonwealth. Similar to the permit applications notice, citizens can receive notice of up to ten specific milestones in the regulatory process.

Public Comment in the Bond Release Process

PADEP received 999 annual bond calculations and completion report applications during the past year. As part of the required annual bond calculation report, each permittee must notify

every property owner of how much of the property owner's land has achieved Stage I, II and III standards during the preceding year. This required notice to the property owner also includes who in the Department to contact if the property owner disagrees with the adequacy of reclamation.

The permittee must publish each bond release application in a local newspaper once a week for four consecutive weeks. This advertisement must include permittee name, and permit number, precise location and number of acres, total amount of bond and amount of requested release, summarize the reclamation, and state where written comments should be filed. The permittee must also provide proof of notification to surface owners, adjacent property owners, local government bodies, planning agencies and sewage and water treatment facilities. At any time, a citizen may file a complaint with the local PADEP Mining District Office about the adequacy of reclamation or about mining activities. The local PADEP office will investigate the complaint within days and respond to the concerned citizen.

Act 54, 5-Year Report

In EY 2004, PADEP and California University of Pennsylvania signed a Memorandum of Understanding, for the University to conduct a study of the effects of underground bituminous coal mining for the period 1998 – 2003. The study, which is required pursuant to section 18.1 of the Pennsylvania Bituminous Mine Subsidence and Land Conservation Act, examines the effects of underground bituminous coal mining. PADEP selected California University to prepare the report based on the availability of faculty and graduate students with appropriate expertise and the University's proximity to PADEP's California District Mining Office, which houses underground mining records. Project work, which was 50 percent Federally funded, was carried out under a memorandum of understanding between the University and the Bureau of Mining and Reclamation.

During this evaluation period, the University of Pennsylvania completed work on the report summarizing the effects of underground bituminous coal mining on overlying lands, structures and water resources for the period August 1998 to August 2003. Much of the data collection and analysis was completed by October 2004, although drafting, editing and map preparation continued into early 2005. The report, which describes the effects of the 81 underground bituminous coal mines that operated during the 1998-2003 period, was presented to the Governor, General Assembly and Citizens Advisory Council on March 2, 2005, and was posted on the DEP website on the same date.

Citizen Complaint Resolution

With respect to inspection, compliance monitoring and enforcement activity during the evaluation year, the public may submit both informal and formal complaints on ongoing and completed mining operations, and bond release requests. PADEP received and investigated approximately 541 citizen complaints, of which 433 were successfully resolved. The remaining complaints were pending resolution at the close of the evaluation period. Complaints can be directed to many aspects of the mining activities including stream pollution from erosion and

mine drainage, blasting effects on structures and water supplies, damage to public roads, mining off-permit, and dust.

B. Outreach by OSM

General Outreach

OSM continued interacting with citizens, industry and other State and Federal agencies on oversight and State program initiatives. The PFD met with industry representatives such as the Pennsylvania Coal Association and attended the MRAB meetings to provide input on oversight initiatives and explain new OSM programs.

Throughout the Federal and State regulatory process, OSM's outreach to the public is very important in considering and implementing changes to the Pennsylvania Approved Regulatory Program.

During this evaluation year, public outreach meetings were held to discuss two very important amendments to the Pennsylvania program regarding the repair and/or compensation for damage to structures or water loss caused by subsidence from underground mining, as well as other changes to the surface mining program statutes and regulations pertaining to bonding, remining and reclamation, postmining discharges, and water supply protection/replacement issues. These amendments are discussed in detail further in this report under the section entitled **Amendments to the Pennsylvania Approved Regulatory Program** (Page 10).

Appalachian Clean Streams Program

OSM continues to provide assistance to PADEP and numerous local groups and associations in promoting the cleanup of AMD impacted streams through the Appalachian Clean Streams Program (ACSP). Since 1996, when the program was first funded, about \$15.274 million in clean stream grants have been awarded to Pennsylvania. PADEP has identified 48 projects across the coalfields of Pennsylvania to receive this funding. So far, 24 projects have been completed, 11 are in construction, and 13 are in design. These projects are being accomplished in partnership with other agencies and watershed groups to maximize the effectiveness of the cleanup effort.

Watershed Cooperative Assistance Program

The PFD Harrisburg Office staff attends workshops, and individual watershed meetings throughout the year in support of AMD clean-up efforts and PADEP programs. Also, under the umbrella of ACSP, OSM has budget authority to enter into project agreements with local non-profit watershed groups to remediate AMD. Under this program OSM has funded 63 Watershed Cooperative Assistance Program (WCAP) projects in Pennsylvania for a total amount of approximately 6 million dollars. The total contribution to these projects, from all partners, is \$25,077,528 with OSM contributing about 24 percent of the total costs. During the evaluation

period, 11 new cooperative agreements were awarded in the total amount of \$1.03 million. These projects involve multiple partners, providing financial and other assistance. To date in Pennsylvania there have been about 257 funding and in-kind partners involved in the WCAP. Partners are counted with each project in which they are participating. Therefore, the number of unique partners involved in the program is fewer. PADEP is providing financial and technical assistance on a significant number of these projects, and the PFD Harrisburg Office has noted a significant number of applicant referrals from Growing Greener watershed coordinators due to budget constraints in that program.

The Harrisburg staff is also providing significant technical assistance to PADEP and watershed groups in characterizing the chemical properties of mine drainage, and providing possible treatment solutions.

IV. Major Accomplishments and Innovations in the Pennsylvania Program

Accomplishments/Innovations

On July 1, 2004, responsibility for reclamation of primacy bond forfeited permits was transferred from the Bureau of Abandoned Mine Reclamation (BAMR), to the Bureau of District Mining Operations (DMO). The primary reason for the transfer of the program was to realize efficiencies and reclamation cost savings by having the program in the same office responsible for issuance of the permit and permit inspection prior to forfeiture. DMO staff, with a familiarity of the permit and its condition at forfeiture, would be in an advantageous position when determining what activities are needed to complete the mine reclamation plan. Essentially, the inspector with responsibility to monitor the active permit will also be responsible for assuring reclamation of the site should the permit be forfeited. This knowledge of the permit and cradle to grave approach is expected to result in more timely reclamation of bond forfeited sites. Also, reclamation is expected to be less costly, again because of the familiarity of the DMO staff with the site and reclamation plan at forfeiture. Another anticipated benefit of the cradle to grave approach is that the inspector should become more diligent in assuring contemporaneous reclamation if she/he knows that they will also be responsible for any bond forfeiture reclamation required.

As part of the transfer process, BAMR submitted a list of primacy forfeitures to DMO. The list initially contained over 100 permits. DMO prioritized the sites into six groupings as follows;

1. Sites in need of land reclamation.
2. Reclaimed sites with a discharge that degrades the receiving stream at the downstream monitoring point.
3. Sites requiring a water supply replacement, or repair of other property damage.
4. Reclaimed sites with a discharge that does not degrade the receiving stream at the downstream monitoring point.
5. Sites being reclaimed, or where treatment is being provided under existing contracts or agreements.

6. Sites where all reclamation obligations have been met and there is a need to notify the land owner of the release of excess bond.

There were 41 permits in the first three categories, and a plan was developed to remediate these sites in three years beginning in the summer of 2004. Sites in category 4 will be maintained in the data base for future action as warranted.

PADEP is also modifying its internal bond forfeiture reclamation program guidance to assist DMO staff in administering the program.

Amendments to the Pennsylvania Approved Regulatory Program

During this evaluation year, several changes to the Pennsylvania coal mining program regulations were completed as a result of a cooperative effort by the PADEP and OSM staff. This cooperative effort has proven to be a very effective approach to resolving complex and controversial issues. Under the team approach, OSM and PADEP staff analyze legislative and regulatory requirements, solicit comments from citizen and industry representatives, and prepare joint proposals consistent with both agencies goals and with Pennsylvania and Federal laws. This is accomplished within existing Pennsylvania and Federal rulemaking requirements to improve public commenting opportunities and to simplify and shorten the process for modifying the approved Pennsylvania program. The Pennsylvania regulatory process can take up to twenty-four months until changes are finalized and published in the Pennsylvania Bulletin. The effective resolution of outstanding amendments continues to be a high priority for both OSM and PADEP.

OSM continued to review a program amendment that has spanned several years. This amendment contained changes to the Bituminous Mine Subsidence and Land Conservation Act (BMSLCA) and the implementing regulations to repair or compensate for damages to structures, and restore or replace water supplies damaged by underground mining operations. The historical data pertaining to this amendment is described in great detail in the 2003 and 2004 OSM annual reports. During this evaluation year, OSM completed the review of this amendment and published two final rules in the Federal Register. The first rule was issued to remove the 47 required amendments coded at 30 CFR 938.16(hhhh) – (bbbbbb), and the second rule was issued, the same day, to supersede six sections of the BMSLCA. An in-depth review of these actions are located in the December 9, 2004, Federal Register Notices, Volume 70, Pages 71528-71551 and 71551- 71560. In spite of these actions, PADEP is still required to promulgate these approved changes. To date, PADEP has prepared and submitted the final regulations and regulatory preamble, along with presentations to the Environmental Quality Board and Independent Regulatory Review Commission. The rulemaking was approved by the Environmental Quality Board on April 19, 2005, but has not yet been finalized. Upon final approval, the Bureau of Regulatory Counsel will request that the West Group, a publisher of State and Federal laws and regulations, document these changes to the Pennsylvania BMSLCA as affected by OSM's action to supersede these provisions. In addition to the required changes addressed in this regulatory package, the Bureau of Mining and Reclamation has also added draft changes to address four provisions that were not previously reviewed or approved by OSM. These additional changes, if promulgated, will be submitted to OSM for approval and will be

discussed in the next evaluation year.

OSM and PADEP continued to work on another complex amendment submitted by PADEP in 1998 regarding changes to PASMCRRA (by Act 173/43) and implementing regulations at 25 PA Code Chapters 86-90. This proposed amendment addressed various changes to the statute and regulations pertaining to bonding, remining and reclamation, postmining discharges, and water supply protection/replacement issues. In 1999 and 2000, OSM issued two letters to PADEP seeking clarification to several changes to their program. This resulted in approximately 110 outstanding issues that needed to be resolved. During this evaluation period, OSM and PADEP held several meetings to discuss and seek resolutions, and on November 24, 2004, OSM published in the Federal Register (69 FR 68286-68287) a reopening to afford the public the opportunity to speak at scheduled public hearings and to provide comment on the amendment's adequacy. On May 13, 2005 (70 FR 25472-25491), OSM issued a final rule approving the statutory and regulatory changes with the exception of a few unresolved issues. On April 28, 2005, PADEP submitted draft proposed regulations to the Mining and Reclamation Advisory Board to address these issues and received approval to go forth with the proposal. As changes occur, PADEP will involve OSM in the process, and the progress of this amendment will be continued in next year's annual report.

PADEP also submitted an informal review request to OSM to satisfy the required amendments at 30 CFR 938.16(mm) – (qq), requiring PADEP to make changes to 25 PA Code 86.187 – 190 and 86.283 concerning the use of funds, reclamation of bond forfeited sites, and selection of bond forfeited sites, as well as changes to the remining and reclamation incentive provisions. PADEP also submitted, as part of this package, a change to remove the reclamation fee at 25 PA Code 86.17. PADEP will submit these changes through their regulatory process and upon approval from the Pennsylvania Environmental Quality Board, PADEP will submit a formal amendment to OSM for review in the next evaluation period.

