

CALENDAR YEAR 1996
SEVENTY-FOURTH ANNUAL REPORT
of the
MARYLAND BUREAU OF MINES



HON. PARRIS N. GLENDENING
Governor of Maryland

DEPARTMENT OF THE ENVIRONMENT
JANE T. NISHIDA, Secretary

WATER MANAGEMENT ADMINISTRATION
J. L. HEARN, Director

MINING PROGRAM
ANTHONY F. ABAR, Director

BUREAU OF MINES
JOHN E. CAREY, Director



MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore, Maryland 21224
(410) 631-3000

Parris N. Glendening
Governor

Water Management Administration
Bureau of Mines
160 South Water Street • Freetburg, Maryland 21532
Telephone: (301) 669-6104

Jane T. Nishida
Secretary

A MESSAGE FROM THE SECRETARY

Protecting and restoring Maryland's environment requires the participation and cooperation of all members of society, including businesses, citizens, and all levels of government. MDE's primary mission is to protect and restore the quality of Maryland's air, water and land resources for the benefit of the environment, public health and future generations, while also supporting and balancing economic development to ensure an excellent quality of life for all Marylanders. We believe that a strong economy and a clean environment, not only go hand-in-hand, but are mutually reinforcing. The information in this publication is designed to increase your understanding of our programs.

Jane T. Nishida

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EXECUTIVE SUMMARY

During Calendar Year 1996, Maryland operators produced 3,962,853 tons of coal. Surface coal mine production was 776,506 tons-- 599,799 in Allegany County and 176,707 in Garrett County. Deep coal mine production was 3,186,348, all in Garrett County.

During calendar year 1996, two new permits were issued and 9 permit amendments were issued. Three hundred forty-four acres were permitted.

Two hundred four acres were affected, 73 acres backfilled, and 91 acres planted. Bond was released on 519 acres. Three permits were completed, with bond being totally released; and one permit was forfeited.

Nine hundred ninety-one inspections were performed on coal mining operations. Five Notices of Violations were issued. Thirty-three Citizen Complaints were received and investigated.

The Land Reclamation Committee met 7 times and approved 5 reclamation plans. The Committee also evaluated the revegetation on 232 acres eligible for Phase II bond release and approved 185 acres as meeting the standards for release.

During 1996, grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provided \$562,682.00 for the reclamation of abandoned mine lands. Approximately 89 acres of abandoned mine lands were reclaimed.

FOR CALENDAR YEAR 1996

MINING PROGRAM

Anthony F. Abar Director, Mining Program

Laboratory and Administrative Services

Ruth D. Booth Administrator
 Robert Harris (5/96 - Present) Office Secretary II
 Sallie A. Shuman Administrative Specialist I
 Mary Lynn Pegg Laboratory Scientist V
 Julie O'Connor Chemist III

BUREAU OF MINES

John E. Carey Director, Bureau of Mines

Coal Permitting Section

Stephen M. Layton Section Chief
 Mark Carney Energy Resources Officer IV
 Alan V. Hooker Administrator II

Land Restoration Section

John C. Eilers Section Chief
 Michael P. Garner Energy Resources Officer IV
 Tobias C. Joy Energy Resources Officer I
 Bradley Nee Energy Resources Officer IV

Water Restoration Section

Constance A. Lyons Energy Resources Officer III
 Edward Lyons Conservation Associate
 Joseph E. Mills Environmental Specialist IV

Revegetation Section

Fred L. Bagley Administrator II

Mining Inspection and Compliance

Raymond Karlstrand Field Supervisor
 Larry Johnson District Mine Inspector
 Thomas P. Murray District Mine Inspector

FOR THE CALENDAR YEAR 1996

REPORT OF THE MARYLAND BUREAU OF MINES

Coal production in Maryland during 1996 totalled 3,962,853.27 tons. Production for 1996 represents an increase of 333,321.92 tons from the 1995 production of 3,629,531.34 tons.

SUMMARY OF 1996 STATISTICS¹

COAL PRODUCTION

Mining Method	Allegany County	Garrett County	Total
Strip	599,799.11	176,706.53	776,505.64
Deep00	3,186,347.63	3,186,347.53
Auger00	.00	.00
TOTALS	599,799.11	3,363,054.16	3,962,853.27

EMPLOYEES²

Type of Mine	Allegany County	Garrett County	Total
Deep	0	304	304
Strip	144	52	196
TOTALS	144	356	500

¹Reports submitted by Maryland mining operators.

²These figures do not include office, supervisory personnel or independent truck haulers.

FOR THE CALENDAR YEAR 1996
 TONNAGE BY COAL SEAMS

<u>Allegheny County</u>	
Waynesburg.	26,030.38
Sewickley (Tyson)	63,045.38
Redstone.	134,015.12
Pittsburgh.	286,637.07
Morantown	45,267.11
L. Pittsburgh	23,764.23
Franklin.	21,039.82
Harlem.	0
Bakerstown.	0
Freeport.	0
Kittanning.	0
Federal Hill.	0
Barton.	0
TOTAL.	599,799.11

<u>Garrett County</u>	
Sewickley	657.44
Pittsburgh.	23,036.11
Morantown	8,152.60
L. Pittsburgh	3,208.10
Franklin.	14,451.00
Barton.	35,110.92
Elk Lick.	0
Harlem.	0
Bakerstown.	330,729.00
Brush Creek	0
Freeport.	2,856,496.64
Kittanning.	86,593.21
Redstone.	4,619.14
TOTAL.	3,363,054.16

TONNAGE BY BASIN	
Lower Youghiogheny.	0
Upper Youghiogheny.	0
Casselman	0
Casselman (Cherry Creek).	0
Potomac	3,323,380.77
George's Creek.	639,472.50
TOTAL.	3,962,853.27

