CALENDAR YEAR 2003

EIGHTY-SECOND ANNUAL REPORT

Of The

MARYLAND BUREAU OF MINES



HON. ROBERT L. EHRLICH, JR. Governor of Maryland

DEPARTMENT OF THE ENVIRONMENT KENDL P. PHILBRICK, Secretary

WATER MANAGEMENT ADMINISTRATION ROBERT SUMMERS, Director

MINING PROGRAM C. EDMON LARRIMORE, Program Manager

> BUREAU OF MINES JOHN E. CAREY, Director

FOR THE CALENDAR YEAR 2003

STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION MINING PROGRAM BUREAU OF MINES

FROSTBURG, MARYLAND 21532

LETTER OF TRANSMITTAL

To The Honorable:

ROBERT L. EHRLICH, JR.

Governor of Maryland

Sir:

I have the honor of submitting herewith the Eighty-Second Annual Report of the Maryland Bureau Of Mines for the period of January 1, 2003 through December 31, 2003, in compliance with the mining law of the State of Maryland. It is a report of the conditions of the coal mining industry within the state.

Very Respectfully, Joh E. Carry

John E. Carey Director

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EXECUTIVE SUMMARY

During calendar year 2003, Maryland operators produced 5,145,569 tons of coal. Surface coal mining production was 1,712,666 tons —1,068,212 in Allegany County and 644,454 in Garrett County. Deep coal mining production was 3,432,903 tons, all in Garrett County.

Eighty permitting actions were received and sixty-six permitting actions were issued, including issuance of two original permits, three permit increments, and twenty permit amendments totaling 299 acres.

Two hundred thirty-one acres were affected, 115 acres backfilled, and 132 acres planted. Bond was totally released on 47 acres. Three permits were completed, with bond being totally released. There were no permits forfeited.

Nine hundred nineteen inspections were performed on coal mining operations. Nineteen Notices of Violations were issued. Twenty-seven Citizen Complaints were received and investigated and there were no bond forfeitures during this calendar year.

The Land Reclamation Committee met three times and approved two reclamation plans. The Committee also evaluated the revegetation on 148 acres eligible for Phase II bond release and approved 86 acres as meeting the standards for release, and approved 2 reclamation plan changes.

The Abandoned Mine Lands Section had 9 projects under construction during Calendar Year 2003. Two projects were funded by the deep mine fund, totaling \$12, 698.23. These projects eliminated one mine subsidence hole at a residence south of Frostburg and mine drainage impact to a recreation/picnic area at Potomac State Forest. Bond forfeiture reclamation continued at Permits SM-84-405 and Sm-84-233. Four Marytand /Federal Abandoned Mine Reclamation Projects were completed in 2003, totaling \$3,302.995. These project reclaimed 51 acres of land while extinguishing a burning coal refuse pile, closed three mine portals, removed an unsafe dam and improved the water quality of the Cassleman River and the North Branch of the Potomac River.

The Planning, Research, and Development Section (PRD), during the period of Jan. 1, 2003 to Dec. 31, 2003, completed upgrades to existing acid mine drainage (AMD) remediation systems. PRD also worked on the design and permitting for three additional AMD remediation projects; which are scheduled for construction during 2004. The upgrades improved the operation and maintenance of dosers in the North Branch Potomac River, Georges Creek, and Cherry Creek. Although these upgrade projects did not add any additional miles of improved stream, the systems currently in operation were made more efficient and reliable by the upgrades. However, an additional one-quarter mile of stream in the North Branch Potomac River was improved through the Shallmar Coal Waste Stabilization Project that was completed by the AML Section during this time period. An overall total of 72 miles of stream in the coal region continues to be improved by mine drainage controls since AMD remediation efforts were initiated in 1992. Construction costs for the upgrade work completed by PRD totaled \$91, 950.

FOR CALENDAR YEAR 2003

MINING PROGRAM

C. Edmon Lammore	Program Manager, Mining Program
Ruth D. Booth.	Administrator
Sallie Shuman	Administrative Officer

BUREAU OF MINES

John E. Carey	Director, Bureau of Mines
Barbara E. Murphy	Office Secretary III

Abandoned Mine Lands Section

Michael P. Gamer
John C. Eilers.
Bradley Nee.
Mark Carney
Randall Matthews

Permitting and Regulatory Section

Stephen M. Layton.	
Jeffery Snyder.	
Alan V. Hooker	

Planning, Research & Development Section

Constance A. Lyons
Richard Wolters 1/01/03 - 10/31/03
Michelle Arrington 11/01/03
Joseph E. Mills
Tamara Davis

Laboratory & Support Services

Mary Lynn Pegg					•		•		•	•	•	•	•	•	•			
Julie O'Connor		•	•	•	•	•		•	•	•	•	•		•	•		•	

Mining Inspection and Compliance

Ray Karlstrand 1/01/03 – 10/01/03	
Larry Johnson	
Thomas P. Murray.	