Abandoned Underground Mine Pools

In 2002, LTV's and Beth Energy's looming bankruptcies presented PADEP with the reality that about 15 significant underground mine drainage treatment plants may cease operations unless they were taken over by the Commonwealth. Unprepared to handle a crisis of this magnitude, then PADEP Secretary David Hess wrote a letter to the Mining Reclamation Advisory Board (MRAB) asking for their input and advice on how to deal with this underground mine pool issue. Although the LTV and Beth Energy situations were successfully resolved, the question of how to handle the many discharging abandoned underground mines still remained. The MRAB formed a task force in April 2003. In July 2003, the task force presented the full MRAB with 19 resolutions which were unanimously adopted and presented to the Secretary of PADEP. In summary the resolutions covered activities including evaluating technologies for in-situ and ex-situ treatment of the mine water; reduction of infiltration of surface water; economical metals recovery; using airborne geotechnology to map mine pools; developing and consolidating data bases of mine pools and discharges; developing trust funds to address the long-term treatment of discharges; and developing outreach to and partnerships with potentially interested parties. In December 2003, an action plan was developed and implemented to address the 19 resolutions.

The action plan lays out the steps, responsible parties and timetable for fulfilling the resolutions.

The most innovative resolutions involve the potential marketing of mine pools to industries and other public and private water users to promote economic development. PADEP recognizes that flooded deep mines contain vast quantities of stored, but polluted water and that many industries need water to conduct their businesses. PADEP is encouraging such industries to consider recycling and reusing the mine pool water and large volume discharges as an option to satisfy their needs. The reuse and recycling of mine pool water offers the potential of several important benefits. First, industry would have additional flexibility in making siting decisions for their facilities. Second, the use of mine water could provide cost advantages compared to the options that rely on traditional sources of water. Third, a facility that is sited at a location to take advantage of the availability of mine water and possibly the reclamation of abandoned mine lands for facility construction would bring economic development to an area that might not previously have been considered.

Following up on the action plan, PADEP issued two Requests for Proposals (RFP) in January of 2005. The first was for proposals with economic development or industrial application as their primary goal and which will rely on recycled mine water and/or a site that has been made suitable for the location of a facility through the elimination of existing P1 or P2 hazards. The second RFP is for proposals for new and innovative mine drainage treatment technologies that will provide waters of higher purity that may be needed by a particular industry at costs below conventional treatment costs as in common use today or reduce the costs of water treatment below those of conventional lime treatment plants. The PADEP will consider proposals in five (5) different categories. These include: In-situ treatment, in-situ abatement, ex-situ treatment, ex-situ abatement, and enhanced metals recovery. At the end of the evaluation year, PADEP was in the process of evaluating proposals.

Resource Recovery

On November 17, 2004, the Southern Alleghenies Conservancy (SAC) and the PADEP hosted a Resource Recovery Symposium in Johnstown, Pennsylvania. The conference aimed at connecting technology producers with the business industry in order to further the concept of mineral extraction from AMD Resource Recovery. At this one day event the scientific community and business sector had an opportunity to exchange information and to form partnerships; forming a marriage of technology with a need for industrial resources. The objective of starting to form future connections between business/industry and technology purveyors was a success, as approximately 250 individuals from state and federal agencies, watershed organizations, businesses, grassroots organizations, and other entities attended this conference. This symposium created an ideal environment for these parties to network and accomplish the aforementioned goals. Outgrowths of this symposium included Pennsylvania's focus on Grayfields Legislation, announcements of the PADEP Innovative Treatment Grants, and business/technology partnerships formed.

Abandoned Mine Reclamation Activities - AMD Treatment and Remediation

The Bureau of District Mining Operations (DMO) and Bureau of Abandoned Mine Reclamation (BAMR) provided significant support to AMD remediation efforts. These Bureaus provide technical and financial assistance to local agencies, municipalities and watershed groups, develop watershed restoration plans, collect stream data, and implement AMD treatment plans. A number of state and locally administered AML and AMD abatement projects were funded under Pennsylvania's Growing Greener Program. Growing Greener funds are appropriated by the Pennsylvania Legislature and are not part of those awarded by OSM from the Title IV Abandoned Mine Reclamation Fund. In several projects, Growing Greener funds were combined with ACSP funds to enhance the partnership approach to AMD cleanup. Fourteen ACSP Projects funded in financial partnership with Growing Greener funds, are Tremont North Indian Head, Tanoma South, Glenwhite Run, Keystone Phase I, Mill Creek Allen Point, Newkirk Mines, Melcroft Phase I, Argentine Central, Little Mill Creek, Quemahoning Creek, Blue Valley Phase II, Lackawanna River, Two Mile Run, and Lee's Creek. The total cost of these projects is \$3,908,440, with \$1,537,203 from the ACSP and \$2,371,237 from Growing Greener. OSM has awarded PADEP \$14.4 million in grants for ACSP projects, for the cleanup of streams contaminated by AMD. Twenty-seven projects have been identified for funding. Eighteen projects have been completed, five are in construction and four are in design. These are partnership projects, with local watershed groups, private companies and other State and Federal agencies contributing time and financial resources.

Growing Greener

Growing Greener is the largest single investment of state funds in Pennsylvania's history to address Pennsylvania's critical environmental concerns of the 21st century.

The original Growing Greener legislation was signed into law by Governor Tom Ridge on December 15, 1999. Called the Environmental Stewardship and Protection Act, funds were allocated for farmland preservation, state park and local recreation projects, waste and drinking water improvements, and watershed restoration programs.

In June 2002, Governor Mark Schweiker signed legislation that increased the funding for Growing Greener, extending it until 2012. Though authorized funding levels were established, revenue shortfalls affected actual spending, and the program was in danger of running out of funds.

In 2004, Governor Rendell proposed the Growing Greener II initiative and a bond issue resolution was placed on the statewide voting ballot. In May 2005 Pennsylvania residents approved the following resolution with 61% of the vote: "Do you favor authorizing the Commonwealth to borrow up to \$625,000,000, for the maintenance and protection of the environment, open space and farmland preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other environmental initiatives?"

PADEP is authorized to allocate its share of Growing Greener funds for the following mining related activities:

- Watershed restoration and protection;

- Abandoned mine reclamation; and
- Abandoned oil and gas well plugging projects.

AML land and water reclamation projects funded by Growing Greener can be designed, contracted and administered through BAMR, or administered through grants to municipalities and watershed groups awarded by PADEP with oversight and technical assistance provided by BAMR and DMO staff. Since 1999, BAMR has received about 25 million dollars in Growing Greener funds.

Reforestation Initiative

The reforestation initiative is a joint effort of OSM's Appalachian Region and the States within the region. The initiative also includes partnerships with States, coal industry, academia, landowners, environmental organizations and various governmental agencies. The goals include planting more high value hardwood trees, increased tree survival and increased tree growth and productivity. The initiative uses the Forestry Reclamation Approach. This involves the planting of higher quality trees, minimum compaction of the reclaimed ground, using native as well as non-competitive ground covers and proper tree planting techniques.

This year was a busy time for the Appalachian Regional Reforestation Initiative (ARRI). Over 100 people were invited to attend a ceremony and sign the Statement of Mutual Intent at the Stonewall Resort in Roanoke, West Virginia, on December 15, 2004. Work shops on the initiative were held during the morning, and after a short social hour, the signing took place at 2:00 PM. Participants included representatives from the Office of Surface Mining, the States of Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. Many state forestry departments and several major universities were represented in the signing. Since the official ceremony, several more organizations have signed the statement, including the Western Pennsylvania Conservancy, and the Pennsylvania Audubon Society.

Several local projects have been undertaken to further the goals of the ARRI. Hardwood tree seedlings were planted on abandon mine lands in the anthracite coal region by the Wilkes-Barre staff of the Bureau of Abandoned Mine Reclamation in celebration of Arbor Day. A Boy Scout Troop in Windber was supplied with hardwood seedlings to reforest an area where AMD treatment projects are being implemented and a small park is planned. These projects will be ongoing for some time. A large project is being planned with the Pennsylvania Game Commission, Privet Coal Company, and The Pennsylvania ARRI team to reforest an area, using the ARRI forestry approach, on previously mined Pennsylvania Game Lands. This will be an ongoing project for the Game Commission. The ARRI team will continue to promote the Reforestation Initiative in the coming years.

AMD Inventory Maintenance

PADEP and OSM continued their cooperative approach to the development and maintenance of a statewide inventory of long-term polluttional discharges (AMD Inventory) from sites mined under the Pennsylvania primacy program (after July 30, 1982). The purpose of the inventory is to help determine the magnitude of the potential harm from AMD, to assess the potential for use of passive treatment technologies to address problem sites, to identify the amount of bond

available to treat the discharges and to estimate the cost to abate the pollution. During the evaluation year OSM inspectors continued to collect water quality and quantity data on a sample (30) of discharges contained in the inventory. The additional information helps to verify and improve the quality of the data. There are currently 276 permits having a total of 325 AMD discharges on the OSM AMD inventory for Pennsylvania. To date, 80 permits and 91 AMD discharges have been inspected by OSM personnel and the hydrologic information has been updated in the OSM AMD inventory. For this evaluation year, no new AMD discharges were discovered or reported by OSM inspectors or PADEP. OSM will continue to refine the database by collecting additional water quality and quantity data during the next evaluation year.

Title IV of SMRCA AML Reclamation

Pennsylvania's AML program continued to make progress in traditional areas of abandoned mine land reclamation such as dangerous highwall removal, subsidence control, and sealing shafts and portals. Specific accomplishments include completion of 24 major projects and 44 smaller state work force projects for a total of 322 acres of land reclamation. The total construction cost for these projects was approximately \$6,546,944 of which, \$5,849,756 was funded by the Title IV grant and \$697,188 was matching funds. Reclamation included 25 dangerous highwalls totaling 38,300 linear ft., 16 deep mine shafts and entries, large dangerous embankments, and hazardous equipment. The AML program also completed two projects addressing polluted drinking water. During the year, there were 67 projects under development; 100 in some stage of design, and 61 under construction.



The above picture shows the Curry Hill/Avondale AML site in the anthracite coal region that is currently in the process of being reclaimed by BAMR under a \$3,953,052 contract. Reclamation involves eliminating dangerous highwalls, hazardous water bodies, and the tire dump. It is estimated that 5 million cubic yards of material will be needed for reclamation. A wetland with incorporated wildlife structures will be constructed and surface water flow in Slickers Creek will be re-established. Completion of the project is expected to take three years.

Monongahela South No. 1, Dangerous Highwall Reclamation

Washington County

A unique reclamation project was completed by BAMR during the evaluation year. The project involved the stabilization of a dangerous and deteriorating highwall that threatened the parishioners of St. Anthony's Roman Catholic Church and School in the City of Monongahela, Washington County. The school at the site had been closed for several years due to the dangerous condition posed by the highwall. Pedestrians and automobiles traveling along the driveway at the base of the highwall were in danger. Several automobiles had been severely damaged by rock falls. The eastern two-thirds of the highwall was stabilized by cutting the slope back to a stable slope. The western third of the highwall was stabilized by constructing a retaining wall. The highwall could not be cut back in this area due to residential properties and a city street located at the top of the slope. St. Anthony's Parish now plans to re-open the school.