HISTORICAL COAL PRODUCTION BY COUNTY AND TYPE OF MINING

YEAR	ALLEGHENY CO.		TOTAL	STRIP*	GARRETT CO.		TOTAL	STATE TOTAL	
	STRIP*	DEEP			DEEP	STRIP*		DEEP	STRIP*
1996	599,799.11	---	599,799.11	176,706.53	3,186,347.63	3,163,054.16	3,962,853.27	---	---
1995	633,185.42	---	633,185.42	147,775.51	2,848,570.41	2,996,345.72	3,629,531.34	---	---
1994	631,249.25	---	631,249.25	165,890.01	2,803,048.97	2,968,938.98	3,600,188.23	---	---
1993	507,668.57	---	507,668.57	341,867.55	2,507,016.83	2,848,884.38	3,356,552.95	---	---
1992	698,015.37	---	698,015.37	357,335.69	2,383,314.12	2,741,249.81	3,439,265.18	---	---
1991	781,671.85	---	781,671.85	378,832.57	2,542,364.32	2,921,196.89	3,702,868.44	---	---
1990	1,056,810.34	---	1,056,810.34	457,300.32	1,999,527.34	2,456,827.66	3,513,638.20	---	---
1989	867,025.49	---	867,025.49	675,160.16	1,826,443.65	2,501,603.81	3,368,629.30	---	---
1988	562,139.94	---	562,139.94	642,948.91	2,014,828.42	2,657,777.33	3,219,917.27	---	---
1987	790,903.09	---	790,903.09	810,166.55	2,132,554.30	3,142,720.85	3,933,623.94	---	---
1986	696,377.39	---	696,377.39	786,429.97	2,572,505.11	3,357,935.00	4,055,312.47	---	---
1985	543,960.99	---	543,960.99	676,274.41	1,842,595.67	2,518,870.08	3,062,831.07	---	---
1984	730,135.35	---	730,135.35	1,145,507.03	2,117,657.44	3,263,164.47	3,993,299.82	---	---
1983	568,716.82	---	568,716.82	981,550.36	1,536,568.39	2,518,118.75	3,086,835.57	---	---
1982	814,102.63	---	814,102.63	1,058,360.96	1,587,428.07	2,645,789.03	3,459,891.66	---	---
1981	1,275,576.42	---	1,275,576.42	1,272,911.65	1,903,071.24	3,175,982.89	4,451,559.31	---	---
1980	1,122,817.48	---	1,122,817.48	1,143,643.80	1,493,630.97	2,637,274.77	3,760,092.25	---	---
1979	761,655.93	---	761,655.93	1,067,180.13	887,781.01	1,954,961.14	2,716,617.07	---	---
1978	1,082,370.39	---	1,082,370.39	1,389,078.89	379,872.61	1,768,951.50	2,851,321.89	---	---
1977	1,181,181.11	---	1,181,181.11	1,586,353.70	261,094.85	1,847,448.55	3,028,629.66	---	---
1976	972,234.87	---	972,234.87	1,547,928.09	175,016.00	1,722,944.09	2,695,178.96	---	---

*Figure includes coal removed by the auger method.

CALENDAR YEAR 1996
COAL PRODUCTION, MINING, AND RECLAMATION STATISTICS

This table includes all permits on which there was production, mining, backfilling or planting activity. This table does not include permits on which all bonds have been released or forfeited, or permits on which bonds are still held but no production or mining or reclamation activity occurred.

ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	PRODUCTION (TONS)			Auger	Acres Affected	Acres Back-filled	Acres Planted
			Deep	Strip	Auger				
Barton Mining Co., Inc.	338	Pittsburgh		72,685.00			2.0	3.0	19.0
		L. Pittsburgh		35,912.00			-	-	-
		Redstone		18,109.00			-	-	-
		Morantown		15,126.00			-	-	-
Brashear Coal Mines	264	Pittsburgh		1,561.30		9.0	0.0	0.0	
		Franklin		17,057.30		-	-	-	
Buffalo Coal Co.	326	Morantown		1,899.07		-	-	-	
		Pittsburgh		555.94		0.0	23.0	23.0	
Clise Coal Co.	213	Morantown		1,200.72		0.0	0.0	0.0	
		Pittsburgh		1,571.75		0.0	0.0	0.0	
		Morantown		53,622.45		39.0	6.0	6.0	
		Pittsburgh		5,135.46		-	-	-	
Cobra Mining	184	Redstone		12,360.77		-	-	-	
		Morantown		9,602.89		-	-	-	
Clise Coal Co.	213	Sewickley		373.00		1.0	6.0	6.0	
		Waynesburg		3,133.38		0.0	0.0	0.0	
		Sewickley		1,242.35		0.0	0.0	0.0	
Cobra Mining	404	Waynesburg		1,447.82		0.0	0.0	0.0	
		L. Pittsburgh		2,073.80		0.0	0.0	0.0	
Cobra Mining	184	Franklin		3,982.52		-	-	-	
		L. Pittsburgh		2,073.80		0.0	0.0	0.0	

Name of Operator	Permit Number	Coal Seam Worked	PRODUCTION (TONS)			Auger	Acres Affected	Acres Back-filled	Acres Planted
			Deep	Strip	Auger				
Fairview Coal Co.	399	Pittsburgh		3,070.13			0.0	0.0	0.0
		Morantown		1,049.61			-	-	-
		Redstone		5,811.75			-	-	-
Jenkins Development Co.	411	Waynesburg		21,449.11		2.0	5.0	5.0	
		Sewickley		1,561.35		-	-	-	
Patriot Mining Co., Inc.	393	Pittsburgh		3,840.30		2.0	0.0	0.0	
		Morantown		3,996.07		-	-	-	
Tri-Star Mining, Inc.	419	Pittsburgh		40,118.62		(See Garrett County)	-	-	
		L. Pittsburgh		1,494.97		-	-	-	
		Morantown		11,608.08		-	-	-	
		Redstone		6,065.73		-	-	-	
Min-More Mining & Const.	273	Pittsburgh		14,730.20		-	-	-	
		Redstone		3,442.62		0.0	0.0	0.0	
Winner Bros. Coal Co.	40	Sewickley		4,134.47		-	-	-	
		Sewickley		399.92		-	-	-	
		Morantown		1,042.05		0.0	0.0	0.0	
		Morantown		1,180.33		-	-	-	
Winner Bros. Coal Co.	207	Pittsburgh		14,959.69		4.0	0.0	0.0	
		Redstone		35,631.15		-	-	-	
Winner Bros. Coal Co.	247	Pittsburgh		13,470.28		0.0	0.0	0.0	
		Sewickley		43,388.73		5.0	2.0	5.0	
Winner Bros. Coal Co.	247	Pittsburgh		14,236.73		-	-	-	
		Redstone		18,479.86		-	-	-	

Name of Operator	Permit Number	Coal Seam Worked	PRODUCTION (TONS)				Acres Back-filled	Acres Affected	Acres Back-filled	Acres Planted
			Deep	Strip	Auger	Strip				
Winner Bros. Coal Co.	318	Sewickley		50.75			0.0	4.0	4.0	
	368	Pittsburgh		25,122.13			2.5	.5	0.0	
	407	Redstone		1,376.25			-	-	-	
		Pittsburgh		12,458.72			1.0	0.0	0.0	
		Sewickley		179.65			-	-	-	
		Redstone		15,289.18			-	-	-	
	414	Pittsburgh		713.47			0.0	0.0	0.0	
TOTAL ALLEGANY COUNTY				599,799.11			67.5	49.5	68.0	

CALENDAR YEAR 1996
COAL PRODUCTION, MINING, AND RECLAMATION STATISTICS

This table includes all permits on which there was production, mining, backfilling or planting activity. This table does not include permits on which all bonds have been released or forfeited, or permits on which bonds are still held but no production or mining or reclamation activity occurred.

