

**SURFACE MINING CONSERVATION AND RECLAMATION ACT
RECLAMATION AND REMINING INCENTIVES REPORT
2007**

**Prepared for:
Senate Environmental Resources and Energy Committee
and
House Environmental Resources and Energy Committee**

**Prepared by:
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I. Executive Summary

In accordance with the requirements of Section 4.11(b) of the Commonwealth's Surface Mining Conservation and Reclamation Act (SMCRA) regarding the Department's reclamation and remining programs, this report is submitted to the Senate Environmental Resources and Energy Committee and to the House Environmental Resources and Energy Committee. This report provides the status of the Department's reclamation and remining programs authorized under the SMCRA Sections 4.8, 4.9, 4.10, 4.12, 4.13, and 18. Information is current to December 31, 2007.

Since its inception, Pennsylvania's reclamation and remining incentives programs have been very successful. Coal mine operators using these programs have reclaimed 4,555.5 abandoned mine land (AML) acres equivalent to \$24,366,671 in reclamation value.

The Government-Financed Reclamation Contracts program benefits the public and the mining operators by establishing contracts for mining companies to conduct operations that will reclaim abandoned mine lands sites at little or no cost to the public. Between January 1991 and December 31, 2007, 171 contracts were issued, with a total reclamation value of \$6,069,000.

The Remining Operator Assistance Program (ROAP) creates an incentive to remine and reclaim abandoned mine land areas by providing financial assistance for most of the cost of permitting the remining area. Between August 1996 and December 31, 2007, 30 operators requested participation in this program on 60 remining sites. Through December 31, 2007, 43 projects have resulted in approved remining permits that have reclaimed 360.3 acres of abandoned mine land with an approximate reclamation value of \$2,161,800.

Under the Financial Guarantees program, the Department of Environmental Protection provides low-cost bonding of remining areas. As of December 31, 2007, 154 coal mine operators used Financial Guarantees to bond 567 mining permit increments. Those operations have reclaimed 2,654.1 acres of abandoned mine land, saving the Commonwealth an estimated \$15,918,600

The Bond Credits program also provides an incentive for operators to reclaim an abandoned area by earning a "bond credit" under a Consent Order and Agreement with the Department. Four licensed mine operators have competed for five Bond Credit projects. Five projects have been completed under this program, reclaiming 31 acres. In 2006 Sky Haven Coal, became the fifth company to use the Bond Credit program. Sky Haven is reclaiming the Maney bond forfeiture site. The Maney Project is ahead of schedule and will be completed in 2008. The five completed projects represent a reclamation value of \$217,271.

The Department has not promulgated regulations nor established final criteria for the Designating Areas Suitable for Remining program. Presently, this program is not workable. It sounds good in theory; however, there is not a practical way to implement the program.

**Summary of Reclamation and Remining Incentives Programs
1996 - 2006**

| Program | Year | Number of Companies | Number of Projects | AML Acres Reclaimed as of 12/31/06 | Reclamation Value of Projects Completed by 12/31/06 |
|------------------------------------|-------------|----------------------------|---------------------------|---|--|
| Government-Financed Rec. Contracts | 91-06 | 71 | 154 | 1,339.5 | \$5,037,000 |
| ROAP | 97-06 | 30 | 60 | 187.7 | \$1,126,200 |
| Financial Guarantee | 96-06 | 141 | 520 | 2,513.5 | \$15,081,000 |
| Bond Credits | 96-06 | 5 | 6 | 31 | \$217,271 |
| Totals | | | 740 | 4,071.7 | \$21,461,471 |

**Summary of Reclamation and Remining Incentives Programs
2007**

| Program | Year | Number of New Companies | Number of New Projects | AML Acres Reclaimed During 2007 | Reclamation Value of Projects Completed 2007 |
|------------------------------------|-------------|--------------------------------|-------------------------------|--|---|
| Government-Financed Rec. Contracts | 2007 | 6 | 17 | 172 | \$1,032,000 |
| ROAP | 2007 | No new ones | No new ones | 172.6 | \$1,035,600 |
| Financial Guarantee | 2007 | 13 | 47 | 139.6 | \$837,600 |
| Bond Credits | 2007 | 0 | 0 | 0 | 0 |
| Totals | 2007 | | | 483.8 | \$2,905,200 |

II. Conclusions and Recommendations

The Department recommends (1) Section 4(d) of SMCRA be amended to allow reclamation bonds posted for “lands eligible for remining” to be released similar to the provisions of the federal Surface Mining Control and Reclamation Act (SMCRA). This would mean reducing the minimum amount of time bonds are held after reclamation work is complete from 5 years to 2 years; (2) continuing the reclamation and remining incentives programs; and (3) continuing to identify and develop reclamation and remining incentives.

The Department has developed four of the five reclamation and remining incentive programs authorized by the 1992 amendment to the Surface Mine Conservation and Reclamation Act (SMCRA): Government-Financed Reclamation Contracts, Remining Operator’s Assistance Program (ROAP), Financial Guarantees and Bond Credits. The fifth program, Designating Areas Suitable for Remining, is not practical. In the time the four programs have been available, coal mine operators have used them to aid in completing reclamation of 4,555.5 acres of abandoned mine land. This equates to an approximate reclamation value of \$24,366,671 (completed reclamation areas only). In general, it takes several years to negotiate leases, obtain permits, and then remine and reclaim a site. There are many projects in progress with remining or reclamation not yet completed.

Department costs to operate the programs are minimal. Existing staff absorbed the reclamation and remining program work as additional duties.