Site Before Construction



Site After Construction

Mercury Monitoring at Abandoned Coal Mine Fires

The BAMR initiated an effort to understand the risk to public health and safety posed by the release of mercury from abandoned coal mine fires. If mine fires are significant emitters of mercury, this risk analysis would provide the BAMR with a means to prioritize fires for extinguishment utilizing the limited federal funds available to the State through the Federal Surface Mine Control and Reclamation Act, P.L. 95-87. As recently as last year, forty

uncontrolled mine fires were known to be burning in the State.

During the evaluation year, BAMR entered into an agreement with the Pennsylvania Bureau of Air Quality to pool limited resource to collect information on mercury emissions from sample sites identified in the area of the historic Centralia mine fire. At the time of this report, further work was being conducted to obtain entry rights and to provide electric power to locations where automated sampling devices will be located.

Bennett Branch AMD Initiative Elk County

During the evaluation year, BAMR continued to take the lead in developing an approach to addressing the extensive AMD problems in a tributary to the West Branch of the Susquehanna River. Cleaning up the West Branch of the Susquehanna has wide support from many citizen groups and meets the Commonwealth's goals to improve water quality in areas with high recreation interest. Cleaning up the West Branch of the Susquehanna is one of Governor Rendell's priorities and PADEP and Trout Unlimited sponsored a symposium in State College in May to discuss future planning and clean up efforts. BAMR has worked with staff from the PADEP Knox Office of the Bureau of District Mining Operations (DMO), the Moshannon Office of DMO, and members of the Bennett Branch Watershed Association. The primary mission of the initiative is to develop and implement a detailed mine drainage abatement plan with a goal of restoring water quality in the main stem of the Bennett Branch and significantly improving water quality in most of the mine drainage impacted tributaries. During this year, BAMR completed a great deal of sampling and other field reconnaissance work within the watershed. BAMR is actively pursuing partnerships with the active mining industry to evaluate areas with re-mining potential that could result in water quality improvements or in the elimination of abandoned mine land features that pose a threat to the health and safety of the general public.

O'Conner Reservoir Lackawanna County

During the evaluation year, BAMR completed a project that reclaimed 42 acres of abandoned mine lands containing priority two health and safety conditions in a manner that will allow development of a business park. The project combined Title IV funding to eliminate the hazards with funding from the Commonwealth to provide the compaction required for an industrial facility. During construction, several openings to abandoned underground mines were discovered that possessed the attributes of possible bat habitat. Survey work by BAMR determined that the mine openings provided access to an underground mine area that supported a substantial bat population. One of the openings that had apparently served as one of the main haulage ways to the mining complex was being used by the bat population as a hibernaculum. To preserve access to the hibernaculum and meet the goals of the construction project, BAMR and the property owner worked with the Pennsylvania Game Commission to implement a plan where a large diameter vertical borehole was drilled to intersect the main haulage way in a wooded area adjacent to the reclamation site. The new borehole opening was further protected with a rock entrance and a bat-friendly gate. The

combination of several funding sources, the partnership between the BAMR, the property owner and the contractor, and, the expertise of the Pennsylvania Game Commission resulted in a successful reclamation project. The project eliminated health and safety hazards, preserved important wildlife habitat, and provided an opportunity for regional economic development.



Bat Gate

Government Financed Construction Contracts (GFCC)

PADEP continued to make progress in the reclamation of abandoned mine lands under OSM's 1999 "AML Enhancement Rule." The AML Enhancement Rule, regulations OSM adopted on February 12, 1999, amended the Federal Regulations at 30 CFR Parts 707.5 to allow less than 50 percent financing from a government agency when there is incidental extraction of coal and the project is undertaken as an approved reclamation project under Title IV of SMCRA. Prior to this rule change, SMCRA Title IV AML reclamation projects that involved incidental coal removal were required to have at least 50 percent of the cost of reclamation provided by a governing agency's budget.

The purpose of this regulatory change was to encourage reclamation of Title IV eligible sites that are unlikely to be reclaimed under an AML grant-funded reclamation project or a Title V surface mining permit. Many low-rated Priority 2 or Priority 3 sites would probably go unreclaimed because scarce grant funds would be expended on higher-priority projects. As defined in SMCRA, priority one coal mining problems present an extreme danger to public health, safety, general welfare and property; priority two problems present adverse effects from coal mining to public health, safety and general welfare; and priority three problems involve land and water resources and the environment previously degraded by adverse effects of coal mining practices. Also, some AML sites with limited remining potential would likely remain un-permitted because of the potential risks posed by marginal coal reserves, potential long-term liabilities associated with AMD, or other environmental concerns would not warrant the expenditures required to obtain a mine permit. Removing the minimum 50 percent government funding threshold in

projects involving coal removal incidental to an AML reclamation contract, encourages reclamation of additional AML at little cost to the public.

On March 26, 1999, OSM approved an amendment to the Pennsylvania AML program to adopt the flexibilities made available through the AML Enhancement Rule. Since then, Pennsylvania has continued to excel in implementing this program. During the evaluation year, PADEP received 34 applications, approved 11, and denied 2 as of the end of the period. The remaining are still under review. According to information provided by BAMR, approximately 179 GFCC project applications have been submitted since the program's inception. BAMR records indicate that 110 project applications have been accepted and 21 are still under review. The remaining applications have either been rejected for cause (e.g., site eligibility problems, incomplete documentation, potential water-related problems, etc.), withdrawn by the applicant, or simply not pursued to contract. In this evaluation year, Pennsylvania awarded 17 GFCC sites representing reclamation of approximately 136 acres for an estimated reclamation savings of \$779,640.

Pennsylvania 10% AMD Set-Aside Program

Pennsylvania currently has a balance of \$20,738,983.17 in the 10% Set-Aside fund. The total accumulated revenue with interest that has been placed into the fund is \$38,889,458.31. Two Hydrologic Unit Plans (HUPs) were approved in 2004: Sterling Run in Centre County and Indian Creek in Fayette County. There have been a total of 20 approved HUPs and 18 completed construction projects since the program's inception. Since there are other AMD funding sources available in PA (ACSP and Growing Greener programs), the 10% Set-Aside Program will be used primarily for larger, more expensive construction projects. Future plans for the 10% Set-Aside fund include watershed-wide abatement projects to keep surface streams from entering deep mine pools, and the construction of active treatment facilities where the AMD problem is too large to address with passive facilities.

During the evaluation period, PADEP continued to work on a future 10% Set-Aside project to improve water quality in the West Branch of the Susquehanna River. OSM and PADEP conducted a site review to coordinate on the extent and types of information that will be used to develop a HUP for the Bennett Branch area of the watershed. The overall goal of the initiative is to improve the opportunities for tourism and economic development in north central Pennsylvania by improving water quality in the West Branch.

V. Success in Achieving the Purposes of SMCRA

OSM's national regulatory program oversight guidelines known as REG-8 requires an evaluation of off site impacts, reclamation success, and a component of customer service in its annual oversight work plan with PADEP. Summaries of those areas of evaluation are discussed below.

A. Off Site Impacts

The OSM Oversight Directive REG-8 requires the measuring and reporting of the number and degree of off site impacts occurring on active and reclaimed mining sites. This information is used to prepare Table 4 in the Annual Report.

In previous evaluation years, OSM obtained data for the report by reviewing the Pennsylvania Department of Environmental Protection (PADEP) civil penalty assessment files and supplementing that information with OSM oversight permit inspection reports to collect off site impact data.

In 2004, the Department of the Interior's Office of Inspector General (OIG) submitted an audit report with specific recommendations to OSM regarding the collection of off site impacts. OIG required OSM to include, in each state regulatory authority's performance agreement, the methodology to be used for the collection of off site impacts, and also recommended that these impacts be identified through state inspections.

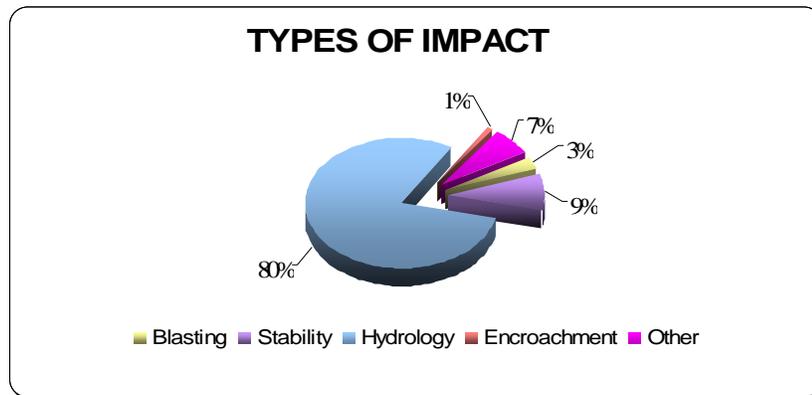
This resulted in an agreement with PADEP that it would modify its data collection system to collect off site impact data. Off site impacts are determined by evaluating all violations resulting in civil penalty assessments during the evaluation year. Because PADEP needed time to modify its data collection system, OSM agreed to continue to review all civil penalty assessments issued, from July 1, 2004 through March 31, 2005, and evaluate those assessments for off site impacts. PADEP completed its modifications and collected off site impact information based on review of all civil penalty assessments issued from April 1, 2005 through June 30, 2005. Therefore, between OSM and PADEP, a review was completed of all civil penalty assessments issued during the evaluation year and a determination of off site impacts was made. This information was compiled and used to compile Table 4 in Appendix B of this report.

As a validation of the reliability of the data, OSM inspectors also continued to identify any off site impacts through routine inspections. In evaluation year 2006, PADEP will supply OSM with all off site impact data for this report and OSM will conduct oversight of the reliability of the data.

Off site impacts are any negative off permit impacts from a surface coal mining or reclamation activity that affects the following resources: people, land, water, and structures. There are three levels of impacts: **1.** Minor impact or impacts that do not affect the public, disturb a small area or have negligible effect on the receiving stream; **2.** Moderate impacts, or impacts that do not fit in either of the other two categories; and **3.** Major impacts, or impacts that have significant impacts to the public, that affect large off site areas and have major impacts to the receiving

streams. The categories of impacts identified for the study are blasting, land stability, hydrology, encroachment and other.

During the 2005 evaluation year, PADEP inspectors conducted inspections on 1928 mine permits. OSM and PADEP inspectors reviewed 138 state enforcement actions, resulting in a determination that 67 permits had off site impacts. Therefore ninety-seven percent of the permits were free of off site impacts. The impact types are blasting (3%), stability (9%), hydrology (80%), encroachment (1%), and other (7%).



The majority of off site impacts are hydrology related (53) and resulted primarily from the discharge of improperly treated or untreated water that exceed the numerical effluent limitations specified in the permit. These discharges resulted in impacts to nearby streams with the addition of acidity, iron, manganese, or sedimentation. There were 36 minor, 8 moderate and 9 major off site hydrologic impacts. All 9 major impacts involved large discharges not meeting effluent standards and contaminating good quality receiving streams. Major hydrology off site impacts include:

- Five major impacts resulted from the same operator pumping water from a deep mine off site that did not meet the effluent levels. The resulting discharges were large and the water contained high iron content, flowing into a good quality stream. The permittee was assessed civil penalties for each of the five compliance orders by PADEP.
- Two of the major impacts resulted from an operator discharging water that blackened a good quality receiving stream. One company discharged blackened water into Pigeon Creek and the other was a large untreated discharge into an unnamed stream. In both cases, PADEP issued compliance orders, resulting in civil penalties being assessed.
- In one major impact, an operator was cited for failure to maintain erosion and sedimentation control measures, resulting in a sediment trap overflowing into Good Spring Creek, causing the creek to flow with black water.
- In another major impact, the company was cited with failure to conduct mining activities to protect animal and aquatic life. In this case, fish and other aquatic life were killed at Gladden Run, Somerset County, with the resulting impact being for an unknown length

of time. The company was assessed a civil penalty by PADEP and fined by the Fish Commission.