Section Chief

Energy Resources Administrator Water Resources Engineer Water Resources Engineer Conservation Associate

Section Chief

Civil Engineer Energy Resources Administrator

Section Chief Env. Compliance Specialist Env. Compliance Specialist Natural Resources Planner Natural Resources Planner

Laboratory Scientist Chemist

Env. Compliance Specialist Env. Compliance Specialist Env. Compliance Specialist

FOR THE CALENDAR YEAR 2003 REPORT OF THE MARYLAND BUREAU OF MINES

Coal production in Maryland during 2003 totaled 5,145,569.59 tons. Production in 2003 represents an increase of 100,523.98 tons from the 2002 production of 5,045,045.61 tons.

SUMMARY OF 2003 STATISTICS1

COAL PRODUCTION

Mining Method	Allegany County	Garrett County	Total
Strip	1,068,212.04	644,454.25	1,712,666.29
Deep	.00	3,432,903.30	3,432,903.30
Auger	.00	.00	.00
TOTALS	1,068,212.04	4,077,357.55	5,145,569.59

EMPLOYEES²

Type of	Allegany	Garrett	
Mine	County	County	Total
Deep	0	230	230
Strip	154	44	198
	154		
TOTALS		274	428

¹Reports submitted by Maryland mining operators.

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

FOR THE CALENDAR YEAR 2003 TONNAGE BY COAL SEAMS

Allegany County

Waynesburg	 65,848.99
Sewickley (Tyson)	 106,096.91
Redstone	 268,187.85
Pittsburgh	 374,083.90
Morantown	 153,872.03
L. Pittsburgh	 89,932.64
Franklin	 10,189.72
Harlem	 0
Bakerstown	 0
Freeport	 0
Kittanning	 0
Federal Hill	 0
Barton	 0

TOTAL 1,068,212.04

Garrett County

Sewickley	 1,892.95
Pittsburgh	 120,008.31
Morantown	 42,427.15
L. Pittsburgh	 6,072.97
Franklin	 267,448.25
Barton	 84,420.96
Elk Lick	 10,781.21
Harlem	 12,577.25
Bakerstown	 23,206.18
Upper Freeport	 15,573.61
Freeport	 8,387,938.17
Kittanning	 89,580.00
Redstone	 12,341.70
Waynesburg	 3,088.84
, ,	

TOTAL 4,077,357.55

TONNAGE BY BASIN

Lower Youghiogheny	0
Upper Youghiogheny	0
Casselman	. 0
Casselman (Cherry Creek)	0
Potomac	
George's Creek	1,547,705.43

TOTAL	TOTAL	L		5,145,569.59
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COAL PRODUCTION, MINING AND RECLAMATION STATISTICS FOR ALLEGANY & GARRETT COUNTIES*

"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.

	Permit	Coal Seam		PRODUCTION (TONS)		Acres	Acres	Acres
Operator	Number	Worked	Deep	Strip	Auger	Affected	Backfilled	Planted
Barton Mining Company, Inc.	338	Pittsburgh		6,177.56		3.0	6.0	6.0
		Redstone		382.65		1	1	,
	427	Pittsburgh		64,786.43		50.0	0.0	0.0
		L. Pittsburgh		71,550.12		1	I	'
		Morantown		19,299.31		1	I	'
		Redstone		30,572.89		1	I	.'
		Sewickley		11,776.08		'	1	'
	432	Pittsburgh		3,821.63		6.0	7.0	7.0
		Morantown		1,628.07		.'	I	'
		Redstone		1,781.90		1	1	1
Brashear Coal Mines	264	Franklin		3,204.20		0.0	0.0	0.0
	436	· Franklin		6,985.52		2.0	0.0	0.0
Cobra Mining, Inc.	437	Pittsburgh		10,535.04		2.0	0.0	0.0
		Morantown		4,982.65				'
Fairview Coal Co., Inc.	399	Pittsburgh		2,015.07		3.0	0.0	0.0
		Redstone		2,817.72		I	1	'
		Morantown		302.31		1	1	1
G & S Coal Company, Inc.	430	Pittsburgh		14,340.20		9.0	5.0	0.0
		Morantown		6,014.95		I	I	•
	440	Pittsburgh		1,523.20		2.0	0.0	0.0
		L. Pittsburgh		18,069.10		I	1	'
		Morantown		386.20		1	1	'
Jenkins Development Co., Inc.	411	Waynesburg		43,762.32		2.0	7.0	7.0
Mountaineer Mining Corp.	436	Pittsburgh		10,337.42		3.0	10	0.0
		Morantown		2,778.41			1	'
Tri-Star Mining, Inc.	419	Pittsburgh		68,035.70		13.0	12.0	12.0
		L.Pittsburgh		313.42		ı	'	'
		Morantown		111,440.84		'	I	'
		Sewickley		46,288.97		1	ι	'
		Redstone		27,870.64		ſ	ł	'
				70 000 CC				