These programs are encouraging abandoned mine land reclamation at a dramatic cost saving to the Commonwealth. The environment is being enhanced, the mine operators are receiving support, and the Commonwealth’s abandoned mine land burden is being reduced. The “Reclaim PA” program aims to maximize reclamation of Pennsylvania’s \$15 billion abandoned mine legacy. Remining by industry is a major component of this reclamation effort. This program encourages reclamation with financial incentive for operators to remine and reclaim abandoned mine lands as opposed to virgin lands. These remining incentives have become the keystone in the Commonwealth’s “Reclaim PA” program. The Department will continue to identify and develop incentives to encourage and expand reclamation and remining operations.

- The Department will continue these reclamation and remining incentive programs.
- The Department will continue to identify and develop incentives to encourage reclamation and expand reclamation through remining operations.
- The Department will initiate changes to Chapter 86 to up date the regulations to make the existing remining incentives more compatible with conventional bonding. Currently Remining Financial Guarantees are intended to cover only a remining area, while under DEPs conventional bonding process, the bonded area floats across the entire surface of the permit.

III. Background

This report has been prepared in accordance with the requirements of Section 4.11(b) and (c) of the Surface Mining Conservation and Reclamation Act (SMCRA). Section 4.11(b) requires the Department to prepare a report regarding the Department's reclamation and remining programs to the Senate Environmental Resources and Energy Committee and to the House Environmental Resources and Energy Committee. Section 4.11(b) was added to the SMCRA by passage of Act 173 on December 18, 1992. This report summarizes the status of the Department's reclamation and remining programs authorized under the SMCRA Sections 4.8, 4.9, 4.10, 4.12, 4.13, and 18.

There are five primary reclamation and remining programs authorized by these sections of the SMCRA:

- Section 4.8 - Government-Financed Reclamation Contracts
- Section 4.9 - Designating Areas Suitable for Reclamation by Remining
- Section 4.10 - Remining Operator's Assistance Program
- Section 4.12 - Financial Guarantees to Insure Reclamation
- Section 4.13 - Reclamation Bond Credits

Section 18 of the SMCRA includes the creation of the Remining Environmental Enhancement Fund and the Remining Financial Assurance Fund. The status of both of these funds is included in Sections V and VI, of this report, respectively.

In addition to the program descriptions contained in this report, appropriate tables for each program showing site/operator lists, project cost, reclamation dollar value, acres reclaimed and pertinent dates are included in the appendices to this report. Many of the remining incentive program descriptions refer to a "remined area." A "remined area," as defined in these descriptions, includes the abandoned mine land (AML) area to be reclaimed and up to 300 feet of adjacent previously unmined area that is needed to complete the reclamation.

This report was submitted to the Mining and Reclamation Advisory Board (MRAB) as required by Section 4.11(c)(5) of SMCRA. The MRAB's comments are included as Appendix A.

IV. Individual Program Descriptions

A. SMCRA Section 4.8 - Government-Financed Reclamation Contracts

The Government-Financed Reclamation Contracts program involves contracted operations that will reclaim abandoned mine land sites at little or no cost to the public. This program was previously known as the No-Cost Government-Financed Reclamation Contracts Program. Regulations were deemed unnecessary for implementation of this program. This program allows removal of incidental coal or coal refuse during the reclamation of an abandoned mine land site. Occasionally, coal removal is necessary in order to effectively and efficiently reclaim an abandoned mine land site. The value of the

coal or coal refuse that must be removed to reclaim the site offsets the cost of the reclamation project.

Coal refuse is the waste product generated from the physical or chemical cleaning or processing of coal. It contains pyrite (the major culprit in the formation of acid mine drainage pollution), residual coal and various types of rocks and spoil. The Department's Bureau of Abandoned Mine Reclamation's state inventory at the end of 2006 showed 823 abandoned coal refuse piles, covering 9,082 acres in 36 of the 67 Pennsylvania counties. The estimated cost to reclaim these piles is over \$102 million.

Under the Government-Financed Reclamation Contract program, the mining industry has made progress in reclaiming coal refuse and other abandoned mine land sites at no additional direct cost to the Commonwealth. Between January 1991 and December 31, 2007, 171 contracts were issued. Using these 171 contracts at the end of 2007, 1,511.5 acres had been reclaimed for a total reclamation value of \$6,069,000. The projects contracted during 2007 are listed in Appendix B.

The Government-Financed Reclamation Contracts program was modified in 1999 and is one of the initiatives of the "Reclaim PA" program. The United States Department of Interior, Office of Surface Mining Reclamation and Enforcement approved the new program as an amendment to Pennsylvania's Abandoned Mine Reclamation Plan. The Government-Financed Construction Contracts program allows incidental coal removal as part of abandoned mine land reclamation contracts, authorizes no cost reclamation contracts and allows reclamation of abandoned mine land adjacent to active mining operations using excess spoil.

Government-Financed Reclamation Contracts Overview:

| | As of 12/31/06 | As of 12/21/07 |
|---------------------------|-----------------------|-----------------------|
| Number of acres completed | 1,339.5 | 1,511.5 |
| Number of companies | 71 | 77 |
| Number of projects | 154 | 171 |

B. SMCRA Section 4.9 - Designating Areas Suitable for Reclamation by Remining

The Department has not promulgated regulations nor established a program for designating areas suitable for remining. The Department also found that, considering the broad industry acceptance of the other incentive programs such as the Remining Financial Guarantee Program, the scope and benefits of designating areas suitable for remining required considerably more analysis. The analysis has been completed and there is no feasible way to implement this program at this time.

There are several issues with the Designating Areas Suitable for Reclamation by Remining (DASRR) program.