The stability impacts (6) came from treatment system stability issues causing soil erosion, ditch erosion, failure to plant disturbed areas, and conducting mining within 100 feet of a roadway. None of the stability impacts were classified as major.

There were five impacts, three of which were moderate and two minor, that fell into the other category, and involved problems such as dust from a mining operation, sediment build-up, lack of sufficient neutralizing agent at a treatment facility, and an offensive odor to residents.

Blasting impacts (2) were both major and moderate and were caused by blasting exceeding the allowable air blast, high ground vibrations causing a house to vibrate, and ground cracks 1000 feet from the blast.

The one minor encroachment impact was a dozer operator disturbing acreage along an existing pre-act mine road of the bonded area.

This evaluation year, 97 percent of permits inspected were free of off site impacts. In evaluation year 2004, 94 percent of permits inspected were free of off site impacts. In evaluation year 2003, 95 percent of permits inspected were free of off site impacts.

Hydrology related off site impacts continue to dominate the total numbers of enforcement actions, accounting for 80 percent of the total in 2005, 92 percent in 2004, 90 percent in 2003 and 74 percent in 2002.

Similar results were obtained in the second phase of this review in which OSM inspectors recorded off site impacts observed during oversight inspections. Of the 415 inspections conducted by OSM staff, there were 30 instances of off site impacts noted. Thus, 93 percent of the permits reviewed by OSM over the course of the evaluation period were free of off site impacts. In evaluation year 2004, OSM inspections found 95 percent of the permits reviewed were free of off site impacts. In 2003, OSM found 91 percent of the permits inspected were free of off site impacts.

The number of enforcement actions with off site impacts has gone down over the past couple of years. Hydrology continues to be the main source of off site impacts, and the number of permits free of off site impacts continues to be very high.

In evaluation year 2006, OSM's review of off site impacts will be changing from primary data collection, to analysis and verification of PADEP data. OSM will focus on PADEP's consistency of decisions regarding identification of off site impacts and analysis of PADEP's data. OSM will continue to use oversight inspections as a way to validate and support findings.

B. Reclamation Success

OSM Directive REG-8, Oversight of State Regulatory Programs, requires a yearly evaluation of the success of reclamation as determined by the acres of bond release. Bond release information is presented in Table 5 of the Pennsylvania Annual Report. The information presented in Table 5 is submitted by PADEP. OSM selected and evaluated a sample of permits with bond releases during the evaluation year in order to evaluate reclamation success in Pennsylvania. The results were compared with previous years to identify any trends.

The evaluation concluded that PADEP is doing an effective job in achieving reclamation of lands affected by surface coal mining operations. All of the 49 sites inspected were in full compliance with the applicable Stage I, II or III bond release requirements. Approximate original contour had been achieved in all Stage I bond releases. Approved post mining land uses had been achieved in all Stage II bond releases. Vegetation success had been achieved and sustained on all Stage III sites. There were no post mining polluttional discharges

Of the 49 bond release inspections conducted, a total of four violations were noted on three sites. None of these violations resulted in off site impacts. All of the above violations were deferred to PADEP for action. In one case, a compliance order had already been issued. In the other three cases, the appropriate enforcement action was taken on-site by PADEP at the time of the bond release inspection.

C. Customer Service

OSM Directive REG-8, Oversight of State Regulatory Programs, requires OSM to evaluate the effectiveness of Pennsylvania's customer service as part of the annual work plan. Applicant Violator System (AVS) determinations were selected for this evaluation year. The objective of this study is to evaluate customer service by reviewing Pennsylvania's AVS permit eligibility determinations for Title V permit applications and Title IV Abandoned Mine Land (AML) reclamation contractors. AML Government Financed Construction Contracts (GFCC) awarded under the Bureau of District Mining Operations (DMO) during the evaluation period are included in the study for AVS compliance. AML contracts issued under the Bureau of Abandoned Mine Reclamation (BAMR) were not evaluated.

The primary purpose of the AVS is to provide a tool for States use in determining permit and AML contractor eligibility. A State's implementation of the AVS should focus on four critical areas. They are: new permit and issued permit data, violation data, requests for Surface Mining Control and Reclamation Act (SMCRA) Section 510(c) checks or evaluations prior to permit issuance, along with verification of ownership and control information and entering relevant updates. Under the current program guidelines, the regulatory authority checks the AVS during the review of each application for a mining permit or AML contract. The AVS automatically compares the ownership and control information with the violation information to determine if links exist between the applicant and any outstanding violations. If the applicant is linked to certain violations in the AVS, OSM recommends to the regulatory authority that it deny the application unless the applicant submits proof that the violation has been corrected, is being corrected, or is being appealed through proper channels. By matching permit applicants to

outstanding violations, the AVS helps regulatory authorities implement SMCRA Section 510(c) dealing with permit eligibility and with 30 CFR 874.16 dealing with AML reclamation contractor eligibility.

Section 510(c) of SMCRA, as it relates to this discussion, requires the state regulatory authority to withhold permit issuance when any surface coal mining operation owned or controlled by the applicant is currently in violation of SMCRA, until that violation has been corrected or is in the process of being corrected to the satisfaction of the regulatory authority. 30 CFR 874.16 requires any successful bidder for an AML contract issued using Title IV AML funds to meet the same test in order to receive a contract.

This review was conducted to evaluate PADEP's compliance with SMCRA Section 510(c), and with 30 CFR 874.16. In accordance with the PADEP AVS compliance policy, Document Number 562-3000-802, AVS checks are to be conducted for:

- All new permits just prior to issuance.
- Transfers, assignments or sale of a permit or company.
- Changes in contract operators.
- Successor in interest permit changes.
- Major permit amendments which add acreage or require public notification of the requested change.

In 1991, OSM and PADEP executed a Memorandum of Understanding that sets forth Pennsylvania and OSM responsibilities for maintenance and use of the AVS.

In 2000, OSM issued three System Advisory Memorandums with guidance and recommendations regarding use of the AVS for permit eligibility determinations, entering and maintaining State violations in the AVS, and upstream ownership and control information in the AVS.

These documents formed the basis for evaluation of Pennsylvania's regulatory and AML programs under this review.

OSM evaluated 108 actions during the evaluation period January 1 through June 30, 2004. These actions involved new permits, transfers, AML Government Financed Construction Contracts (GFCC), and major amendments. Of the 108 actions, DMO issued 43 new permits, processed 22 transfers, processed 34 major amendments and awarded 9 AML GFCCs. Twelve major amendments did not require AVS checks. OSM also evaluated the timeliness of violation data entry into the AVS, by checking 12 cessation order violations, one civil penalty violation, and 16 bond forfeiture violations during the review period.

OSM found that PADEP completed AVS checks in an effective manner with a 95 percent performance rate. PADEP also demonstrated timely AVS violation data entry with a 90 percent compliance rate.

D. 300 Foot Residential Barrier Waiver

Federal and Pennsylvania law prohibit surface mining operations within 300 feet of an occupied dwelling without a waiver from the owner. Pennsylvania regulations governing these waivers are found at 86.102(9). Section 86.102(9)(ii) specifically requires a written waiver by lease, deed or other conveyance clarifying that the owner and signatory had the legal right to deny surface mining operations and knowingly waived that right and consented to surface mining operations closer than 300 feet of the dwelling as specified.

The PFD Harrisburg Office reviewed approved Pennsylvania program requirements and compared those requirements with SMCRA regulations. To verify implementation, recently issued permits (2002 or later), with 300 foot occupied dwelling waivers were identified from each district office. A sample of waivers was reviewed against the approved program to determine if District Mining Offices are consistently implementing the requirements.

The OSM found that Pennsylvania rules at 86.109(9)(ii) were consistent with the Federal rules at 30 CFR 761.15(b). Both require a written waiver if mining operations (excepting haul or access roads connected to a public road) will be conducted within 300 feet of any occupied dwelling. The waiver must clarify that the owner and signatory had the legal right to deny mining and knowingly waived that right.

The PFD Harrisburg and Johnstown Office staff reviewed a sampling of 300 foot dwelling waivers on recently issued permits. Permits were selected from all District Mining Offices. In no case did the waivers contain the required clarification that the owner and signatory had the legal right to deny mining and knowingly waived that right.

In subsequent discussions with PADEP, OSM was advised that when the current regulatory language (adding the requirement that the waiver clarify...) was amended into the program in 1999, the change was not transmitted to the operators so they could incorporate the additional language in their waivers. PADEP advised OSM that the District Mining Offices have been informed by way of a policy memo of the need for operators to include the additional language, and that new waivers received would be returned if they do not contain the required language. PADEP District Mining Offices are now reviewing waivers to insure the required language is incorporated.

E. MSHA Class Impoundments Study:

In an August 12, 2004, meeting between the Mine Safety and Health Administration (MSHA) and OSM, MSHA announced its intention to discontinue inspections of current orphaned MSHA class impoundments and any future orphaned MSHA coal mining impoundments. OSM agreed to insure their continued inspection by the regulatory authorities or OSM under the requirements of 30 CFR 840.11 regarding inspections on abandoned coal mine permits (bond forfeited permits). MSHA identified seven impoundments in Pennsylvania

Staff from the PFD Harrisburg and Johnstown offices inspected the seven impoundments listed by MSHA, often in the company of coal mining inspection staff from PADEP, and the MSHA district inspector.

In summary, OSM identified four MSHA class impoundments on three permits in Pennsylvania for continued oversight. The impoundments are listed below:

Shannopin Mine	MSHA number 1211-PA-02-0068-03
Mathies Mine	MSHA number 1211-PA-02-0059-02
Mathies Mine	MSHA number 1211-PA-02-0059-05
Isabella Mine	MSHA number 1211-PA-02-0001-03

All four impoundments are associated with bond forfeited underground coal refuse disposal and preparation plant areas. All of the impoundments are stable and present no serious threats to the public or environment. PADEP is actively involved at the Mathies Mine (Mon View Mining), and is continuing a pumping operation involving the two listed MSHA impoundments. The impoundment at the Isabella Mine is a popular recreation site and fishery, and is the location of a recent drowning when a vehicle entered the water from a barricaded and closed township road. PADEP will increase its monitoring activities at the Isabella impoundment.

OSM found that there are no current plans by PADEP to reclaim these sites. There are no current activities to permit the sites to re-process the refuse material or coal silt collected in the impounded areas, although there is a potential for future re-permitting and resource recovery at all three permits. During this review a concern was identified regarding PADEP's inspection frequency policy on bond forfeited sites which have been sent for collection. PADEP is modifying its policy to keep the inspection frequency on bond forfeited sites the same as for inactive sites.

VI. OSM Assistance

This evaluation period, OSM provided technical assistance to PADEP through participation on teams to evaluate the success of mine drainage treatment systems. Also, the PFD Harrisburg Office staff hydrologist is working part time in the BAMR Harrisburg office providing technical assistance in the review and design of AMD treatment systems. The PFD Harrisburg Office also provided financial and technical assistance through the ACSP and WCAP programs.