GARRETT COUNTY

Name of Operator	Permit Number	Coal Seam Worked	PRODUCTION (TONS)				Acres Back-filled	Acres Affected	Acres Back-filled	Acres Planted
			Deep	Strip	Auger	Strip				
Buffalo Coal Co., Inc.	367	Kittanning		29,300.44			25.0	0.0	0.0	
G&S Coal Co.	365	Freeport		19,262.33			5.0	0.0	0.0	
	421	Kittanning		10,905.10			-	-	-	
		Franklin		14,451.00			4.0	0.0	0.0	
Masteller Coal Co. Co., Inc.	DM110	Kittanning	46,387.67				0.0	0.0	0.0	
Mettiki Coal Co., Inc.	DM101	Freeport	2,809,230.96				54.9	0.0	0.0	
Patriot Mining Co., Inc.	DM109	Bakerstown	330,729.00				1.0	0.0	0.0	
Pine Mt. Coal Co.	424	Pittsburgh		4,909.65			3.0	0.0	0.0	
		Morantown		4,630.70			-	-	-	
		Redstone		556.94			-	-	-	
Tri-Star Mining, Inc.	419	Pittsburgh		18,126.46			22.0	0.0	0.0	
		L. Pittsburgh		3,308.16			-	-	-	
		Morantown		3,521.90			-	-	-	
		Sewickley		3,657.44			-	-	-	
		Redstone		4,062.20			-	-	-	

Name of Operator	Permit Number	Coal Seam Worked	PRODUCTION (TONS)			Auger	Acres Affected	Acres Back-filled	Acres Planted
			Deep	Strip	Strip				
Tri Star Mining, Inc.	425 426	U. Freeport Barton		28,003.35 45,110.92		2.0 20.0	4.0 8.0	4.0 8.0	
Kassell, J. Walter	410	Bakerstown		.00		-	11.0	11.0	
TOTAL GARRETT COUNTY			3,186,347.63	176,706.53		136.9	23.0	23.0	
TOTAL ALLEGANY COUNTY			599,799.11			67.5	49.5	68.0	
TOTAL BOTH COUNTIES			3,186,347.63	776,505.64		204.4	72.5	91.0	

FOR CALENDAR YEAR 1996
SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 1996
(By Geological Basin)

ACRES THIS YEAR

	Permitted	Affected	Backfilled	Planted	Bond Release*
Allegheny County:					
Georges Creek Basin	135.00	67.50	49.50	68.00	136.00
Garrett County:					
Georges Creek Basin	24.00	45.00	19.00	19.00	254.50
Potomac River Basin	184.90	91.90	4.00	4.00	52.70
Casselman River Basin**	0	0	0	0	27.00
Cherry Creek Basin**	0	0	0	0	24.00
Upper Yough Basin	0	0	0	0	25.00
Lower Yough Basin	0	0	0	0	0
TOTAL GARRETT COUNTY	208.90	136.90	23.00	23.00	383.20
TOTAL BOTH COUNTIES	343.90	204.40	72.50	91.00	519.20

ACRES CUMULATIVE FROM JANUARY 1, 1975 - DECEMBER 31, 1996

Allegheny County:					
Georges Creek Basin	6,475.00	5,030.00	4,575.47	4,647.80	3,709.50
Garrett County:					
Georges Creek Basin	2,333.00	2,369.95	2,184.85	2,448.05	2,302.10
Potomac River Basin	4,087.00	3,232.70	3,354.80	3,478.70	3,541.10
Casselman River Basin**	1,416.60	1,135.00	1,260.50	1,142.20	1,230.80
Cherry Creek Basin**	667.00	671.50	578.90	545.80	659.95
Upper Yough Basin	216.00	157.35	215.35	189.30	261.50
Lower Yough Basin	1,335.00	914.00	1,135.06	1,078.16	855.40
TOTAL GARRETT COUNTY	10,054.60	8,480.50	8,729.46	8,882.21	8,850.85
TOTAL BOTH COUNTIES	16,529.60	13,510.50	13,304.93	13,530.01	12,550.35

*Total Bond Release by the Bureau.

**Both Casselman Geological Basin.

FOR CALENDAR YEAR 1996

SUMMARY OF LICENSES, PERMITS, FORFEITURES, AND COMPLETIONS

YEAR	NEW SURFACE MINE LICENSES ISSUED	NEW SURFACE MINE PERMITS PROCESSED	NEW DEEP MINE PERMITS PROCESSED	AMENDED PERMITS PROCESSED	FORFEITURES	PERMITS COMPLETED
1996	0	7	0	12	1	3
1995	0	7	0	16	0	4
1994	0	10	0	13	2	6
1993	5	6	0	18	2	2
1992	3	3	1	16	2	3
1991	2	10	1	16	0	7
1990	2	3	1	3	1	3
1989	4	5	0	7	2	5
1988	2	1	0	1	2	6
1987	1	7	0	3	0	7
1986	4	6	0	1	1	11
1985	8	6	0	7	1	5
1984	5	7	0	4	3	9
1983	13	12	0	11	0	11
1982	8	11	1	15	0	16
1981	10	0	0	11	1	16
1980	6	19	0	19	5	15
1979	8	7	0	8	4	19
1978	9	20	5	24	1	17

FOR THE CALENDAR YEAR 1996
LAND RECLAMATION COMMITTEE

Members:

The following members served on the Land Reclamation Committee during 1996:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

David Fluke (Chairman), Hazardous and Solid Waste Management Administration

Stephen M. Layton, Bureau of Mines

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Ed Golden, Wildlife Division

Robert Webster, Forestry Division

Robert Davis, Freshwater Fisheries

CITIZEN REPRESENTATIVES:

June Neder, Allegany County

Jessie McCullough, Garrett County (1/96 - 9/18/96)

COUNTY REPRESENTATIVES:

Margaret Jamison, Garrett County

Tim Carney, Allegany County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

Craig Hartsock, Allegany Soil Conservation District

Shaun Sanders, Garrett Soil Conservation District

COAL INDUSTRY REPRESENTATIVES:

Jerry Duckett

Tim Schwinabart

Functions and Duties of the Committee:

The Land Reclamation Committee is responsible for the approval of all reclamation plans submitted, as part of an application for a permit, to the Bureau of Mines and for the oversight of land reclamation activities on surface coal mining operations in Maryland.