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	Permit	Coal Seam		PRODUCTION (TONS)		Acres	Acres	Acres
Operator	Number	Worked	Deep	Strip	Auger	Affected	Backfilled	Planted
United Energy Coal, Inc.	4	Pittsburgh		12,107.37		0.0	0.0	0.0
;		Redstone		14,184.97		1	1	ť.
	407	Sewickley		548.68		0.0	0.0	0.0
		Redstone		7,153.59		1	•	1
	414	Pittsburgh		2,183.69		2.0	0.0	0.0
		Redstone		28,967,12		I	i	1
		Sewickley		2,794.85		1	1	I
	439	Pittsburgh		170,996.63		30.06	0.0	0.0
		Redstone		154,456.37		1	;	ı
		Sewickley		44,688.33		I	I	1
		Morantown		5,438.98		;	-1	
Win More Mining & Const. Co., Inc.	433	Pittsburgh		1,223.96		5.0	0.6	8.0
		Morantown		1,600.31		1		1
FOTAL ALLEGANY COUNTY				1.068.212.04		132.0	0.74	40.0
				· ·····				

	Permit	Coal Seam	PR	PRODUCTION (TONS)		Acres	Acres	Acres
Operator	Number	Worked	Deep	Strip	Auger	Affected	Backfilled	Planted
G & S Coal Company, Inc.	365	U.Freeport		15,573,61		19.0	17.0	17.0
	421	Franklin		13,242,61		2.0	10.0	10.0
	435	Bakerstown		23,206,18		40	0.0	00
		EK Lick		10.781.21		1	; '	, 1
		Harlem		12.577.25		1	1	ı
George Creek, Inc.	DM111	Barton	44.965.13			00	00	00
Mettiki Coal Corporation	DM101	Freeport	3.387.938.17			00	10.0	10.0
Millennium Resources, LLC	441			0.00		20	00	00
Pine Mountain Coal Company	424	Pittsburgh		5.907.13		10	0	10
		Morantown		2.474.36		1	1	1
		Redstone		4,195.50		1	,	,
Tri-Star Mining, thc.	419	Pittsburgh		114,101.18		(See	Allegany	County)
		L.Pittsburgh		6,072.97		1	1	;
		Redstone		8,146.20		1	I	;
		Morantown		39,952.79		1	1	1
		Sewickley		1,892.95		1	1	ı
		Waynesburg.		3,068.84		1	ł	ı
	429	Barton		5,743.58		4.0	0.0	24.0
	434	Franklin		254,205.64		17.0	13.0	13.0
	44	Barton		33,712.25		0.0	0.0	0.0
Vindex Energy Corporation	443	Kittanning		89,580.00		47.2	16.7	16.7
TOTAL GARRETT COUNTY			3,432,903.30	644,454.25		99.2	<i>ET 3</i>	91.7
TOTAL BOTH COUNTIES			3,432,903.30	1,712,666.29		231.2	114.7	131.7

GARRETT COUNTY

FOR CALENDAR YEAR 2003 SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 2003 (By Geological Basin)

		ACRES THIS YEAR	IS YEAR		
	Permitted	Affected	Backfilled	Planted	Bond Released*
Allegany County:					
Georges Creek Basin	22.00	132.00	47.00	40.00	23.00
Garrett County:					
Georges Creek Basin	123.00	22.00	14.00	38.00	0.00
Potomac River Basin	154.00	77.20	53.70	53.70	24.00
Casselman River Bash	0.00	0.00	0.00	0.00	0.00
Cherry Creek Basin	0.00	0.00	0.00	0.00	0.00
Upper Yough Basin	0.00	0.00	0.00	0.00	0.00
Lower Yough Basin	0.00	0.00	0.00	0.00	0.00
TOTAL GARRETT COUNTY	277.00	99.20	67.70	91.70	24.00
TOTAL BOTH COUNTIES	299.00	231.20	114.70	131.70	47.00