To designate a property as ‘Suitable for Remining,’ the Department would need to gather the same information that is required for an approved surface mining permit application. It is unclear whether the property owner or the mine operator would be responsible for submitting this information.

There is no fair, competitive way to determine which property to designate. Determining which surface mine operator should receive the benefits of the designation is also quite arbitrary.

If the Department would gather information on a property that would not be mined in the following ten years, to designate it ‘Suitable for Remining,’ the information would become dated. Mining processes and “best management practices” would probably have advanced enough that it would become necessary for the information to be gathered again.

The Department does not have advanced notice as to which operator will mine the property, if any. Different mine operators use very different equipment and therefore different mining methods. The varying mining methods require different mining and reclamation plans, resulting in different pre-permit information packages needed.

Pre-permit information gathering may cost between \$25,000 and \$200,000. This is a substantial amount to spend for a project that may not move ahead. The Department does not have either the money or the staffing necessary to perform this type of work.

C. SMCRA Section 4.10 - Remining Operator’s Assistance Program (ROAP)

The regulations for the ROAP program were promulgated as 25 Pa. Code Sections 86.261-86.270 and became effective on August 24, 1996.

The ROAP program provides an incentive to an operator to remine and reclaim an abandoned mine land area that the operator would not otherwise reclaim. This incentive is in the form of Department financial assistance towards the cost of obtaining a permit for the remining area. The ROAP program pays qualified consultants to collect and analyze permit-specific hydrogeologic data and prepare reports used in the mine permit application.

Between August 1997 and April 2003, 31 operators applied to this program for 60 remining ROAP projects. As of December 31, 2007, 46 surface mine permits were issued as a result of 45 ROAP projects. An exceptionally large ROAP project was issued as 2 permits. When completed, these 46 operations will have provided 2,060.3 acres of surface abandoned mine land (AML) reclamation and 840.5 acres of AML underground reclamation. This work has the potential for \$12,361,800 worth of AML surface reclamation. The cost to the Department in ROAP assistance for these 46 permits was \$857,193.

The Department or the applicant cancelled 13 of the 60 projects. The Department's cost for these 13 projects totaled \$109,686. One project failed to materialize and the operator reimbursed the Department for cost and services provided by ROAP.

There is one ROAP project that is currently under review for a surface mine permit application in the local district mining office. It is estimated that this permit will reclaim 71.5 acres of AML. The cost to the Department for this ROAP project was \$14,205. The complete ROAP program projects are listed in Appendix C.

While the remaining ROAP application is working its way through the permitting process, no additional applications have been taken into the program since 2003 because funding for the program has ceased.

Remining Operator's Assistance Program (ROAP) Overview:

ROAP AML Reclaimed as of December 31, 2007

| | |
|--------------------------------|-------------|
| AML surface acres reclaimed | 360.3 |
| DEP's ROAP cost | \$857,193 |
| Value of reclamation completed | \$2,161,800 |

Total AML Reclaimed Upon Completion of ROAP Projects

| | |
|---|--------------|
| Estimated total AML acres surface reclamation | 2131.8 |
| DEP ROAP Dollars | \$1,003,086 |
| Estimated value of total AML surface rec. | \$12,790,800 |

D. SMCRA Section 4.12 - Financial Guarantees to Insure Reclamation

The Financial Guarantees program regulations were promulgated as 25 Pa. Code Sections 86.281-86.284 and became effective on August 24, 1996. Under this program, the Department provides low-cost bonds to guarantee reclamation of the remining area of a surface mine permit.

Each operator and each permit must meet the regulatory criteria to participate in this program. An operator is limited to a maximum Financial Guarantee value of 30 percent of the amount allocated in the Financial Guarantee Special Account within the Remining Financial Assurance Fund (RFAF). Each permit is limited to a maximum Financial Guarantee value of 10 percent of the amount allocated in the Financial Guarantee Special Account within the RFAF.

During 2006, with the support of the Mining and Reclamation Advisory Board, the Department increased the amount allocated from \$800,000 to \$1,000,000. This allowed the Department to raise the maximum amount of Remining Financial Guarantees that an operator may use at any one time from \$240,000 to \$300,000 and the maximum permit limit from \$80,000 to \$100,000. This amount is adjusted periodically by the Department

based on premium payments made by the operators as well as bond forfeitures. An operator may not substitute Financial Guarantees for existing bonds, and Financial Guarantees may not be rolled over.

An operator is not required to pay the \$100/acre permit fee on any area bonded with Financial Guarantees. Bond release is the same as for any other bond; however, Financial Guarantees are the first bond released on a surface mining permit.

The operator pays an annual fee for Financial Guarantees of one percent per year. The fee is paid in advance and is not refundable. The one percent fee goes into the RFAF. This is the only source of income to the fund.

Since inception of the program on January 3, 1996, about one in every five (19.2 percent) bonding instruments issued have included Financial Guarantees.

One hundred fifty-four coal mine operators have used Financial Guarantees 567 times as of December 31, 2007. Those operators have reclaimed 2,653.1 acres of abandoned mine land. This has saved the Commonwealth an estimated \$15,918,600 in reclamation costs, based on an average of \$6,000/acre. The Commonwealth's cost to operate this program is approximately 2.5 employee-years of Department staff effort each year.

Appendix D lists the individual projects that were issued in 2007.