The Land Reclamation Committee visits proposed and active mining sites to:

- (1) determine the suitability of proposed reclamation plans;
- (2) review mining and reclamation progress; and
- (3) evaluate the success of revegetation practices.

During 1996, the Land Reclamation Committee conducted site visits on 8 days. These visits included field reviews of 5 proposed mining sites, 28 revegetation planting reports, 26 annual mining and reclamation progress reports, and 1 special field visit.

The Land Reclamation Committee conducts meetings to:

1. Review and approve reclamation plans;
2. Review reclamation progress on active mining permits;
3. Evaluate the revegetation on areas eligible for Phase II bond release;
4. Review the surface coal mining laws, regulations and policies and recommend changes to improve effectiveness of the Maryland Regulatory program; and
5. Recommend research and cost-sharing projects to promote optimum revegetation of surface coal mined lands.

During 1996, the Land Reclamation Committee met 7 times. During these meetings, the Land Reclamation Committee approved 5 reclamation plans, evaluated 232 acres of revegetation eligible for Phase II bond release and approved 185 acres as meeting the standards for release.

REVEGETATION OF SURFACE MINED LANDS

A permittee must submit a backfilling and planting report to the Bureau of Mines after planting is completed. When this report is approved by the Bureau, a minimum bond liability period of five years begins. All reclaimed permit areas may have bonds reduced (Phase II) after two years, and totally released (Phase III) after five years from the approved planting date. The Phase II bond may be released when:

1. The revegetated area is not contributing suspended solids to stream flow or runoff outside of the permit area in excess of the requirements of the regulatory program;
2. All temporary drainage control structures are removed and the affected area is regraded, seeded and mulched; or all permanent structures are inspected and any deficiencies are repaired;
3. With respect to prime farmlands, soil productivity has been returned to the level of yield required;
4. Revegetation has been established in accordance with the approved reclamation plan and the standards for success of revegetation have been met; and

When all of the above requirements have been achieved, a longer evaluation time may still be required if the health conditions of the revegetation are questionable. The Phase III bond on an area may be released when the permittee has successfully completed reclamation operations in accordance with the approved reclamation plan, achieved compliance with the requirements of the regulatory program, and the applicable liability period has expired.

Bonds cannot be released until the required work is completed, the appropriate evaluation time has elapsed, and the permittee submits a complete application for bond release to the Bureau. During 1996, the Bureau released Phase II bond on 185 acres, Phase III bond on 519 acres, and totally released bond on three permits.

In January of each year, a listing of acres eligible for Phase II and Phase III bond releases during the calendar year is compiled and available from the Bureau of Mines.

**FOR CALENDAR YEAR 1996
ABANDONED MINE LAND RECLAMATION**

The Maryland Bureau of Mines administers two programs to reclaim and/or restore land and water resources adversely affected by past coal mining practices. These two programs are: (1) Maryland-Federal Abandoned Mine Reclamation Program, implemented utilizing Federal funds available under the Federal Surface Mining Control and Reclamation Act of 1977 (U.S. Public Law 95-87) under the authority of Environment Article, Title 15, Subtitle 9 of the Annotated Code of Maryland, and (2) Maryland Mine Reclamation Program implemented utilizing funds from the Bituminous Coal Open-Pit Mining Reclamation Fund (BCOMRF) under the authority of Environment Article, Title 15, Subtitle 5; the Deep Mining Fund under the authority of Environment Article, Title 15, Subtitle 6; and the Mine Reclamation and Water Quality Restoration Loan under the authority of Environment Article, Title 15, Subtitle 7.

Maryland - Federal Abandoned Mine Reclamation Program

The Maryland Abandoned Mine Land Reclamation Plan received Federal approval on July 16, 1982, thus enabling Maryland to receive Federal funds for the reclamation of abandoned mine lands. During 1996, grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provided \$562,682.00 for the reclamation of abandoned mine lands. Approximately 80 acres of abandoned mine lands located in Allegany and Garrett Counties, Maryland were reclaimed during the 1996 calendar year.

AML Projects Under Construction During 1996

1. Vindex Refuse Abandoned Mine Reclamation Project

Location: Approximately 1.9 miles north of Kitzmiller, Garrett County, on the east side of MD State Rt. 38, between the towns of East and West Vindex.
Size: 74 Acres
Nature: Reclamation of 74 acres of abandoned surface mine to eliminate dangers associated with several hazardous water bodies, dangerous highwalls, unstable spoil, and hazardous garbage, equipment and structures.
Cost: \$3,174,440.00
Fund Source: Maryland- Federal AML Fund

2. Waverly Street Landslide Stabilization Project

Location: Approximately .5 miles north of Westernport, Allegany County, on the west side of Md State Rt. 36, just north of Waverly Street.
Size: 6 Acres
Nature: Stabilization of a landslide located within the right-of-way of MD State Rt. 36, to eliminate health and safety hazards to vehicular traffic and adjacent residences. The landslide was caused by drainage from an abandoned coal deep mine. Construction was coordinated for the Bureau of Mines by the MD State Highway Administration under a cooperative agreement.
Cost: \$1,830,000.00
(MDE-WMA-Bureau of Mines Fund - \$365,000)
Fund Source: Maryland-Federal AML Fund

3. Metz Water Supply Replacement Project

Location: Approximately .5 miles east of Barton, Allegany County, at Dogwood Flats.
Nature: Replacement of a potable source of drinking water to two residences whose wells were contaminated by drainage from an abandoned coal deep mine. Construction was completed for the Bureau of Mines by the Town of Lonaconing under a cooperative agreement.
Cost: \$31,725.00
Fund Source: Maryland-Federal AML Fund