ACRES CUMULATIVE FROM JANUARY 1, 1975 - DECEMBER 31, 2003

4,419.00	2,643,60	3,866.40	1,265.80	659.95	261.50	855.40	9,552.65	13,971.65
5,349.30	2,687.81	3,844.40	1,142.20	545.80	189.30	1078.16	9,487.67	14,836.97
5,239.47	2,367.80	3,705.10	1,260.50	578.90	215.35	1,135.06	9,262.71	14,502.18
6,025.50	2,601.95	3,667.30	1,135.00	671.50	157.35	914.00	9,147.10	15,172.60
7,108.00	2,746.00	4,749.00	1,416.60	667.00	216.00	1,335.00	11,129.60	18,237.60
Allegany County: Georges Creek Basin Garrett County:	Georges Creek Basin	Potomac River Basin	Casselman River Basin**	Cherry Creek Basin**	Upper Yough Basin	Lower Yough Basin	TOTAL GARRETT COUNTY	TOTAL BOTH COUNTIES

*Total Bond Release by the Bureau. **Total Casselman Geological Basin.

PERMITTING ACTIVITY CALENDAR YEAR 2003

												-
Type of Application		Surface Mines		U	dergroe Mines	and		Other Facilities	5		Totals	
	App. Rec.	Luned	Acres	App. Rec.	Issued	Aeres	App. Rec.	Laued	Acres	App. Rec.	Issued	Acres
Original Permits	0	1	123	0	1	32	0	0	0	0	2	155
Permit Increments	3	3	144	0	0	0	0	0	0	0	3	144
Modifications/Revisions With Acreage	0	0	0	0	0	0	0	0	0	0	0	0
Modifications/Revisions Without Aereage	20	20		0	0		0	0		0	0	
Transfers/ Reinstatements	1	0		0	0		0	0		0	0	
Renewals	13	1		0	0		2	0		15	1	
Prespecting Permits	3	3		0	0		0	0		3	3	
Prospecting Letter of Intent	3	3		0	0		0	0		3	3	
Operators License Original	1	1		2	2		0	0		3	3	
Operators License Renewals	27	26		5	5		0	0		32	31	
Totals	71	58	267	7	8	32	2	0	0	80	66	299

FOR THE CALENDAR YEAR 2003 LAND RECLAMATION COMMITTEE

Members:

The following members served on the Land Reclamation Committee during 2003:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

David Fluke (Chairman), Water Management Administration Stephen M. Layton, Bureau of Mines

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Jim Mullan, Wildlife Division Robert Webster, Forestry Division Alan Klotz, Freshwater Fisheries

CITIZEN REPRESENTATIVES

Edgar Harman, Garrett County Robert Davis, Allegany County

COUNTY REPRESENTATIVES:

Margaret Jamison, Garrett County Tim Camey, Allegany County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

Craig Hartsock, Allegany Soil Conservation District Shaun Sanders, Garrett Soil Conservation District

COAL INDUSTRY REPRESENTATIVES:

Vaughn Miller Tim Schwinabart

FOR THE CALENDAR YEAR 2003 FUNCTIONS AND DUTIES OF THE LAND RECLAMATION 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 2002, the Land Reclamation Committee conducted site visits on 6 days. These visits included field reviews of 4 proposed mining sites and 23 revegetation sites to evaluate the success of the revegetation.

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;
- 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 mine lands.

During 2003, the Land Reclamation Committee met 6 times. During these meetings, the Land Reclamation Committee approved 4 reclamation plans, evaluated 326 acres of revegetation eligible for Phase II bond release, approved 176 acres as meeting the standards for release, and approved 2 reclamation plan changes.

	Reclamation Results Calendar Year 2003	
Bond Release Phase	Applicable Performance Standard	Acreage Released
Phase I	 Area restored to Approximate original contour Topsoil replaced Area seeded and mulched Completion of all reclamation work on the permit or the open acre limit is reduced 	29
Phase II	 Revegetation established in accordance with approved reclamation plan and standards for success of revegetation met The lands are not contributing suspended solids to stream flow or runoff outside the permit area Temporary drainage control structures are removed or all permanent structures are inspected and approved Land Reclamation Committee has inspected and approved the revegetation on the area 	61
Phase III	 Postmining land use/productivity restored Successful permanent vegetation established Groundwater recharge, quality and quantity restored Surface water quality and quantity restored Applicable bond liability period has expired 	47

FOR CALENDAR YEAR 2003 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 Frogram 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 2003, grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provided funds for the following abandoned mine land reclamation projects.