Remining Financial Guarantees Overview:

| | As of 12/31/06 | As of 12-31-07 |
|--|-----------------------|-----------------------|
| Reclamation value of abandoned mine projects | \$15,081,000 | \$15,918,600 |
| Number of acres of AML completed | 2,513.5 | 2,653.1 |
| Number of operators participating | 141 | 154 |
| Number of financial guarantees issued | 520 | 567 |

E. SMCRA Section 4.13 - Reclamation Bond Credits

The Bond Credits program regulations were promulgated as 25 Pa. Code Sections 86.291-86.295 and took effect on August 24, 1996.

The Bond Credits program provides an incentive to an operator to voluntarily reclaim an abandoned mine area that the industry would not ordinarily reclaim. An operator may earn a "bond credit" under a Consent Order and Agreement with the Department by reclaiming an abandoned mine land area. The area does not have to be associated with a mining permit. The value of the bond credit is equal to the lesser of either the Department's cost or the operator's cost to reclaim the stipulated area. Once earned, the operator may use the bond credit instead of normal bonding on future mining permits.

Each bond credit may be used twice by the operator in lieu of a normal bond on a mining permit. The bond credit may be transferred to another operator.

Four licensed mine operators have completed five Bond Credit projects. The earned “bond credits” are either being used or are in the process of being used. During 2006 Sky Haven Coal entered into an agreement for the sixth and largest project. Sky Haven proposed to reclaim the Maney primacy bond forfeiture site for a Reclamation Bond Credit value of \$335,968. This project includes approximately 1200 feet of highwall most of which is over 100’ high. There is approximately 531,600 cubic yards of material to be moved to close this pit. The first phase (\$177,856) was backfilled by July 2007. The project is well ahead of schedule, almost all backfilling has been completed and most of the site will be planted in 2008.

The Commonwealth’s cost in operating this program is approximately one employee/month of Department staff effort for each project.

Reclamation Bond Credits (Bond Credits) Overview:

| | As of 12-31-06 | As of 12-31-07 |
|--|-----------------------|-----------------------|
| Reclamation value for completed projects | \$217,271 | \$217,271 |
| Number of acres reclaimed | 31 | 31 |
| Number of projects completed | 5 | 5 |
| Number of projects in process | 0 | 1 |

F. Additional Remining Incentives Projects

The Department used some of the Growing Greener 2 funds to augment the existing Remining Incentive programs by paying for implementation of best management practices and expanded information gathering at eligible remining sites.

There are nine projects within the bituminous coal fields in Pennsylvania where Growing Greener 2 (GG2) funding was used to defray the costs of best management practices so that otherwise uneconomical remining projects could go forward. When these projects are completed there will be significant improvement to Pennsylvania’s land and water.

Total cost of these projects = \$1,877,982

Potential acres reclaimed = 325.9

Miles of stream improved = 34.5

Growing Greener 2 (GG2) funding of \$118,791 was authorized for four other projects. These projects had pre-law abandoned pollutional discharges. The GG2 funding was paid through the existing Small Operator’s Assistance Program (SOAP) to subsidize the costs of information gathering to secure surface mining remining permits. The projects include day-lighting abandoned deep mines, remining affected areas with highwalls, and eliminating AMD. The affected remining area for these sites totals 658 acres.

An example of a proposed GG2 project is the Babb Creek Watershed Restoration Project, Rattler Mine

The remining project area is located in Morris Twp., Tioga County on State Game Lands No. 268. The proposed project area is approximately 15 acres. The project area is associated with one mine discharge – Bloss coal deep mine discharge. This discharge flows into Paint Run directly southeast of the proposed project area. Currently, this discharge is being treated by a limestone bed/ vertical flow pond passive treatment system. However, because of the severe quality of the mine discharge, the treatment system is overwhelmed and must be rehabilitated on a very frequent and cost prohibitive basis. Moreover, the discharge usually does not meet targeted effluent standards. Day-lighting of the portion of the deep mine that drains to the discharge is the most practical and cost effective solution. Day-lighting of the deep mine in combination with large quantities of alkaline amendments has a very good likelihood of completely abating the discharge to the extent that no further treatment would be necessary, or at least improving water quality to the extent that the discharge will be amenable for treatment at the existing passive treatment system. Water quality improvement would be realized through the employment of best management practices including mixing alkaline material with acid-producing rock, re-grading surface material to maximize runoff, and eliminating underground mine workings to abate the polluttional mine discharge. Through proper remining techniques such as alkaline addition, and day-lighting old underground mines, this project will improve the water quality in Paint Run and Babb Creek. An estimate of the cost of this proposed project is \$557,796.

V. Remining Environmental Enhancement Fund (REEF)

Section 18 of the Surface Mine Conservation and Reclamation Act (SMCRA), as amended by Act 173 of 1992, authorizes the Secretary to transfer a maximum of \$1,000,000/year into the Remining Environmental Enhancement Fund (REEF). This transfer shall be aggregated from revenue sources in the Surface Mining Conservation and Reclamation Fund, the Clean Water Fund, the Coal Refuse Disposal Control Fund, and the Bituminous Mine Subsidence and Land Conservation Fund. REEF is used to fund the ROAP program and the Designating Areas Suitable for Remining program.

To date, the ROAP program has received appropriations of \$850,000 from REEF (\$450,000 from the Surface Mining Conservation and Reclamation Fund, \$125,000 from the Coal Refuse Disposal Control Fund, \$125,000 from the Bituminous Mine Subsidence and Land Conservation Fund, and \$150,000 from the Clean Water Fund). The ROAP program spent about \$806,136 over 5 years, which is sufficient to fund approximately 10 projects per year. This Fund is now depleted. The money remaining in the Surface Mining Conservation Fund, the Coal Refuse Disposal Control Fund, and the Bituminous Mine Subsidence and Land Conservation Fund is obligated to complete reclamation of forfeited sites, etc.