Glenn White Treatment Evaluation Project

In 2001, BAMR constructed five passive treatment systems on four discharges in the Glenn White Run watershed, near Altoona. After construction of the treatment systems, the Altoona Water Authority (AWA) assumed operation and maintenance responsibility for all treatment systems. Abating mine drainage impairment in Glenn White Run is of high priority since Glenn White Run is the major surface water contributor to the Altoona drinking water reservoir. Immediately after the treatment systems were constructed, AWA reported that they noticed a significant reduction in the chemicals needed to make the reservoir water potable. AWA estimated the treatment performed by the passive systems translated into an annual cost savings of approximately \$95,000. Initially, the treatment systems required little maintenance and provided good treatment. However, in 2004 AWA complained to PADEP that the some of the treatment systems were deteriorating in performance and two of the treatment systems required

routine maintenance. The AWA requested that PADEP evaluate the current condition of the Glenn White treatment systems. In 2005 OSM provided technical assistance to PADEP by leading the effort to write a work plan to evaluate the Glenn White treatment systems. The objective of the study is to monitor treatment performance and to identify treatment alternatives that would improve treatment performance and lessen maintenance requirements. The study will also quantify the relationship between system performance and the water quality entering the Altoona reservoir. The work plan calls for collecting water quality and quantity information from 10 sampling points on a monthly collection schedule and to record all maintenance performed on the treatment systems. In addition to monitoring system performance, the data will be used to develop treatment options and risk assessments for four different possible treatment scenarios: 1. Do nothing, 2. Retrofit the existing system, 3. Add a mixing cell, 4. Redirect some water to the Coke Oven treatment system. This project is expected to last for at least two years or until the team decides enough water data has been collected to develop the treatment options and risk assessments.

Minersville Passive Treatment Project

In February 2005, the Cambria District Mining Office requested OSM's assistance in leading an effort to troubleshoot a newly constructed passive treatment system. The Minersville vertical flow pond was constructed in the fall of 2003 and 12 months of post-construction monitoring data showed poor performance. The treatment system was only neutralizing approximately 20 mg/L of acidity (as CaCO₃) and was discharging low pH water. The \$170,000 treatment system was expected to discharge net alkaline water with a pH > 6.

The PFD Harrisburg staff initiated a comprehensive effort to identify the cause of the poorly performing treatment system. Initially, the investigation focused on removing compost and limestone from various areas within the treatment system in an effort to identify system plugging or limestone armoring issues. Very little precipitate was found within the compost layer and the limestone appeared clean and void of chemical precipitates. Further analysis by x-ray diffraction showed the limestone was composed of calcite and was void of mineral coatings. A review of the design drawings and historical monitoring data found the treatment system was properly sized and was treating water quality and quantity that was within the current design limits. Lastly, a tracer test was conducted to determine if short circuiting was responsible for the poor performance. On February 19, 2005, OSM staff conducted a multi-day physical and chemical tracer test. One gallon of fluorescent dye and 27 lbs of food-grade salt were added to the influent. The purpose of the chemical tracer (salt) was to provide the retention time of the treatment system and the purpose of the fluorescent dye was to identify the flow path (or short circuit) through the treatment system. The fluorescent dye was visible in the effluent within 15 minutes of introducing the dye into the treatment system. Water samples were collected during short time intervals during the first day of the tracer test and at longer intervals for the next two days to evaluate the chemical tracer (salt). Results of the water samples agreed with the visual tracer. The visual tracer showed that the short circuiting was occurring around the clean out pipes in the first 10 feet of the bed. In addition to technical assistance, OSM also provided the financial assistance through the Watershed Cooperative Agreement Program to fix the short circuit. The grant has been awarded and system is currently being redesigned.



Photograph showing the introduction of dye into the treatment system



Photograph showing the dye appearing in the outflow within 15 minutes of introduction

Maintenance of the Appalachian Region and Pennsylvania AMD Inventory

The Appalachian Region AMD Inventory was initially created by OSM in 1999 to better characterize the AMD problem from primacy sites in the Region. Annual oversight of that inventory is required by each OSM field office. There are currently 276 permits with a total of 325 AMD discharges on the OSM AMD inventory for Pennsylvania. Of the 325 discharges, 111 of them are associated with bond forfeited permits.

The PFD Harrisburg Office oversees and maintains the Pennsylvania AMD inventory through its oversight inspection program. Each year, 30 sites not previously inspected are selected from the inventory for water quality and flow measurements. The inventory is updated with the new information. Also, whenever an OSM inspector finds a post mining polluttional discharge in association with any oversight inspection, information is collected to add the site to the inventory. To date, 80 permits and 91 AMD discharges have been inspected by OSM personnel and the hydrologic information has been updated in the OSM AMD inventory. For this

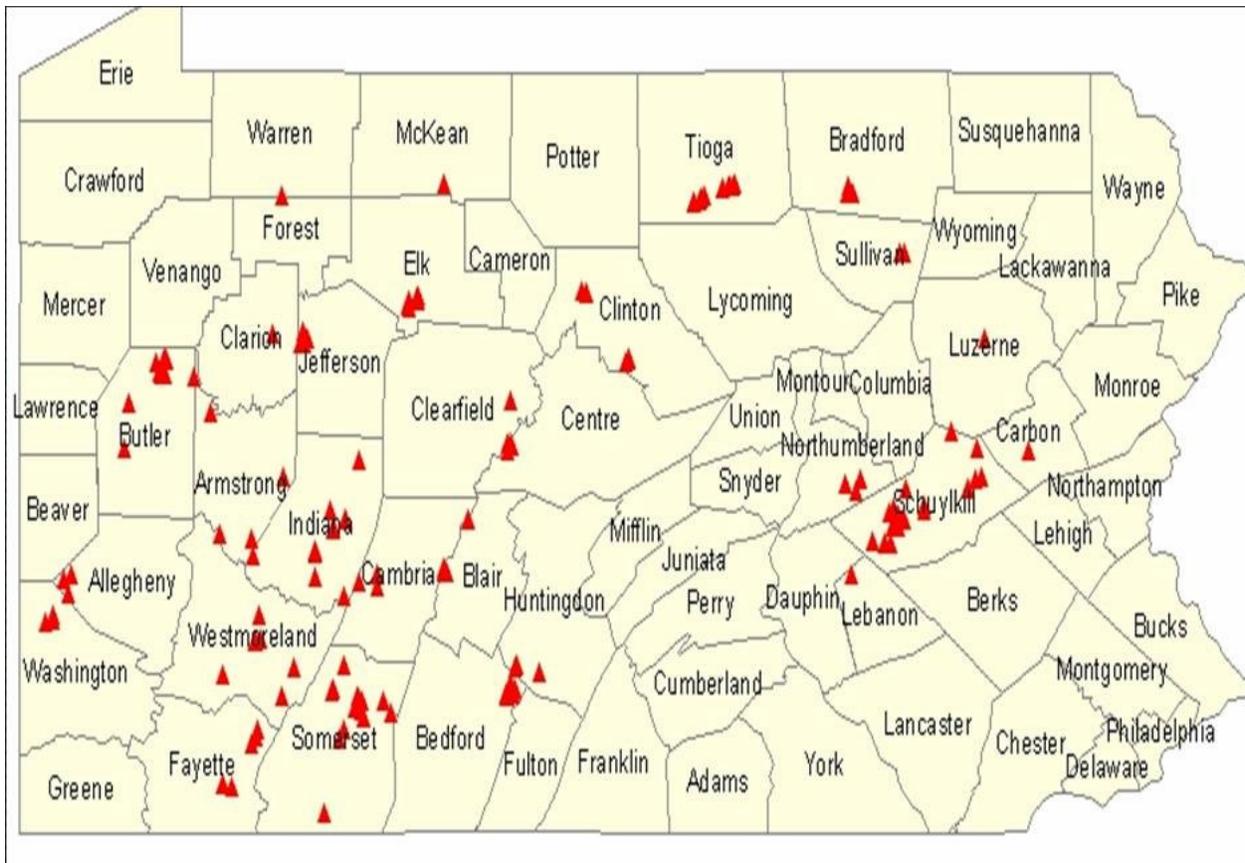
evaluation year, no new AMD discharges were discovered or reported by OSM inspectors or PADEP.

AML/AMD Treatment Systems GIS and Information Data Base

The number of passive AMD treatment systems installed in Pennsylvania to remediate the effects of abandoned mine drainage in streams is rapidly growing. Treatment systems are being funded and/or installed by or under the supervision of PADEP's BAMR, Regional Offices, DMO, County Conservation Districts, local governments and non-profit organizations. In addition, the Natural Resources Conservation Service (NRCS) constructs AMD treatment systems. Pennsylvania's Growing Greener Program provides significant funding to PADEP and numerous local municipalities and watershed groups for the construction of AMD treatment facilities. OSM's WCAP also provides direct assistance to watershed groups for AMD remediation. There are numerous foundations, conservancies and other organizations providing funding for AMD treatment facilities. Because of the large numbers of entities involved in the funding, construction and operation/maintenance of these systems, no one agency or organization maintains a complete list or basic GIS information on the projects.

In 2003, OSM and PADEP agreed to collaborate on developing a GIS data base of all AMD remediation projects for AML and bond forfeited projects statewide. The data base will be provided to anyone having the computer capability to run the programs, and work products such as mapping, and reports could be provided as requested to individuals, watershed groups, consulting companies and agencies. Sites included in the GIS are those funded by the Appalachian Clean Streams Program (ACSP) through PADEP's Title IV AML grant, and those funded by OSM's Watershed Cooperative Assistance Program (WCAP) in direct grants to watershed groups. In addition the GIS captures data on remediation sites funded through other State and Federal programs such as Growing Greener, NRCS – PL 566, and EPA's 319 program. Data collected at the project sites includes the water quality and quantity of the discharges, and the quality of the treated water. Spatial data is gathered by GPS readings taken at the discharge locations. Additional information collected includes the name and address of the organization responsible for maintenance of the system, a description of the treatment technology, observations on the effectiveness of the system and the total capital cost of the project.

Through June 30, 2005, approximately 235 individual passive treatment project sites have been entered into the GIS data base. These projects have a total capital investment of over 50 million dollars. It is noted that there are often multiple treatment systems at each project site. Information on projects was collected from a wide range of sources including consultants, State and Federal agencies, conservation districts, and non-profit watershed groups. Demonstrations of the capabilities of the GIS system were given to PADEP's Bureau of Water Quality Management, Bureau of Abandoned Mine Reclamation, Bureau of District Mining Operations, and regional watershed organizations. The data base was compared to the Growing Greener data base to help assure completeness. In addition, with the input of the user agencies, the data collection form was modified to collect more specific information regarding treatment technologies.



The GIS Location Map, above, represents each of the passive treatment projects in the inventory. In the system, a user can access specific project information by clicking on the individual project icon.

The following GIS AMD related activities will be undertaken in evaluation year 2006.

- Convert the data base from Fox Pro to Access. This format is more familiar to the potential user groups.
- Incorporate the modified data collection form into the data base and update the data base.
- Work with Technical Transfer staff in Pittsburgh to develop a web based access to the GIS and data base.
- Continue to search for new projects and update information on existing projects.
- Conduct outreach to potential users, to encourage use of the program and information.
- Make copies of the data base available to interested parties.