AML Projects Under Construction During 2003

1.	Shallmar Co	al Refuse Stabilization Project
	Location:	Town of Shallmar, Garrett County, MD
	Size:	26 Acres
	Nature:	Stabilization of approximately 26 acres of abandoned coal refuse and collection and routing of Acid Mine Drainage to eliminate health, safety, and environmental hazards associated with the site.
	Cost:	\$ 1,202,523.00
	Fund Source:	Federal/State AML Reclamation Fund
	Status:	100% Complete
2.	Spruce Hollo Location:	w Abandoned Mine Reclamation Project 1 mile east of Clarysville, Allegany County
	Size:	6 Acres
	Nature:	Removal of an abandoned railroad embankment to eliminate blockage to the stream channel of Spruce Hollow and protect downstream residences and property from flooding.
	Cost:	\$ 246,771.00
	Fund Source:	Federal/State AML Reclamation Fund
	Status:	100% Complete

3. Kitzmiller Coal Waste Stabilization Project

Location:	1/2 mile east of Kitzmiller, Garrett County
Size:	16 Acres
Nature:	Reclamation of two abandoned coal refuse piles to eliminate
	blockage to the stream channel of the North Branch of the Potomac
	River, and eliminate health, safety, and environmental hazards
	associated with the site.
Cost:	\$ 1,775,566
Fund Source:	Fed/State AML Reclamation Fund (\$1529626.02)
	Water Quality Restoration Loan (\$245939.98)
Status:	100% Complete

4. Bear Hill Road Abandoned Mine Reclamation Project

Location:	1.5 miles southwest of Jennings, Garrett County
Size:	3 acres
Nature:	Stabilization of approximately 3 acres of abandoned coal refuse, stabilization of 200 linear feet of stream channel and floodplain, and collection and routing of Acid Mine Drainage to eliminate health, safety, and environmental hazards associated with the site.
Cost:	\$ 78,135.00
Fund Source:	Federal/State AML Reclamation Fund
Status:	100% complete

5. Oak Hill Landslide Stabilization Project

Location:	1/2 mile north of Lonaconing, Allegany County
Size:	6 Acres
Nature:	Stabilization of a coal refuse landslide to eliminate blockage to the stream channel of Georges Creek, and protect adjacent residences from flooding. Project includes treatment of AMD emanating from
	an abandoned deep mine portal.
Cost:	\$ 575,000
Fund Source:	Federal/State AML Reclamation Fund
Status:	95% Complete

Bond 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 2003

1. Oliver Permit # 233 Mine Forfeiture Reclamation Project

Location:	.5 miles east of Barton, Allegany County, MD
Size:	20 Acres
Nature:	Reclamation of 20 acres of surface coal mine bond
	forfeiture land associated with the Oliver Mining Company
	Permit SM-84-233 Bond Forfeiture. Reclamation is being
	completed in conjunction with active backfilling operations
	on Barton Mining Company, Inc. Permit SM-96-432.
Construction	Cost: \$ 168,250
Revegetation	Cost: \$ 24,000
Fund Source:	Bond Forfeiture & Bond Supplement Fund
O 1 1	1000/ 0

Status: 100% Complete

2. Jones Coal Permit 405 Mine Forfeiture Reclamation Project - Phase IV

Location:	2 miles northeast of Selbysport, Garrett Co.
Size:	5 acres
Nature:	Relocation of a road to provide access to an adjacent
	landowner. The Project construction was completed using
	the BOM Maintenance Contract and BOM revegetation
	crew. Construction represents the forth Phase of
	reclamation at the site. The final phase will be completed
	in Calendar Year 2004
	Cost: \$ 2,660.00
Revegetation	Cost: \$ 1,240.00
Fund Source:	Bond Supplement Fund
Status:	100% Complete

Deep Mine Fund Reclamation

1.

The Maryland Bureau of Mines administers the Deep Mine Fund, under the authority of Environment Article, Title 15, Subtitle 6, to reclaim deep mine related land and water problems in which there is not continuing liability or responsibility. During calendar year 2003 the Bureau completed the following projects using this fund.