VI. Remining Financial Assurance Fund (RFAF)

The Legislature also authorized the establishment of the Remining Financial Assurance Fund (RFAF) in the 1992 amendments to the Surface Mining Conservation and Reclamation Act (SMCRA). This fund is used to provide the reserve for the Financial Guarantee and Bond Credits Programs. These amendments authorized the Department to transfer up to \$5,000,000 from the Land and Water Development Fund to the RFAF. In 1996 \$1,000,000 was transferred into the RFAF. A second \$1,000,000 was transferred into the RFAF in 1997.

There are no planned expenditures from the RFAF. The money in this fund is used as a reserve to guarantee the bonds written in the Bond Credit and Financial Guarantee programs. The Bond Credit program is required to have funds in the RFAF at least equal to funds issued as Bond Credits. The Financial Guarantee program is authorized to use an actuarial formula (mine permit forfeiture rate + a safety factor) to leverage the amount of money in the reserve to write more financial guarantees than are actually allocated in the fund, based on the historical rate of bond forfeitures. Currently, \$1,000,000 is allocated for financial guarantees, allowing the Department to write \$10,600,000 in financial guarantees.

The only other source of funding for the Financial Guarantee and Bond Credit Programs stems from the one percent annual fee that the permittees pay for the use of the Financial Guarantees. Since the financial guarantee program became available in January 1997, participating coal mine operators have paid \$839,972 in annual fees. The annual fees must be held in reserve until the Fund for Financial Guarantees is considered actuarially sound. The Fund is actuarially sound when there is a sufficient amount of money in reserve to cover any expected losses.

The Department has allocated \$1,000,000 to the Financial Guarantee Special Account to act as the reserve for the Financial Guarantee Program. The Department has allocated \$479,064 to the Bond Credit Account to act as the reserve for the Bond Credit Program.

Appendix A
Mining and Reclamation Advisory Board Comments

The Surface Mining Conservation and Reclamation Act, Remining Incentives Report, 1996-2006, was presented to the Mining and Reclamation Advisory Board on April 24, 2008. The Mining and Reclamation Advisory Board (MRAB) made the following recommendations to enhance incentives for remining and reclamation of abandoned and forfeited mine lands in the Commonwealth:

Appendix B
Government-Financed Reclamation and Construction Contracts Project List

| Year | County | Company | Contract # | Date Permit Issued | No Acres Proposed |
|-------------|---------------|----------------------------|-------------------|---------------------------|--------------------------|
| 2007 | Westmoreland | JOSEPH ROSTOSKY COAL CO | 65-06-09 | 22-Feb-2007 | 6.50 |
| 2007 | Westmoreland | COAL LOADERS INC | 65-05-02 | 04-Apr-2007 | 18.20 |
| 2007 | Clarion | NEISWONGER CONST INC | 16-06-08 | 12-Apr-2007 | 7.60 |
| 2007 | Clearfield | EARTHMOVERS UNLTD INC | 17-06-10 | 25-Apr-2007 | 5.10 |
| 2007 | Clearfield | AW LONG COAL CO | 17-07-01 | 15-May-2007 | 12.20 |
| 2007 | Fayette | PURCO COAL INC | 26-06-08 | 15-May-2007 | 5.20 |
| 2007 | Fayette | PATTERSON COAL CO | 26-05-08 | 22-May-2007 | 4.00 |
| 2007 | Indiana | GATOR COAL LP | 32-06-01 | 23-May-2007 | |
| 2007 | Westmoreland | ROBINDALE ENERGY SVC INC | 65-06-02 | 05-Jun-2007 | 42.70 |
| 2007 | Elk | TAMBURLIN BROS COAL CO INC | 24-05-02 | 28-Jun-2007 | |
| 2007 | Clearfield | SKY HAVEN COAL INC | 17-06-05 | 31-Jul-2007 | 24.80 |
| 2007 | Fayette | MON RIVER ENERGY CORP | 26-07-01 | 25-Sep-2007 | 8.00 |
| 2007 | Fayette | CHEREPS EXCAV | 26-07-08 | 26-Sep-2007 | 14.20 |
| 2007 | Fayette | PATTERSON COAL CO | 26-07-07 | 18-Oct-2007 | 9.00 |
| 2007 | Clearfield | WHITETAIL CONTR | 17-07-04 | 05-Nov-2007 | 7.00 |
| 2007 | Clearfield | ENERCORP INC | 17-07-06 | 13-Nov-2007 | 16.00 |
| 2007 | Huntingdon | JUNIATA PROC LLC | 31-07-01 | 16-Nov-2007 | |