4. Three Forks Run Lime Doser Installation Project

Location: East side of Vindex Road, at the Town of East Vindex, Garrett County, MD.
Size: .25 Acre
Nature: Installation of an Aquafix Lime Doser to treat the effects of acid mine drainage on Three Forks Run and the North Branch of the Potomac River. The lime doser was purchased by Earthmovers Unlimited, Inc. and donated to the State of Maryland for installation and operation.
Cost: \$51,850.00
Fund Source: Federal EPA and Deep Mine Funds

5. **MD State Rt. 135 Landslide Stabilization Project**
 Location: .5 miles west of Bloomington, Garrett County, on the east side of MD State Rt. 135.
 Size: 1 Acre
 Nature: Stabilization of a landslide located adjacent to and beneath the east bound lane of MD State Rt. 135, to eliminate health and safety hazards to vehicular traffic and adjacent residences. The landslide was caused by drainage from an abandoned coal deep mine. Construction was coordinated for the Bureau of Mines by the MD State Highway Administration under a cooperative agreement.
 Cost: \$875,120.00
 (MDE-WMA-Bureau of Mines Funding - \$425,000)
 Fund Source: Maryland-Federal AML Fund

Forfeiture Reclamation

The Maryland Bureau of Mines administers the reclamation of lands affected by operations on which the permit has been revoked and the bond forfeited. The funds received from the forfeiture of bonds and the bond supplement reserve, when the bond is not sufficient, are used to reclaim the lands affected by operations on which the liability was charged on the bonds.

Forfeiture Projects Under Construction During 1996

1. **Delta Tipple 107 Mine Forfeiture Reclamation Project**
 Location: 1 mile north of Midland on the west side of MD State Rt. 936 at Ocean, Allegany County.
 Size: 8.5 Acres
 Nature: Backfilling and revegetation of the Delta Tipple Permit SC-84-107 bond forfeiture site.
 Cost: \$27,831.00
 Fund Source: Bond Forfeiture
2. **Delta 378 Mine Forfeiture Reclamation Project-Phase II**
 Location: Approximately 1 mile southeast of Frostburg, Allegany Co., on the west side of Dan's Mt., at Chestnut Drive.
 Size: 4.5 Acres
 Nature: Reclamation of 4.5 acres of the Delta Mining, Inc. permit No. SM-84-378 surface coal mine forfeiture. Reclamation involves removal and revegetation of sediment and erosion control structures.
 Cost: \$11,958.00
 Fund Source: Bond Forfeiture

FOR CALENDAR YEAR 1996

MINE FOREMAN AND FIRE BOSS EXAMINATIONS AND CERTIFICATIONS

The number of Mine Foremen and Fire Boss applicants examined and certified from 1982 through 1996 are identified below.

YEAR	APPLICANTS EXAMINED		APPLICANTS CERTIFIED	
	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
1996	0	0	4	0
1995	0	0	14*	0
1994	24	4	24	4
1993	25	8	25	8
1992	0	0	5*	0
1991	6	0	6	0
1990	19	4	18	4
1989	0	0	25*	0
1988	15	0	11	0
1987	0	0	10*	0
1986	0	0	25*	0
1985	0	0	11*	0
1984	0	0	0	0
1983	1	26	1	21
1982	11	60	7	20

*These applicants were upgraded from Fire Boss to Foreman, based on years of experience, without taking an examination.

INSPECTION AND ENFORCEMENT ACTIVITIES
1992-1996

TYPE OF ACTION	1992	1993	1994	1995	1996
Inspections	1619	1320	1216	1073	991
Notices of Violations	68	63	31	8	5
Cessation Orders	15	27	11	15	0
Citizen Complaints	38	38	36	44	33
Bond Forfeitures	2	2	2	0	1

MINING PERMITS ISSUED BY YEAR AND PERMITTEE

Permit No.	Year Issued	Permittee
1	1955	The George's Creek Lumber Company*
2	1955	Allegany Engineering Company*
3	1955	B.M.W. Coal Company*
4	1955	Old Hampshire Coal Company, Inc.*
5	1955	Car and Gotfelty Construction Co.*
6	1955	M.H. Bigan Coal Company*
7	1955	Moran Coal Company*
8	1955	Allegany Engineering Company*
9	1955	Schell Mining Company, Inc.*
10	1955	B & U Coal Company*
11	1955	Morgan Contracting Company**
12	1955	Romadale Coal Corporation*
13	1955	Cross Fuel Company*
14	1955	Highland Construction Company*
15	1955	Phoenix Big Vein Coal Company (Repermitted 338)*
16	1955	Moran Coal Company*
17	1955	T.J. Cramblett**
18	1955	Moscow-Georges Creek Coal Company*
19	1955	J.R. Thrasher Contracting & Stripping Co.*
20	1956	Moran Coal Company (Repermitted 333)*
21	1956	Schell Mining Company, Inc.**
22	1956	Savage Coal Company*
23	1956	Moran Coal Company*
24	1956	The Georges Creek Coal & Land Co.*
25	1957	Charles T. Clise*
26	1957	Allegany Engineering Company*
27	1957	Goodwill Fuel Company*
28	1957	D.B.&B. Coal Company*
29	1957	Queen George's Creek Coal Company**
30	1957	Mack Coal Company**
31	1957	White Crest Coal Company, Inc.**
32	1957	D.B.&B. Coal Company*
33	1957	Moran Coal Company*
34	1957	Chelsie A. Liller*
35	1957	J.E. George Trucking Company**
36	1957	D.B.&B. Coal Company*
37	1957	J.&M. Coal Company**
38	1957	Casey Construction Company**
39	1958	Moran Coal Company*
40	1958	Winner Bros. Coal Company, Inc.
41	1958	Buffalo Coal Company, Inc.*
42	1958	Casey Construction Company**
43	1958	Sara-Ki Coal Company, Inc.*
44	1958	Yantus & Zubek Coal Company*
45	1958	Moran Coal Company*
46	1958	Casey Construction Company**
47	1958	Moran Coal Company*
48	1958	Moran Coal Company*
49	1958	Sara-Ki Coal Company, Inc.*
50	1958	Laurel Creek Company, Inc.**