Appalachian Clean Streams Program

In 1994, OSM determined that additional effort was needed to help focus Federal attention on pollution of the nation's rivers and streams by drainage from abandoned coal mines. There are

7,500 miles of streams known to be impacted by abandoned coal mine drainage in Appalachia, with Pennsylvania, West Virginia, Ohio, Maryland and Virginia having the majority. Pennsylvania alone has 3,500 miles of impacted streams from hundreds of abandoned surface and underground coal mine discharges. As watershed assessments are completed, the number of stream miles impacted by abandoned mine drainage in Pennsylvania is expected to rise.

To help address this significant problem, OSM created the ACSP and receives Congressional funding authority in appropriations from the AML Fund that are directed to participating states for mine drainage remediation projects. Selected projects emphasize Federal/State/local partnerships to treat coal mine drainage in watersheds. The allocation is budgeted against the Federal share of the AML Fund. The thirteen States participating in the program receive a share of the yearly clean streams allocation, based on their adjusted historical coal mined percentage, with a minimum of \$120,000.

Through the ACSP, OSM provided financial and program assistance to PADEP since 1997. Awards granted through fiscal year 2004 total \$14.4 million. Twenty-seven AMD remediation projects have been identified by PADEP for funding using these ACSP funds and eighteen projects have been completed. The PFD routinely consults with PADEP regarding the ACSP projects selected to help assure they meet the guidelines of the program, and to identify the contributions of other funding and non-funding partners. The PFD technical staff are often asked for input regarding which treatment technologies will have the greatest likelihood of success in treating individual AMD sites.

One of the goals of the ACSP is to foster partnerships in watershed restoration. This is in recognition of the enormity of the problem and the value of partnerships, and local “grass roots” support in implementing and maintaining successful treatment projects. PADEP provides significant financial, program and technical support, as well as public recognition to watershed groups in building local interest in watershed restoration. PADEP also works closely with other Federal and State agencies in partnerships to leverage funds to address mine drainage problems.

PADEP seeks involvement from local watershed groups in developing projects. Watershed groups provide an invaluable service in generating local support, helping secure land owner cooperation, collecting water samples, and generally keeping an eye on the treatment systems to discourage vandalism, perform routine maintenance and notify PADEP of any problems.

Keystone State Park Phase 2 ACSP Project

The Keystone State Park AMD abatement project is the most recent project to be completed in Pennsylvania with ACSP funds. The project was completed Dec. 9, 2004, at a cost of \$159,985. Phase 1, completed in 2002, dewatered a mine pool, removed a mine seal and replaced a mine drainage collection system that had frequently plugged and threatened to damage recreational facilities at the park. Phase 2 involved the construction of a passive treatment system to treat the discharge. The treatment system consists of an innovative limestone-upflow unit with an automatic siphon to backflush the unit and remove metal precipitates. The treatment system is in operation and is restoring water quality to 1.2 miles of McCune Run, a tributary of Loyalhanna Creek. The system is located on Keystone State Park property and is being incorporated into the

park's environmental education program.



Keystone State Park, Phase 2: Construction of Limestone-Upflow Unit

Watershed Cooperative Agreement Program

There has been a significant growth of watershed protection and restoration groups in the Appalachian Region in the past few years, in large part responding to increasing financial and technical support provided by Federal and State agencies. Pennsylvania now has dozens of active watershed groups dedicated to the remediation of mine drainage problems, and PADEP is providing significant staff support, often funded by grants from the Abandoned Mine Fund, and project funding through the Growing Greener Program.

By 1999, OSM was hearing a need from watershed restoration groups around the Appalachian Region for funds to implement mine drainage remediation projects under their administration. Responding to this need, OSM established the Watershed Cooperative Agreement Program (WCAP), funded under the Appalachian Clean Streams Program (ACSP), and has been awarding partnership grants to non-profit watershed groups for AMD remediation projects. Sixty-Three WCAP grants have been awarded to Pennsylvania watershed groups for a total of \$6,020,188. Total costs for these projects including all partner cash and in-kind donations of labor and services are \$25,077,528. In total, OSM's contribution to the projects averages about 24 percent. Thirty-six projects have been completed. In the evaluative year, there were 11 new project grants awarded for a total of \$1,033,737 and a total cost of \$4,269,441, with OSM's involvement about 24 percent. PADEP is frequently involved as a primary partner in these direct assistance grants, either providing funding and or technical assistance, and PFD Harrisburg Office staff coordinates with PADEP to help assure the successful completion of the projects. Funds provided by OSM complete the remediation budget, and PFD has noted an increasing number of financial assistance referrals from the Growing Greener Program. In the evaluative year Growing Greener funds were included in five of the projects and EPA 319 funds awarded by PADEP were included in four of the projects. Other financial partners involved in WCAP projects include the NRCS, Environmental Protection Agency, the Eastern and Western

Pennsylvania Coalitions for Abandoned Mine Reclamation, the U.S. Army Corps of Engineers (COE), and numerous foundations, conservancies, watershed groups, industries and coal mining companies, and individuals. Because of the partnership nature of the WCAP, the PFD Harrisburg Office is routinely involved in meetings and site visits with watershed groups, PADEP and other project partners, helping to coordinate the technical and programmatic aspects, and to resolve issues. The PFD has dedicated a significant amount of staff resources in administering this program, and is providing an increasing amount of technical help to watershed groups seeking the best available technology to remediate their mine drainage problems.

Permapress AMD Treatment Project Dedication

On June 20, 2005, the Mountain Watershed Association, partners and friends dedicated the Permapress Mine Drainage Treatment Facility. This site is located in the Indian Creek Watershed of Fayette County. Here, a 35gpm discharge of water from an abandoned underground mine is being treated through the use of a limestone flushing bed complete with a large automatic siphon, which drains the bed every 36 hours. The water then flows through a settling pond where the aluminum precipitate is collected. About 1 mile of Indian Creek is cleaned up by this project. The mine water is very low in dissolved iron, but has 23mg/l of dissolved aluminum. The primary financial partner in this \$230,000 project is the Natural Resources Conservation Service, which contributed funds from its P.L. 566 Watershed Restoration Program. OSM also contributed \$8,000 from the WCAP to assist Mountain Watershed Association with contract oversight, and the Western Pennsylvania Watershed Program was also a financial partner. This is the third mine drainage treatment project in the Indian Creek Watershed and OSM has contributed WCAP funds to all projects. There are several others discharges identified for future construction. The P.L. 566 plan developed by the NRCS identified ten AMD sites that have a significant impact on Indian Creek. Treatment of these sites will remove 95percent of the mine drainage pollutants entering Indian Creek, and will restore the recreational and fishery benefits of the watershed. The PADEP's Bureau of Abandoned Mine Reclamation is providing significant technical and financial assistance to AMD projects in the watershed.



Siphon device in the limestone bed at Permapress

Wells Creek Watershed Association.

On April 1, 2005, PADEP Secretary Kathleen McGinty presented Thurman Korn, President of the Wells Creek Watershed Association the 2004 Governor's award for Environmental Excellence. The award recognizes Pennsylvania's businesses, municipalities, and organizations whose efforts are making a profound, positive impact on the protection of the environment, health, and economy. Through the efforts of the Wells Creek Watershed Association, three significant abandoned mine discharges have been addressed using passive treatment technologies, resulting in the restoration of aquatic habitat in several miles of the stream. Prior to the completion of the projects, only one aquatic insect was found in the impacted stream segment. In the latest round of stream sampling, 54 macro-invertebrates representing ten taxa were netted. In addition electro-fishing found 23 fish representing six species including eight trout. Prior to the remediation projects there were no fish found in the impacted stream segments.

The Office of Surface Mining, through its Watershed Cooperative Assistance Program, provided \$293,301 in grants for construction of the three systems. In total about \$850,000 has been expended on these projects. Recent monitoring shows the systems are very effective in treating the mine drainage.



From left, Malcolm Crittenden PADEP Project Manager, PADEP Secretary Kathleen McGinty, and Thurman Korn, President Wells Creek Watershed Association.

VII. General Oversight Topic Reviews

Each year the PFD, in consultation with PADEP, develops an oversight work plan, as required by the OSM Directive REG-8, Oversight of State Regulatory Programs. This plan includes

various aspects of Pennsylvania's approved coal regulatory program that PFD will evaluate for effectiveness, innovation, and compliance. OSM's oversight is not process driven. It focuses on the on-the-ground/end result success of Pennsylvania's program in achieving the purposes of SMCRA. A review team is established for each topic and a team leader is designated. PADEP is invited to appoint team members, and in some cases joint PFD/PADEP team leaders are designated. At the conclusion of the evaluation, a report is written and provided to PADEP for comment prior to finalization. Copies of the reports are maintained in the public evaluation file located in the PFD Harrisburg Office.

Several evaluation studies have been discussed earlier in this report and are not repeated here. A short summary and results of each remaining study follows.

Oversight Inspections

The oversight inspection study is conducted to fulfill responsibilities as specified in OSM's Oversight policy REG-8, regarding review of PADEP's permitting and inspection program for surface coal mining operations. This study includes reviews of applicable mine permit files and on-site inspections focused on identification of off site impacts resulting from various mining activities. Inspections are documented using OSM's Mine Site Evaluation and addendum forms. Inspection data is entered into a national data base. Specifically, this study provides monitoring capability for the entire spectrum of State program operations and gives an up-to-date perspective of the on-the-ground successes of Pennsylvania's mining program. In addition, data was collected in support of other studies identified in the 2005 Work Plan specific to Pennsylvania's conventional bonding program, government financed construction program, 300 foot residential barrier waivers, bond release program, and to evaluate off site impacts. The conventional bonding evaluation included a review of the pit size, highwall height, number of pits, area requiring top soiling, area requiring seeding, number of ponds, length of haul road, acres of support area, acres of forestland not planted in trees and acres of wildlife habitat not planted in trees, to determine bond adequacy.

OSM conducted a total of 415 inspections during the evaluation year. Of those inspections, 209 were oversight inspections of mine sites. The other 206 inspections were in support of other oversight work plan evaluations, and responses to citizen complaints, Ten-Day Notices, and follow-up inspections. The data was used to determine the number of sites in full compliance. The study found the PADEP inspection program continues to do an effective job in achieving and maintaining on-the-ground compliance and minimizing the potential for off site impacts. Of the total 209 oversight complete permit inspections conducted for this study, 182 (87%) of the sites were found in full compliance. There were a total of 48 violations noted on the 27 permits with violations. All violations were either previously cited or abated during the inspection, or were ones where the PADEP inspector agreed to take action. This compliance percentage is a slight improvement from last evaluative year's 85 percent compliance rate, and is very consistent over the past few years. Oversight inspections ranged across the various types and included 53 on permits in Stage II bond release; 49 on permits where mining was completed; 39 on permits in active coal production; 20 on active but non-producing permits; 15 on permits in Stage I bond release; and lesser numbers on the other inspection types. Of the violations noted, 21 were against hydrologic balance standards with the most noted for drainage controls. Fifteen

violations noted were against administrative requirements including mining outside bonded area, expired permit and license, and insufficient liability insurance. There were also 29 permits where bond release had been denied, with 19 of those cases because of post mining polluttional discharges, three cases because of erosion, rills and gullies, and two cases where revegetation standards had not been met.