Appendix C
Remining Operator's Assistance Program Project List

| Year | County | Company Name | Permit # | Work Order Date | AML Surface Acres | \$ Value of Surface Rec. | AML Undergrd Acres | DEP ROAP Cost |
|------|------------|-----------------------|-----------|-----------------|-------------------|--------------------------|--------------------|---------------|
| 1997 | Clearfield | Hepburnia Coal | NPHC | 02/19/1998 | | \$0 | | \$4,680 |
| 1997 | Clearfield | Ed Hanslovan | 17980101 | 10/02/1997 | 27.7 | \$166,200 | 0 | \$11,436 |
| 1997 | Clearfield | Sky Haven Coal | 17990101 | 08/01/1997 | 0 | 0 | 0 | \$25,115 |
| 1997 | Indiana | Amerikohl Mining Inc. | 32980109 | 09/25/1997 | 1.0 | \$6,000 | 0 | \$36,304 |
| 1997 | Indiana | Amerikohl Mining Inc. | 32980105 | 09/25/1997 | 0.0 | \$0 | 1.3 | \$12,208 |
| 1997 | Indiana | Amerikohl Mining Inc. | 32980108 | 09/06/1997 | 12.7 | \$76,200 | 0 | \$23,431 |
| 1998 | Armstrong | Amerikohl Mining Inc. | 03990103 | 04/25/1998 | 4.6 | \$27,600 | 0 | \$18,670 |
| 1998 | Armstrong | Reichard Contracting | Cancelled | 03/23/1998 | | \$0 | | \$644 |
| 1998 | Armstrong | Smith, Thomas | 03990102 | 07/21/1998 | 3.6 | \$21,600 | 2.0 | \$11,126 |
| 1998 | Cambria | Smith Energy | 11980202 | 02/17/1998 | 6.5 | \$39,000 | 0 | \$7,642 |
| 1998 | Clearfield | Energy Resources | Cancelled | | | \$0 | | \$25,963 |
| 1998 | Clearfield | River Hill Coal | 17990107 | 03/11/1998 | 62.1 | \$372,600 | 235 | \$37,704 |
| 1998 | Clearfield | River Hill Coal | 17980124 | 07/10/1998 | 23.5 | \$141,000 | 15.6 | \$7,181 |
| 1998 | Clearfield | River Hill Coal | 17000101 | 08/19/1998 | 10.8 | \$64,800 | 24.2 | \$42,238 |
| 1998 | Clearfield | River Hill Coal | 17990102 | 10/20/1998 | 101.9 | \$611,400 | 119.6 | \$35,241 |
| 1998 | Clearfield | River Hill Coal | 17990103 | 12/02/1998 | 70.3 | \$421,800 | 10.2 | \$50,699 |
| 1998 | Fayette | Marquise Mining | Cancelled | 10/29/1998 | | \$0 | | \$1,577 |
| 1998 | Fayette | Patterson Coal | 26980102 | 04/06/1998 | 2.3 | \$13,800 | 16.1 | \$7,607 |
| 1998 | Fayette | PBS Coal | Cancelled | 08/08/1998 | | | | \$13,000 |
| 1998 | Indiana | Amerikohl Mining Inc. | Cancelled | 01/12/1998 | | \$0 | | \$6,861 |
| 1998 | Indiana | River Hill Coal | 32000108 | 09/09/1998 | 121 | \$726,000 | 364 | \$78,524 |
| 1998 | Indiana | T L H Coal Company | 32990103 | 04/16/1998 | 9.4 | \$56,400 | 0 | \$11,442 |
| 1998 | Jefferson | Amerikohl Mining Inc. | 33990101 | 08/17/1998 | 23.0 | \$138,000 | 4.4 | \$9,296 |
| 1998 | Schuylkill | A C Fuels | 54980201 | 05/13/1998 | 198.0 | \$1,188,000 | 0 | \$14,427 |
| 1998 | Schuylkill | Gale Coal Company | 54980103 | 04/24/1998 | 432.0 | \$2,592,000 | 0 | \$11,543 |
| 1998 | Somerset | Fritz Coal | 56980110 | 03/23/1998 | 0.0 | \$0 | 27.8 | \$13,501 |
| 1998 | Somerset | Hoffman Mining | 56990101 | 04/01/1998 | 12.0 | \$72,000 | 1 | \$9,223 |
| 1998 | Washington | Robinson Coal | 63990102 | 07/22/1998 | SMP withdrawn | | | \$13,807 |
| 1999 | Armstrong | Amerikohl Mining Inc. | 03000101 | 02/23/1999 | 8.0 | \$48,000 | 4 | \$23,216 |
| 1999 | Cambria | Laurel Energy | 11990102 | 10/08/1998 | 164.6 | \$987,600 | 42.1 | \$30,934 |
| 1999 | Clearfield | Hilltop Coal Co. | 17000105 | 05/10/1999 | 0 | \$0 | 8 | \$12,590 |