Permit No.	Year Issued	Permittee
51	1958	D.B.&B. Coal Company**
52	1958	Moon and Sons*
53	1959	George L. Smith Contracting Company*
54	1959	The Georges Creek Lumber Company*
55	1959	Moran Coal Company*
56	1959	North Branch Coal Corporation*
57	1959	George Coal Company**
58	1959	Samuel Compton & Company**
59	1959	Hoover & White*
60	1959	Laurel Creek Company, Inc.**
61	1959	The Eddy Fuel Company**
62	1959	J.R. Thrasher Contracting & Stripping Co.*
63	1959	Pittsburgh Coal Company*
64	1959	Mineral Coal Company, Inc., of West Virginia*
65	1959	Laurel Creek Company, Inc.*
66	1959	The Georges Creek Lumber Company*
67	1959	Chelsie A. Liller*
68	1959	Casey Contracting Company**
69	1959	Pine Mountain Coal Company*
70	1959	Opel and Brenneman*
71	1959	The Georges Creek Lumber Company*
72	1959	P.&J. Coal Company*
73	1959	Casey Contracting Company**
74	1959	Goodwill Fuel Company*
75	1959	D.B.&B. Coal Company*
76	1960	Baughman Contracting Company, Inc.*
77	1960	P&K Coal Company*
78	1960	Morgan Contracting Company*
79	1960	Buffalo Coal Company, Inc.*
80	1960	Buffalo Coal Company, Inc.*
81	1960	Randall Robertson*
82	1960	Hoover & White**
83	1960	James E. George*
84	1960	B.M.W. Coal Company, Inc.*
85	1960	Casey Contracting Company**
86	1960	Beener Coal Company*
87	1960	Moran Coal Company, Inc.*
88	1960	D&K Coal Company*
89	1960	Brenneman Brothers*
90	1960	Mack Coal Company*
91	1960	Clarence Rodamar*
92	1960	James E. George*
93	1961	Casey Contracting Company**
94	1961	Winner Brothers*
95	1961	Moran Coal Company, Inc.*
96	1961	Big Vein Coal Company*
97	1961	Maryland Fuel Company, Inc.*
98	1961	Yantus-Zubek Coal Company*
99	1961	J.R. Thrasher Contracting & Stripping Co.*
100	1961	Trefall Bros., Inc.*
101	1961	Mack Coal Company*
102	1961	C.A. Liller Company*
103	1961	Cross & Brumage Coal Company*

Permit No.	Year Issued	Permittee
104	1961	Beener Coal Company*
105	1961	D&K Coal Company*
106	1961	Mack Coal Company*
107	1961	Yantus and Zubek*
108	1961	Potomac Mining Company*
109	1962	Casey Contracting Company*
110	1962	Wilhelm Coal Company*
111	1962	The Georges Creek Lumber Company*
112	1962	Clark Coal Company*
113	1962	Casey Contracting Company*
114	1962	Casey Contracting Company*
115	1962	Douglas Coal Company*
116	1962	Red Lion Mining Corporation**
117	1962	Ebensburg Coal and Clay Company*
118	1963	James E. George*
119	1963	Ebensburg Coal and Clay Company*
120	1963	J.R. Thrasher Contracting & Stripping Co.*
121	1963	Moran Coal Company, Inc.*
122	1963	Buffalo Coal Company, Inc.*
123	1963	J.R. Thrasher Contracting & Stripping Co.*
124	1963	Win-More Mining & Construction Co., Inc.*
125	1963	Beener Coal Company*
126	1964	W.R. Nethken and Company, Inc.*
127	1964	Mack Coal Company*
128	1964	J.R. Thrasher Contracting & Stripping Co.*
129	1964	J. Russell Cravener*
130	1964	Chelsie A. Liller*
131	1964	The Georges Creek Lumber Company*
132	1964	Brenneman Brothers*
133	1965	W.R. Nethken and Company, Inc.*
134	1965	Richards and Parnell Coal Company*
135	1965	William Brashear*
136	1965	W.R. Nethken and Company, Inc.*
137	1965	G&S Coal Company, Inc.*
138	1966	J.R. Thrasher Contracting & Stripping Co.*
139	1966	J.R. Thrasher Contracting & Stripping Co.*
140	1966	Shallmar Coal Company, Inc.*
141	1966	Randall Robertson**
142	1966	Ace Drilling Coal Company, Inc.*
143	1966	Beener Coal Company*
144	1966	Clarence Rodamer*
145	1967	Ginniman Coal Company*
146	1967	Raymond A. Wolf Mining Company*
147	1967	Menallen Coke Company*
148	1967	Russel Shafer*
149	1967	Homage Coal Co. (Emmett Dupstadt)*
150	1967	Twin States Coal Company**
151	1967	M.F. Fetterolf Coal Company, Inc.*
152	1967	Ebensburg Coal and Clay Company*
153	1968	Raymond A. Wolf Mining Co. (UPRC)*
154	1968	Michael Rostosky*
155	1968	Ginniman & Ware Coal Company*