The study also found PADEP continues to do an effective job in minimizing the occurrence of long-term pollution discharges. Twenty four of the 209 permits (11%) reviewed as part of this study identified the potential for long-term polluttional discharges, and each was being appropriately addressed by PADEP. This percentage is a slight improvement from last evaluative year's 15 percent, and is very consistent over the past few years. Nineteen of the 24 cases (79%) involved discharges from permits issued on or prior to 1987, and seven of those cases were underground mine discharges. In PADEP's permitting program regarding evaluation of probable hydrologic consequences, 1987 is considered a turning point year. Only five of the 24 post mining polluttional discharges (21%) were on permits issued since 1987. The discharges from surface mine permits after 1987 are notably smaller and easier to treat.

Conventional Bonding Review

The purpose of this study, which began in evaluation year 2004, was to review permits covered by PADEP's conventional bonding system (CBS) to determine compliance with the permit conditions related to bonding. OSM inspectors conducted this specific review during routine oversight inspections.

Pennsylvania modified its bonding program for mining operations and initiated the new CBS, in August, 2001. New permit applications and permit revisions received after the effective date of the PADEP bonding guidance (August 4, 2001) were bonded based on the conventional bonding guidelines. Permits under review on August 4, 2001, and existing permits were transitioned from ABS to CBS using schedules developed by each District Mining Office. Permits where backfilling and grading was completed, that were renewed for reclamation only, or where coal extraction was completed by August 4, 2001, or projected to be completed by June 2002, were reviewed to determine if a bond adjustment was needed and were generally allowed to remain in the ABS.

It is noted that under the CBS, bond is not solely acreage based and is not incrementally released. Bond is calculated based on activities and volumes using rates that are periodically updated and published in the Pennsylvania Bulletin. Bond release can begin when the final pit is reclaimed to Stage I standards. The CBS uses the concept of an operational area that involves bonding a pit or extraction area at one rate to cover the grading and revegetation obligations. The operational area reclaimed to Stage 2 standards is bonded at another lower rate to cover the Stage 3 maintenance period. Under this concept, the location of the pit and, consequently the operational area moves within the mining area.

OSM inspectors reviewed the permit files to obtain the bond calculations as established by the State using their Bond Rate Guidelines. The bond amounts established are the basis for the calculations (volumes, acres of grading and revegetation, ponds, pit size etc.) and the permit's operational area

conditions (acres in mining and operational area, maximum pit volume, acres of selective grading, and revegetation and tree planting etc.). Using this information, the permit site was inspected and the inspector determined if the mine operation was in compliance with the permit's bonding conditions. Based on this analysis, a finding was made regarding the adequacy of the total permit bond to cover the cost of reclamation.

The data gathered showed that of the 209 oversight complete inspections performed during the evaluation period, 79 (49 Bituminous and 30 Anthracite) operations were active under full cost bonding. OSM only evaluated permits actively producing coal to provide a full range of bonding activities. OSM found that Pennsylvania is implementing and monitoring their bonding program in an effective manner.

Abandoned Mine Lands Project Reviews

OSM AML Project Review

OSM conducts site reviews of AML projects to understand how PADEP controls the reclamation process and to determine whether the program is meeting stated goals and objectives. During the evaluation year, the Harrisburg office conducted 32 site visits to approved AML projects during various phases of completion. When possible, site visits were coordinated with BAMR and typically included or afforded site representatives an opportunity to accompany OSM during the review. PFD representatives gathered information on site status, BAMR monitoring, overall project success, and the existence of actual or potential problems. The site visits conducted by OSM included 11 construction phase reviews, 8 final inspection phase reviews, and 13 post-completion phase reviews.

Abandoned Mine Lands Inventory Review

This review was conducted to confirm the existence of support information in BAMR project files that verify the units and costs entered into the OSM Abandoned Mine Lands Information System (AMLIS). This review is the second part to a two-stage review conducted to address findings by the U.S. Department of the Interior Office of Inspector General (OIG) that the OSM AMLIS system contained errors. The first OSM review, conducted in evaluation year 2004, concluded that Pennsylvania has a system in place that should provide for the entry of accurate information into AMLIS. To determine whether the existing system is being implemented successfully, this study reviewed two groups of Pennsylvania AML projects.

- Projects formally authorized by OSM between July 1, 2004, and May 2, 2005.
- Projects having a BAMR final inspection between July 1, 2004 and May 2, 2005.

The reviews were conducted in each of the BAMR office locations - Wilkes-Barre, Ebensburg, and Harrisburg. To verify that information exists for the data entered into AMLIS, this study reviewed project files for written documentation of feature numbers and costs. Written documentation was considered to be copies of PAD forms, project completion reports, engineer estimates or other BAMR documents that included discussions or costs that specifically confirmed the AMLIS entries.

AML Inspection Data Collection Review

During this evaluation period, OSM reviewed the information collected during OSM site reviews of AML construction sites. The objective of the review was to improve the effectiveness of OSM AML site visits and to provide BAMR with an opportunity to identify ways in which OSM AML site visits could assist Pennsylvania through the inspection process. The review was conducted by OSM staff and included, project feature identification, the timing of evaluations, simplifying general site information, recording beneficial uses, and NEPA compliance. The review proposed draft reports to the Chief, Pittsburgh Field Division.

Treatment Trust Funds

This study was initiated to develop a tracking and information database for the trust funds that would contain information on the permit, the trust, and development of its value, as well as the discharge and treatment costs. AMDTreat will be used as a tool to aid in the developing or updating of treatment costs if PADEP has not applied the program to calculate the trust fund accounts.

Discussions with PADEP determined that they are developing and implementing a treatment Trust Fund database and had its first input in April 2004. The PADEP Trust Fund database is currently being revamped to accommodate users accessing the system. When the database is completed, a tracking and monitoring system will be incorporated to administer the treatment trust fund agreements. It is probable that an off-the-shelf software program will be used for the tracking and monitoring purpose. PADEP is considering using a program such as Quicken Books to monitor the trust accounts and to provide seamless data updates and transfers to entities also using the software program. To date, PADEP used their Consent Order and Agreement enforcement authority to execute twenty trust fund account agreements involving pollutional discharges on coal mining operation sites. The present day value of these agreements, if fully funded, would be 61.9 million dollars. However, because many of the trust funds are being funded over time, the current value of the agreements is 41 million dollars. PADEP reports that these values are in constant change.

The study concluded that it would be redundant for OSM to develop a separate Treatment Trust Funds data base because PADEP is meticulously developing a database that is comprehensive, user friendly, and will provide the necessary information for trust account tracking. PADEP is using a variety of instruments to calculate treatment trust fund accounts and is implementing a database system that OSM can use to evaluate the success of trust funds. The incorporation of an off-the-shelf software program to track and monitor the trust fund accounts when the data base is completed will simplify the monitoring and tracking process of disbursements and payments.

Acid Mine Drainage Inventory

During the past three years, OSM's Harrisburg Office and the PADEP have cooperatively established and continue to work on a comprehensive inventory of long-term pollution discharges, known as Acid Mine Drainage (AMD), occurring on post-primacy permit sites. PADEP's AMD Inventory consists of discharges on active, inactive, bond forfeited, and pre-

primacy sites while the OSM AMD Inventory includes active, inactive, and bond forfeited sites. Although the PADEP AMD and OSM AMD inventories are maintained separately, DEP and OSM have agreed to provide updates to each other in an effort to maintain consistent and like data. The PADEP AMD Inventory is incorporated into the OSM AMD Inventory to provide information on AMD that was not previously available in the OSM AMD Inventory.

This year's AMD Inventory study consists of comparing water quality data and discharge information on mining sites that are in the OSM AMD Inventory with current water quality data and discharge information. In order to maintain a current AMD inventory, every site, regardless of status, needs to be inspected and have untreated water analyzed on a periodic basis. Periodic inspections are being conducted on the sites listed in the inventory and water samples are being drawn and analyzed to update the inventory. The purpose of this study was to inspect thirty mining operations listed on the OSM AMD Inventory per year and have the untreated water discharges sampled and analyzed in order to characterize the magnitude of the discharges, annotate changes to the water quality, and update the AMD inventory with current information on each AMD discharge.

This year's exercise required inspecting thirty randomly selected permitted sites listed on the OSM AMD inventory. The study compares the current hydrologic data, July 1, 2004 through March 31, 2005, of permit AMD hydrology data with the hydrologic information that is available in the OSM AMD inventory. Each of the thirty permitted sites had not been inspected by OSM inspectors within the last five years.

There are currently 276 permits having a total of 325 AMD discharges on the OSM AMD inventory for Pennsylvania. To date, 80 permits and 91 AMD discharges have been inspected by OSM personnel and the hydrologic information has been updated in the OSM AMD inventory. For this evaluation year, no new AMD discharges were discovered or reported by OSM inspectors or PADEP. There are three operations, permit numbers 56713039, 56823066, and 63841302 that no longer have AMD discharges associated with them. They will be removed from the inventory.

Temporary Cessation of Mining

The purpose of the Mining Operations in Temporary Cessation Study was to determine the number of mining permits in Pennsylvania currently in temporary cessation status for over 90 days as of December 31, 2004. The study reviewed the criteria for deciding approval or disapproval of temporary cessation requests, reviewed the procedures for periodic review of approved and pending requests for temporary cessation status, and reviewed the methods used in tracking permits in temporary cessation.

The study concluded that PADEP's procedures for identifying, authorizing tracking and maintaining permits in temporary status needs to be improved. As a part of this review, discussions were held with PADEP regarding use of the OPNP code (operating but not producing), and identification of permits in temporary cessation. PADEP has begun a review of its procedures.

Conclusion

This evaluation year, the PFD Harrisburg Office conducted a comprehensive review of the Pennsylvania approved coal regulatory and abandoned mine reclamation programs, including 17 topical areas of evaluation, technical assistance, or study. Oversight data and studies indicate that the Pennsylvania Program has been effective in meeting the goals of SMCRA. In support of this finding, OSM conducted 415 permit inspections including 209 randomly selected inspections, and 32 abandoned mine reclamation project inspections. PADEP is conducting a program where active mining sites are, with very few exceptions, in compliance with the approved regulatory program. Very few off site impacts were noted. Reclamation proceeds in a successful and contemporaneous fashion. Abandoned mine reclamation projects result in successful hazard elimination and environmental stabilization and enhancement. Of particular note this year are PADEP's innovative efforts to encourage the use of underground mine pools as water supplies for commercial, industrial and municipal purposes, and to seek innovative technologies for the treatment of mine drainage.

PADEP recognizes the impact mine drainage from abandoned and bond forfeited sources has on Commonwealth streams and continues to dedicate significant staff and financial resources to developing long-term treatment options through trust agreements, and bonding, constructing mine drainage treatment systems, supporting watershed groups in their clean-up efforts, and advancing treatment technologies to help maximize their effectiveness. Also, this year, the Bureau of District Mining Operations (DMO) implemented its primacy bond forfeiture reclamation program. Responsibility for this program was transferred from BAMR to the DMO in 2004. This reorganization is expected to result in improved efficiencies, and lower reclamation costs as the PADEP implements its plan to address pollutional discharges from primacy bond forfeited permits.