| Year | County | Company Name | Permit # | Work Order Date | AML Surface Acres | \$ Value of Surface Rec. | AML Undergrd Acres | DEP ROAP Cost |
|------|--------------|-------------------------|---------------|-----------------|-------------------|--------------------------|--------------------|---------------|
| 1999 | Clearfield | Larson Enterprises | Cancelled | 03/31/1999 | | \$0 | | \$2,831 |
| 1999 | Indiana | Amerikohl Mining Inc. | 32010105 | 10/18/1999 | 5.7 | \$34,200 | | \$25,782 |
| 1999 | Indiana | Hepburnia Coal | NPHC | 02/15/1999 | | \$0 | | \$9,520 |
| 1999 | Luzerne | Hazleton Shaft | 40990101 | 12/17/1998 | 283.0 | \$1,698,000 | 0 | \$18,303 |
| 1999 | Somerset | Cooney Brothers Coal | Appli. Denied | 04/02/1999 | | \$0 | | |
| 1999 | Somerset | Hoffman Mining Inc. | 56000103 | 12/01/1999 | 10.1 | \$60,600 | 4.1 | \$14,935 |
| 1999 | Somerset | Hoffman Mining Inc. | 56000105 | 10/18/1999 | 6.0 | \$36,000 | 3 | \$25,646 |
| 1999 | Westmoreland | Smith Ralph & Son | 65990106 | 05/01/1999 | 11.5 | \$69,000 | 24.5 | \$10,579 |
| 2000 | Cambria | Hoffman Mining Inc. | 11000104 | 09/18/2000 | 40.0 | \$240,000 | 2.6 | \$12,666 |
| 2000 | Clearfield | River Hill Coal Company | 17010110 | 05/18/2000 | 40.0 | \$240,000 | 38 | \$34,914 |
| 2000 | Elk | Energy Resources Inc. | Cancelled | 09/25/2000 | | \$0 | | \$10,543 |
| 2000 | Elk | Energy Resources Inc. | 24010101 | 09/25/2000 | 30.0 | \$180,000 | 0 | \$7,491 |
| 2000 | Jefferson | Sky Haven Coal | 33010101 | 04/25/2000 | 13.9 | \$83,400 | 35.1 | \$21,201 |
| 2000 | Jefferson | Sky Haven Coal | 33010103 | 11/14/2000 | 5.4 | \$32,400 | 17.4 | \$18,206 |
| 2001 | Armstrong | T D K Coal Sales Inc. | 03010108 | 10/23/2001 | 71.5 | \$429,000 | 5 | \$14,206 |
| 2001 | Clearfield | River Hill Coal Company | 17030102 | 05/21/2001 | 42.0 | \$252,000 | 0 | \$22,842 |
| 2002 | Allegheny | Amerikohl Mining Inc. | 02020102 | 04/22/2002 | 3.0 | \$18,000 | 1 | \$12,098 |
| 2002 | Centre | River Hill Coal Co | 14040103 | 08/07/2002 | 8 | \$48,000 | 9 | \$31,336 |
| 2002 | Centre | River Hill Coal Co. | 14040101 | 04/16/2002 | 103 | \$618,000 | 28 | \$22,001 |
| 2002 | Indiana | Amerikohl Mining, Inc. | 32000101 | 08/15/2002 | 0.0 | \$0 | 2.8 | \$5,393 |
| 2002 | Jefferson | T D K Coal Sales Inc. | Reimb CO&A | 10/23/2002 | | | | \$11,762 |
| 2002 | Schuylkill | Devils Hole, Inc. | 54030201 | 01/17/2002 | 27.5 | \$165,000 | 0 | \$5,038 |
| 2002 | Somerset | Hoffman Mining | 56030103 | 11/04/2002 | 2.2 | \$13,200 | 10 | \$9,636 |
| 2002 | Somerset | Mountaineer Mining | 56030102 | 11/04/2002 | 0.8 | \$4,800 | 0 | \$8,375 |
| 2003 | Cambria | Cooney Bros. Coal | Cancelled | 03/10/2003 | | | | \$0 |
| 2003 | Fayette | Amerikohl Mining, Inc. | 26040102 | 01/27/2003 | 5 | \$30,000 | 0 | \$10,144 |
| 2003 | Schuylkill | Jett Contracting | 54030103 | 03/11/2003 | 90.0 | \$540,000 | 0 | \$5,994 |
| 2003 | Schuylkill | RSK Mines | Cancelled | 01/16/2003 | 0 | 0 | | \$20,260 |
| 2003 | Somerset | Berwind Coal Sales | 56040105 | 04/16/2003 | 6.7 | \$40,200 | 1.4 | \$15,316 |

Appendix D
Remining Financial Guarantees to Ensure Reclamation Project List

| County | Company | Permit | Bond Instrument Id | Date Instrument Created | Original Amount |
|------------|---------------------------------------|----------|--------------------|-------------------------|-----------------|
| Armstrong | WALTER L HOUSER COAL CO INC | 03020115 | 483077FG | 08/28/2007 | \$33,603.00 |
| Bedford | FERLITCH CONST CO INC | 05060101 | 4840149FG | 04/04/2007 | \$100,000.00 |
| Butler | BEN HAL MINING CO | 10070101 | 4860103FG | 07/27/2007 | \$21,000.00 |
| Cambria | EP BENDER COAL CO INC | 11050101 | 4840153FG | 04/12/2007 | \$57,332.00 |
| Carbon | KEYSTONE ANTHRACITE MKT CORP DBA KAMC | 13060101 | 481078FG | 12/03/2007 | \$69,532.00 |
| Carbon | KEYSTONE ANTHRACITE MKT CORP DBA KAMC | 13070101 | 481080FG | 12/10/2007 | \$82,523.00 |
| Carbon | PAGNOTTI ENTERPRISES INC | 13743002 | 481075FG | 10/09/2007 | \$100,000.00 |
| Centre | JUNIOR COAL CONTR INC | 14940101 | 4820165FG | 11/01/2007 | \$33,992.00 |
| Centre | RIVER HILL COAL CO INC | 14040103 | 4820166FG | 10/23/2007 | \$47,442.00 |
| Clearfield | AMFIRE MINING CO LLC | 17020107 | 4820161FG | 04/04/2007 | \$100,000.00 |
| Clearfield | BELL RESOURCES INC | 17060110 | 4820162FG | 04/02/2007 | \$100,000.00 |
| Clearfield | JUNIOR COAL CONTR INC | 17930103 | 4820170FG | 12/26/2007 | \$47,978.00 |
| Clearfield | KASUBICK BROS COAL CO | 17820129 | 4820169FG | 11/28/2007 | \$33,395.00 |
| Clearfield | SKY HAVEN COAL INC | 17060104 | 4820160FG | 03/09/2007 | \$21,000.00 |
| Clearfield | SKY HAVEN COAL INC | 17060107 | 4820168FG | 11/01/2007 | \$80,000.00 |
| Clearfield | SWISHER CONTR INC | 17030110 | 4820167FG | 11/01/2007 | \$8,200.00 |
| Clearfield | WAROQUIER COAL CO | 17030106 | 4820164FG | 08/27/2007 | \$40,883.00 |
| Clearfield | WAROQUIER COAL CO | 17070105 | 4820163FG | 04/04/2007 | \$85,000.00 |
| Elk | AMFIRE MINING CO LLC | 24030102 | 4860102FG | 04/02/2007 | \$68,500.00 |
| Huntingdon | FERLITCH CONST CO INC | 31070101 | 4840157FG | 11/27/2007 | \$83,333.00 |
| Indiana | ALVERDA ENTERPRISES INC | 32000104 | 4840146FG | 12/17/2007 | \$3,940.00 |
| Indiana | ALVERDA ENTERPRISES INC | 32010110 | 4840151FG | 03/08/2007 | \$26,668.00 |
| Indiana | ALVERDA ENTERPRISES INC | 32020101 | 4840154FG | 07/24/2007 | \$3,283.00 |
| Indiana | MEARS ENERGY LLC | 32050104 | 4840152FG | 03/29/2007 | \$80,000.00 |
| Indiana | P & N COAL CO INC | 32070104 | 4840158FG | 12/05/2007 | \$100,000.00 |
| Indiana | TWIN BROOK COAL INC | 32040101 | 4840155FG | 07/24/2007 | \$34,753.00 |
| Luzerne | HAZLETON SHAFT CORP | 40990101 | 481061FG | 03/12/2007 | \$20,000.00 |
| Luzerne | MAMMOTH ANTHRACITE LLC | 40840203 | 481074FG | 10/30/2007 | \$89,017.00 |
| Luzerne | MCCLURE ENTERPRISES INC | 40030202 | 481064FG | 04/12/2007 | \$8,703.00 |
| Luzerne | NO 1 CONTR CORP | 40980101 | 481066FG | 04/11/2007 | \$56,267.00 |
| Luzerne | SOUTH TAMAQUA COAL POCKETS INC | 40020201 | 481053FG | 04/11/2007 | \$69,445.00 |