Permit No.	Year Issued	Permittee
156	1968	Harold H. Upole Coal Company*
157	1968	T.G.&C. Coal Company, Inc.*
158	1969	Clarence Rodamer Coal Company*
159	1969	Michael Rostosky Coal Company*
160	1969	Russel Shafer Coal Company*
161	1969	Buffalo Coal Company, Inc.*
162	1969	J.R. Thrasher Contracting & Stripping Co.***
163	1969	Buffalo Coal Company, Inc.*
164	1969	Union Coal Company*
165	1970	Win-More Mining & Construction Co., Inc.*
166	1970	Ginniman Coal Company*
167	1970	Upperman Coal Company*
168	1970	Frank Pulford**
169	1970	Winner Bros. Coal Company, Inc.*
170	1970	Russel Shafer*
171	1970	The Chief Coal Company*
172	1970	Mary Ruth Corporation*
173	1970	Oakland Coal Company*
174	1971	Bernard C. Drees*
175	1971	Delta Mining, Inc.*
176	1971	D&K Coal Company, Inc.*
177	1971	T.G.&C. Coal Company, Inc.*
178	1971	Emmett Dupstadt*
179	1971	Somerset Excavating, Inc.*
180	1971	Ayers Coal Company*
181	1971	Delta Mining, Inc.*
182	1971	Patriot Mining Company, Inc.*
183	1971	Chief Coal Company*
184	1971	Cobra Mining
185	1971	Bessemer Iron & Coal Company*
186	1971	Coal Lick Coal Company*
187	1971	Phillips Big Vein Coal Company*
188	1971	Ace Drilling Coal Company, Inc.*
189	1971	Buffalo Coal Company, Inc.*
190	1971	Buffalo Coal Company, Inc.*
191	1971	Keystone Coal and Development Company (Liability Assumed by Garrett County Roads Department)
192	1971	Ace Drilling Company, Inc.*
193	1972	Wilhelm Coal, Inc.*
194	1972	M.F. Fetterolf Coal Company, Inc.***
195	1972	Buffalo Coal Company, Inc.*
196	1972	Bessemer Iron & Coal Company*
197	1972	Grafton Coal Company*
198	1972	Jet Fuel Coal Company*
199	1972	Bessemer Iron & Coal Company*
200	1972	Chief Coal Company*
201	1972	Brashear Coal Company*
202	1972	Winner Bros. Coal Company, Inc.*
203	1972	Mary Ruth Corporation*
204	1972	Grafton Coal Company*
205	1972	Chief Coal Company*
206	1972	Upperman Coal Company*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
207	1972	Winner Bros. Coal Company, Inc.
208	1973	Sanner Bros. Coal Company*
209	1973	Delta Mining, Inc.*
210	1973	Markat, Inc.*
211	1973	Oakland Coal Company*
212	1973	Bessemer Iron & Coal Company*
213	1973	Clise Coal Company
214	1973	Inter-State Lumber Company*
215	1973	Buffalo Coal Company, Inc.*
216	1973	Brashear Coal Company***
217	1973	Bernard Drees Coal Company*
218	1973	Buffalo Coal Company, Inc.*
219	1973	G&S Coal Company, Inc.*
220	1974	Evans Coal Company*
221	1974	Brideview Coal Company*
222	1974	John Duckworth Coal Company*
223	1974	Edward Mikel*
224	1974	Delta Mining, Inc.*
225	1974	Northwest Coal Company, Inc.*
226	1974	Thrasher Coal Company**
227	1974	Winner Bros. Coal Company, Inc.*
228	1974	Bittinger Coal Company*
229	1974	Charles M. Filsinger*
230	1974	G&H Coal Company, Inc.*
231	1974	Hi-Note, Inc.*
232	1974	Buffalo Coal Company, Inc.*
233	1974	Oliver Mining Company**
234	1974	Clise Coal Company*
235	1974	Markat, Inc.*
236	1974	Delta Mining, Inc.*
237	1974	Bridgeview Coal Company*
238	1974	Burnham Coal Company, Inc.*
239	1974	Highland Mining*
240	1974	Buffalo Coal Company, Inc.*
241	1975	Buffalo Coal Company, Inc.*
242	1975	Hopwood Strip Mine, Inc.**
243	1975	Ponderosa Coal Company, Inc.*
244	1975	Markat, Inc.*
245	1975	Phillips Coal, Inc.*
246	1975	Lambert Coal Company*
247	1975	Winner Bros. Coal Company, Inc.
248	1975	Buffalo Coal Company, Inc.*
249	1975	Cobra Fuels*
250	1975	Laoc Coal Company*
251	1975	Tower Resources, Inc.*
252	1975	Phillips Coal, Inc.*
253	1975	Pine Mt. Coal Company*
254	1975	T.G.&C. Coal Company*
255	1975	Allegheny Mining Company*
256	1975	Bridgeview Coal Company*
257	1975	A&R Coal Company*
258	1975	Clinton Coal Company**