APPENDIX A

Acronyms used in this Report

ABS	Alternative Bonding System
ACSP	Appalachian Clean Streams Program
AMD	Acid Mine Drainage (Relates to all mining related pollutional discharges)
AMDISys	Acid Mine Drainage Inventory Systems
AML	Abandoned Mine Lands
AMLIS	Abandoned Mine Land Inventory System
ATV	All Terrain Vehicle
BAMR	Bureau of Abandoned Mine Reclamation
BMR	Bureau of Mining and Reclamation
CAC	Citizens Advisory Council
CBS	Conventional Bonding System
CO&A	Consent Order and Agreement
COE	U.S. Army Corps of Engineers
DCED	Department of Community and Economic Development
DMO	Bureau of District Mining Operations
EHB	Environmental Hearing Board
EQB	Environmental Quality Board
GFCC	Government Financed Construction Contract
HUP	Hydrologic Unit Plan
MRAB	Mining and Reclamation Advisory Board
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
OSM	Office of Surface Mining Reclamation and Enforcement
PADEP	Pennsylvania Department of Environmental Protection
PASMCRA	Pennsylvania Surface Mining Conservation and Reclamation Act
PFD	Pittsburgh Field Division
SMCRA	Surface Mining Control and Reclamation Act of 1977
TMDL	Total Maximum Daily Load
WCAP	Watershed Cooperative Assistance Program

APPENDIX B

Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration

These tables present data pertinent to mining operations, State and Federal regulatory activities within Pennsylvania. They also summarize funding provided by OSM and Pennsylvania staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the 2005 evaluation year (July 1, 2004 - June 30, 2005). Additional data used by OSM in its evaluation of Pennsylvania's performance is available for review in the evaluation files maintained by the Harrisburg Field Office.

TABLE 1

COAL PRODUCTION FOR PENNSYLVANIA (Millions of short tons)			
Calendar Year Period	Surface mines	Underground mines	Total^B
Coal production^A for entire State			
2002	12.7	56.0	68.7
2003	11.8	53.1	64.9
2004	17.3	51.6	68.9

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

^B Information in this table may differ from the narrative in this report because the narrative data is discussed in terms of the production tonnage as reported by the State of Pennsylvania.

TABLE 2

INSPECTABLE UNITS												
As of June 30, 2005												
Coal mines and related facilities	Number and status of permits								Insp. Units^D	Permitted acreage^A (hundreds of acres)		
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals					
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	Total
	STATE AND PRIVATE LANDS REGULATORY AUTHORITY: STATE											
Surface mines	0	869	0	489	0	0	0	1,358	1,358	0	1,400	1,400
Underground mines	0	133	0	46	0	0	0	179	179	0	2,516	2,516
Other facilities	0	336	0	55	0	0	0	391	391	0	350	350
Subtotals	0	1,338	0	590	0	0	0	1,928	1,928	0	4,266	4,266
FEDERAL LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0
ALL LANDS^B												
Surface mines	0	869	0	489	0	0	0	1,358	1,358	0	1,400	1,400
Underground mines	0	133	0	46	0	0	0	179	179	0	2,516	2,516
Other facilities	0	336	0	55	0	0	0	391	391	0	350	350
Totals	0	1,338	0	590	0	0	0	1,928	1,928	0	4,266	4,266
Average number of permits per inspectable unit (excluding exploration sites)									<u>1</u>			
Average number of acres per inspectable unit (excluding exploration sites)									<u>221.3</u>			
Number of exploration permits on State and private lands:							<u>1</u>		On Federal lands ^C :		<u>0</u>	
Number of exploration notices on State and private lands:							<u>389</u>		On Federal lands ^C :		<u>0</u>	
IP: Initial regulatory program sites												
PP: Permanent regulatory program sites												
^A When a unit is located on more than one type of land, include only the acreage located on the indicated type of land.												
^B Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.												
^C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.												
^D Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.												

TABLE 3

**STATE PERMITTING ACTIVITY
As of June 30, 2005**

Type of Application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres ^A	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New Permits	60	60	7,763	0	4	1,205	8	5	232	68	69	9,200
Renewals	190	191	N/A	6	12	N/A	54	37	N/A	250	240	N/A
Transfers, sales and assignments of permit rights	34	47		4	13		10	14		48	74	
Small operator assistance	9	19		0	0		0	0		9	19	
Exploration Permits ^B	1	1		0	0		0	0		1	1	
Exploration notices ^C		389			0			0			389	
Revisions (exclusive of incidental boundary revisions)		57			29			4			90	
Incidental boundary revisions											0	0
Totals	294	764	7,763	10	58	1,205	72	60	232	376	882	9,200

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

^B Underground Anthracite Exploration Permit

^C State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

OFF-SITE IMPACTS														
RESOURCES AFFECTED			People			Land			Water			Structures		
DEGREE OF IMPACT			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	2		1	1								1	1
	Land Stability	6		1					4	2				
	Hydrology	53							36	8	9			
	Encroachment	1				1	1							
	Other	5	1	1						2				
Total	67	1	3	1	1	1	0	40	12	9	0	1	1	

Total number of inspectable units:

1,928

Inspectable units free of off-site impacts:

1,861

*Note: More than one resource may be affected by each type of impact. Therefore, the total number of impacts will likely be less than the total number of resources affected.

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

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	Applicable performance standard	Acreage released ** during this evaluation period
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	2,850
Phase II	- Surface stability - Establishment of vegetation	3,387
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	4,456
	Bonded Acreage Status^A	Acres
Total number of acres bonded at end of last review period (June 30, 2004) ^B		383,398
Total number of acres bonded during this evaluation year		6,014
Number of acres bonded during this evaluation year that are considered remaining, if available		1,448
Number of acres where bond was forfeited and collected during this year (also report this acreage on Table 6)		163

** Acreage released is based on a 9 mth period (Oct 1, 2004 - June 30, 2005)- due to change in program

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

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

TABLE 6

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)		
Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Acres
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2004 (end of previous evaluation year) ^A	121	N/A
Sites with bonds forfeited and collected during Evaluation Year 2005 (current year)	3	163
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2005 (current year)	0	0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2005 (current year)	5	N/A
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2005 (end of current year) ^A	119	N/A
Sites with bonds forfeited but uncollected as of June 30, 2005 (end of current year)	38	4106
Surety/Other Reclamation (In Lieu of Forfeiture)		
Sites being reclaimed by surety/other party as of June 30, 2004 (end of previous evaluation year) ^B	32	4574
Sites where surety/other party agreed to do reclamation during Evaluation Year 2005 (current year)	0	0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2005 (current year)	0	0
Sites with reclamation completed by surety/other party during Evaluation Year 2005 (current year)	3	181
Sites being reclaimed by surety/other party as of June 30, 2005 (current evaluation year) ^B	31	4394
^A Includes data only for those forfeiture sites not fully reclaimed as of this date ^B Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date		

TABLE 7

PENNSYLVANIA STAFFING (Full-time equivalents at the end of evaluation year)	
Function	EY 2005
Regulatory Program	
Permit review	49.30
Inspection	88.00
Other (administrative, fiscal, personnel, etc.)	104.50
Regulatory Program Total	241.80
AML Program Total	111.00
TOTAL	352.80

TABLE 8

FUNDS GRANTED TO PENNSYLVANIA BY OSM (Millions of dollars) EY 2005		
Type of Grant	Federal Funds Awarded	Federal Funding as a Percentage of Total Program Costs
Administration and Enforcement	8.9	50%
Small Operator Assistance	0.67	100%
Totals	9.57	

TABLE 9

STATE OF PENNSYLVANIA INSPECTION ACTIVITY		
PERIOD: JULY 1, 2004 - JUNE 30, 2005		
Inspectable Unit Status	Number of Inspections Conducted	
	Complete	Partial
Active	5,065	8,818
Inactive	1,981	963
Total Active & Inactive	7,046	9,781
Exploration	55	40

The State should provide inspection data to OSM annually, at a minimum, and maintain inspection data on a continual basis.

TABLE 10

**STATE OF PENNSYLVANIA
ENFORCEMENT ACTIVITY**

PERIOD: JULY 1, 2004 - JUNE 30, 2005

Type of Enforcement Action	Number of Actions*	Number of Violations*
Notice of Violation	684	799
Failure-to-Abate Cessation Order	22	22
Imminent Harm Cessation Order	0	0

* Do not include those violations that were vacated.

State should provide enforcement data to OSM annually, at a minimum, and maintain data on a continuous basis. OSM offices responsible for Federal and Indian Programs need not complete this table since data will be queried from the I & E Tracking System.

TABLE 11

LANDS UNSUITABLE ACTIVITY

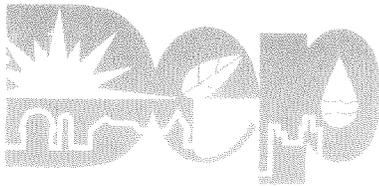
PERIOD: JULY 1, 2004 - JUNE 30, 2005

Number of Petitions Received	0		
Number of Petitions Accepted	1		
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 Denied as Being Unsuitable	0

State should provide lands unsuitable data to OSM annually if there is any activity in this program area

APPENDIX C

The Pennsylvania Department of Environmental Protection's comments provided to the Office of Surface Mining on September 1, 2005.



Rachel Carson State Office Building
P.O. Box 8461
Harrisburg, PA 17105-8461
September 1, 2005

Bureau of Mining and Reclamation

717-787-5013

Mr. George J. Rieger
Office of Surface Mining
Harrisburg Field Office
415 Market St., Room 304
Harrisburg, PA 17101

Re: 2005 Annual Evaluation Report

Dear Mr. Rieger:

Your office's draft "2005 Annual Evaluation Report of Pennsylvania's coal mining regulatory and abandoned mine land reclamation programs" was distributed throughout the Department's mining program for review and comment. The general feedback indicated the report is a good representation of the program under review. Specifically, the following comments are provided for your consideration:

- On Page 2, Overview of Pennsylvania Coal Industry, third paragraph, second sentence: Correct to read "This tonnage accounted for eighty-one percent (81%) of the total **bituminous** mining coal production."
- On Page 9, Accomplishments/Innovations, first paragraph, first sentence: Change "Bureau of Mining and Reclamation" to read "Bureau of Abandoned Mine Reclamation."
- On Page 21, under Off-Site Impacts: OSM did not incorporate the following recommendation previously provided by DEP:
 - Reword the second of four bullets describing major hydrology off-site impacts to indicate whether or not DEP cited the operator and assessed penalties. The other bullets indicate DEP took some actions. As the bullet currently reads, a reader could misinterpret that DEP failed to take some kind of action.
 - In the fourth bullet, the word "sited" should be changed to "cited".
- Page 38, Conventional Bonding Review: This section appears to be a continuation of the Conventional Bonding Review provided on 36.
- On Page 40 under Acid Mine Drainage Inventory, third paragraph: OSM did not incorporate the following recommendation previously provided by DEP:
 - Under the first paragraph of the Data Presentation and Discussion section, the report indicates permits 11823002 and 30823015 have never been inspected by OSM personnel because they are sites that are no longer considered inspectable units by PADEP and have complete bond release or bond



forfeiture. Both sites have a facility status of "Reclaimed with Passive Treatment" and **are** considered inspectable units by PADEP. Both sites continue to have reclamation bonds posted against the site.

- Appendix B. Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration: Tabular summaries were not available for comment.

We appreciate the opportunity to review the draft reports. Please do not hesitate to call if you have any questions.

Sincerely,



Joseph G. Pizarchik

Director

Bureau of Mining and Reclamation