| | | | | | |
|----------------|----------------------------------|---------------|---------------------------|--------------------------------|------------------------|
| Luzerne | STOCKTON ANTHRACITE LP | 40041601 | 481057FG | 03/08/2007 | \$78,713.88 |
| | | | | | |
| County | Company | Permit | Bond Instrument Id | Date Instrument Created | Original Amount |
| Northumberland | BLASCHAK COAL CORP | 49920101 | 481060FG | 03/08/2007 | \$30,274.00 |
| Northumberland | D MOLESEVICH & SONS CONST CO INC | 49070101 | 481079FG | 12/27/2007 | \$54,693.00 |
| Northumberland | FARRAGUT ANTHRACITE CO | 49860102 | 481069FG | 06/15/2007 | \$22,568.00 |
| Northumberland | MALLARD CONTR CO INC | 49663009 | 481054FG | 03/08/2007 | \$91,327.00 |
| Northumberland | MID VALLEY COAL SALES INC | 49970203 | 481059FG | 03/08/2007 | \$58,485.00 |
| Schuylkill | CHAR PAC COAL CO | 54930101 | 481062FG | 04/04/2007 | \$38,730.00 |
| Schuylkill | CHAR PAC COAL CO | 54930101 | 481070FG | 09/17/2007 | \$35,216.00 |
| Schuylkill | CRUZ BAY TRADING INC | 54060202 | 481058FG | 12/03/2007 | \$72,697.00 |
| Schuylkill | FOX COAL CO INC | 54813224 | 481071FG | 09/05/2007 | \$13,133.00 |
| Schuylkill | FREDERICK CONSULTING | 54040202 | 481065FG | 04/05/2007 | \$8,437.00 |
| Schuylkill | GALE MINING CO | 54060103 | 481052FG | 04/04/2007 | \$25,020.00 |
| Schuylkill | JJ & W COAL CO INC | 54070101 | 481067FG | 04/24/2007 | \$61,643.00 |
| Schuylkill | POST MINING | 54060104 | 481056FG | 05/15/2007 | \$20,200.00 |
| Schuylkill | WILBUR WHITE COAL CO | 54940203 | 481045FG | 04/12/2007 | \$31,103.00 |
| Washington | MULLIGAN MINING INC | 63050102 | 483074FG | 01/05/2007 | \$80,000.00 |

Appendix E
Reclamation Bond Credit Project List
Years 1997 - 2007

| County | Fiscal Year | Company Name | Original Issuance Date | Remine Acres Agreed To Reclaim | Value of Bond Credit | AML Acres Reclaimed | Value of Reclamation |
|----------------|-------------|-------------------------|------------------------|--------------------------------|----------------------|---------------------|----------------------|
| Armstrong | 1998 | Amerikohl Mining Inc. | 07/16/1998 | 7.3 | \$41,747 | 7.3 | \$43,800 |
| Clarion | 1998 | MSM Coal Company, Inc. | 07/08/1998 | 3.9 | \$20,645 | 3.9 | \$23,400 |
| Clearfield | 1999 | Larson Enterprises, Inc | 10/20/1999 | 15.0 | \$43,150 | 15.0 | \$82,500 |
| Northumberland | 1999 | Blaschak Coal | 10/13/2000 | 2.6 | \$28,832 | 3 | \$28,832 |
| Columbia | 2001 | Blaschak Coal | 10/2001 | | \$34,466 | 1.8 | \$38,739 |
| Clearfield | 2006 | Sky Haven Coal | 07/ 2006 | 14.7 | \$335,968 | 0 | 0 |
| | | Totals | | 45.3 | | 31.0 | \$217,271 |