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
259	1975	Tower Resources, Inc.*
260	1975	Yough Tree Farm*
261	1975	Russel Shafer***
262	1975	Northwest Coal Company**
263	1975	Allegheny Mining Corporation*
264	1975	Brashear Coal Company
265	1975	Bittinger Coal Company
266	1975	Delta Mining, Inc.*
267	1975	Bittinger Coal Company*
268	1975	Clyde Marsh Coal Company
269	1975	Hungry Hollow Coal Company*
270	1975	Clise Coal Company*
271	1975	A&R Coal Company*
272	1975	Action Mining, Inc.*
273	1975	Win-More Mining & Construction
274	1975	Evans Coal Company*
275	1975	Buffalo Coal Company, Inc.*
276	1975	Buffalo Coal Company, Inc.*
277	1975	Allegheny Mining Corporation
278	1976	Inter-State Lumber Company*
279	1976	Buffalo Coal Company, Inc.*
280	1976	Delta Mining, Inc.*
281	1976	Rondell Company*
282	1976	Phillips Coal, Inc.*
283	1976	G&H Coal Company, Inc.*
284	1976	Tower Resources, Inc.*
285	1976	Clinton Coal Company**
286	1976	Winner Bros. Coal Company, Inc.
287	1976	T.L. Moran, Inc.*
288	1976	Delta Mining, Inc.*
289	1976	Pine Mt. Coal Company*
290	1976	Delta Mining, Inc.*
291	1976	George Nolan**
292	1976	Alexander Coal Co.*
293	1976	Pine Mt. Coal Company*
294	1976	Arlen Miller***
295	1976	Action Mining, Inc.*
296	1976	Bessemer Iron & Coal Company**
297	1977	Oakland Coal Company
298	1977	Bittinger Coal Company*
299	1977	Inter-State Lumber, Inc.*
300	1977	Garbart Coal Company*
301	1977	Pine Mt. Coal Company*
302	1977	L.C. Coal Company, Inc.*
303	1977	Ginniman Brothers Coal Company**
304	1977	Buffalo Coal Company, Inc.*
305	1977	Wood Products, Inc.*
306	1977	Bridgeview Coal Company*
307	1977	T.L. Moran, Inc.*
308	1977	Best Coal Stripping, Inc.**
309	1977	Delta Mining, Inc.*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>	<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
310	1977	Oakland Coal Company*	362	1980	Alpha Mining, Inc.*
311	1977	Primrose Coal Company*	363	1980	Pamela Mines, Inc.**
312	1977	R.A.K. Coal Company, Inc.**	364	1980	John Duckworth Coal Company*
313	1977	G&S Coal Company*	365	1980	G&S Coal Company, Inc.
314	1977	Wilhelm Coal, Inc.**	366	1980	Buffalo Coal Company, Inc.*
315	1977	Clise Coal Company	367	1980	Buffalo Coal Company, Inc.
316	1977	Brawal Mining, Inc.*	368	1980	Winner Bros. Coal Company, Inc.
317	1977	John R. Livingston**	369	1980	Bittinger Coal Company*
318	1977	Winner Bros. Coal Company, Inc.	370	1982	Keystone Mt. Development Company*
319	1977	John Duckworth Coal Company*	371	1982	Eagle Mining, Inc.*
320	1977	Kelley Enterprises*	372	1982	John Duckworth Coal Company
321	1978	Delta Mining, Inc.*	373	1982	Kirby Energy, Inc.
322	1978	Bridgeview Coal Company*	374	1982	Winner Bros. Coal Company, Inc.
323	1978	Ayers Coal Company*	375	1982	Win More Mining & Construction Company
324	1978	John Duckworth Coal Company*	376	1982	Jones Coal, Inc.**
325	1978	G&S Coal Company, Inc.	377	1982	Allegheny Mining Corporation*
326	1978	Buffalo Coal Company, Inc.	378	1982	Delta Mining, Inc.**
327	1978	Buffalo Coal Company, Inc.*	379	1982	Masteller Coal Company*
328	1978	Buffalo Coal Company, Inc.	380	1982	Fairview Coal Company (Repermitted 399)*
329	1978	Winner Bros. Coal Company, Inc.	381	1982	Richard Duckworth Coal Company*
330	1978	Inter-State Lumber Company*	382	1983	Pine Mt. Coal Company
331	1978	R.A.K. Coal Company***	383	1983	Allegheny Mining Corporation*
332	1978	Seneca Mining Company*	384	1983	Evans Coal Company*
333	1978	Westvaco Corporation	385	1983	Winner Bros. Coal Company, Inc.
334	1978	Buffalo Coal Company, Inc.*	386	1983	Jones Mining, Inc.*
335	1978	Inter-State Lumber Company**	387	1983	Hilltop Construction Company**
336	1978	Inter-State Lumber Company*	388	1983	Fetterolf Mining, Inc.*
337	1978	Kirby Energy, Inc.	389	1983	Winner Bros. Coal Company, Inc.
338	1978	Barton Mining Company, Inc.	390	1983	C.J. Merlo, Inc.*
339	1978	Wilhelm Coal, Inc.*	391	1983	Oak Springs Coal Company*
340	1978	Fetterolf Mining, Inc.*	392	1984	Westvaco Resources, Inc.*
341	1979	Eastern Mining Systems, Inc.**	393	1984	Patriot Mining Company, Inc.
342	1979	Primrose Coal Company*	394	1984	Action Mining, Inc.
343	1979	L.C. Coal Company*	395	1984	Stan-Jan Excavating, Inc.*
344	1979	Bridgeview Coal Company*	396	1984	Allegheny Mining Corporation*
345	1979	Delta Mining, Inc.**	397	1985	Michael R. McGowan*
346	1979	Inter-State Lumber Company*	398	1985	Brashear Coal Company
347	1979	Kelley Enterprises*	399	1985	Fairview Coal Company
348	1979	Schwinabart & Green, Joint Venture	400	1985	Delta Mining, Inc.*
349	1979	Wilhelm Coal, Inc.**	401	1985	Buffalo Coal Company, Inc.***
350	1980	Bridgeview Coal Company*	402	1985	Pine Mt. Coal Company*
351	1980	Winner Bros. Coal Company, Inc.*	403	1985	T.D. Mining Company
352	1980	John Duckworth Coal Company*	404	1986	Clise Coal Company
353	1980	Winner Bros. Coal Company, Inc.	405	1986	Jones Coal, Inc.**
354	1980	Brawal Mining, Inc.*	406	1986	Patriot Mining Company, Inc.*
355	1980	Hi-Note, Inc.*	407	1986	Winner Bros. Coal Company, Inc.
356	1980	G&S Coal Company, Inc.***	408	1986	Tri Star Mining, Inc.*
357	1980	Richard Duckworth Coal Company*	409	1986	Buffalo Coal Company, Inc.
358	1980	Bridgeview Coal Company*	410	1987	J. Walter Wassell
359	1980	Buffalo Coal Company, Inc.	411	1987	Jenkins Development Company
360	1980	Buffalo Coal Company, Inc.*	412	1987	John Duckworth Coal Company***
361	1980	Pamela Mines, Inc.**			

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
413	1988	Buffalo Coal Company, Inc.
414	1989	Winner Bros. Coal Company, Inc.
415	1989	Pine Mt. Coal Company*
416	1989	Action Mining, Inc.
417	1989	Tri Star Mining, Inc.
418	1991	Tri Star Mining, Inc.
419	1991	Tri Star Mining, Inc.
420	1991	Pine Mt. Coal Company
421	1992	G&S Coal Company, Inc.
422	1992	Buffalo Coal Company, Inc.
423	1992	Patriot Mining Company, Inc.
424	1995	Pine Mt. Coal Company
425	1995	Tri Star Mining, Inc.
426	1996	Tri Star Mining, Inc.
427	1996	Barton Mining Company, Inc.

DEEP MINES

DM 101	1977	Mettiki Coal Corporation
DM 102	1977	Masteller Coal Company*
DM 103	1977	Mt. Top Coal Company
DM 104	1977	Mettiki Coal Corporation
DM 105	1977	Mettiki Coal Corporation
DM 106	1978	A&J Coal Corporation**
DM 107	1982	Masteller Coal Company*
DM 108	1989	Preston Energy, Inc.
DM 109	1991	Patriot Mining Company, Inc.
DM 110	1992	Masteller Coal Company

TIPPLES AND GOB PILES

SC-83-101	1983	Buffalo Coal Company
SC-83-102	1983	Buffalo Coal Company*
SC-83-103	1983	Buffalo Coal Company
SC-83-104	1983	Buffalo Coal Company
SC-83-105	1983	Buffalo Coal Company***
SC-83-106		Permit Not Issued
SC-83-107	1983	Delta Coal Sales, Inc.**
SC-83-108	1984	Delta Coal Sales, Inc.*
SC-83-109		Permit Not Issued
SC-83-110	1983	Winner Bros. Coal Company, Inc.
SC-83-111	1983	Westvaco Corporation
SC-83-112	1983	Winner Bros. Coal Company
SC-83-113		Permit Not Issued
SC-83-114	1984	Ever, Inc.*
SC-83-115		Permit Not Issued
SC-87-116	1987	John Duckworth Coal Company
SC-87-117	1987	Tri Star Mining, Inc.
SC-87-118	1987	Patriot Mining Company, Inc.

* Operation Completed and Bond Released
 ** Forfeiture of Bond
 *** Not Activated