Deep Mine Fund Projects Under Construction During 2003

Shriver Sul	osidence Project
Location:	.2 miles north of Frostburg, Allegany County along Borden Mine
	Road.
Size:	.1 acres
Nature:	Filled and graded a 25' deep subsidence hole in the backyard of the
	Shriver Residence.
Construction	n Cost: \$ 1,026.50

Revegetation & Stone Cost: \$1,800.00 Fund Source: Deep Mine Fund Status: 100% Complete

2. Potomac State Forest Mine Drainage Project

Location:	Potomac State Forest Headquarters along Potomac Camp
	Road, Garrett County, Maryland
Size:	.5 acres
Nature:	Installation of subsurface drains to eliminate the saturation
	of the recreation area adjacent to the State Forest
	Headquarters.
Construction	Cost: \$9,871.73
Fund Source:	Deep Mine Fund
Status:	100% Complete

STATE OF MARYLAND BUREAU OF MINES PLANNING, RESEARCH AND DEVELOPMENT SECTION

2003 CONSTRUCTION PROJECT UPDATE

Prepared By: Joseph E. Mills

WIN-MORE AMD PROJECT

PAD: Federal Grant: Location: Lonaconing, Allegany County, Maryland. Size: 2 acres. Nature, Goal, Type of Treatment System: Construction of drains to collect the AMD and discharge it in an area where it can be dealt with in a future project. Included the addition of steel slag to the ditches. Status: Complete. Contractor: Win-More Mining Construction Start: Summer 2003 Construction Completion: Summer 2003 Cost: \$24,000 for construction. Funding Source: Deep Mine Funds. BOM Coordinator: Mike Garner

ELKLICK II AMD PROJECT - (STEEL SLAG REVISIONS)

PAD: MD 212 SGA
Federal Grant: ACSI FY
Location: North side of Mt. Zion Road, Garrett County, Maryland.
Size: 2 acres.
Nature, Goal, Type of Treatment System: Add steel slag to the "cell" that was constructed last year, construct a steel slag leach bed at the discharge channel, and add steel slag to the AMD collection ditch.
Status: Complete.
Contractor: Pine Mountain Coal Company
Estimated Construction Start: Fall 2003
Estimated Construction End: Fall 2003
Estimated Cost: \$10,000
Funding Source: FY Appalachian Clean Streams Initiative Grant.
BOM Coordinator: Joe Mills

LOSTLAND RUN DOSER UPGRADES PAD: Federal Grant: ACSI FY Location: Located within Potomac-Garrett State Forest, adjacent to Lostland Run Road. Barton, Allegany County, Maryland. Size: 1 acre.

Nature, Goal, Type of Treatment System: The water intake line and intake structure was upgraded and buried along the road prevent clogging and to eliminate the damage caused by high flow events. The fence around the doser was replaced and two solid walls were constructed to reduce noise.

Status: Complete.

Contractor: Marshall Ruby and Son

Construction Start: October 2003 Construction Completion: November 2003 Cost: \$9,450 for construction. Fund Source: Appalachian Clean Streams Initiative BOM Coordinator: Joe Mills

DOSER UPGRADES

PAD: N/A

Federal Grant: ACSI FY

Location: Lostland Doser - Located within Potomac-Garrett State Forest, adjacent to Lostland Run Road. Barton, Allegany County, Maryland. Laurel Run Doser – Located on Kempton Road, where Kempton Road crosses Laurel Run, Gorman, Maryland. Gorman Doser – Located at the sewage treatment plant at Gorman, Maryland.

Size: 1 acre.

Nature, Goal, Type of Treatment System: Replace the dosing mechanism at the Lostland Doser site. Replace all motors and meters at the Laurel Run and Gorman Doser sites.

Status: Complete.

Contractor: Environmental Dosers International Construction Start: June 2003

Construction Completion: December 2003

Cost: \$48,500

Fund Source: Appalachian Clean Streams Initiative BOM Coordinator: Joe Mills

FOR CALENDAR YEAR 2003

MINE FOREMAN AND FIRE BOSS EXAMINATIONS AND CERTIFICATIONS

The number of Mine Foreman and Fire Boss applicants examined and certified from 1989 through 2003 are identified below.

	APPLICANT	S EXAMINED	APPLICANTS	6 CERTIFIED
YEAR	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
2003	0	0	0	0
2002	12	2	12	2
2001	0	0	0	0
2000	14	8	14	8
1999	17	5	17	5
1998	13	5	13	5
1997	18	5	18	5
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

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

INSPECTION AND ENFORCEMENT ACTIVITIES 1999-2003

TYPE OF ACTION	1999	2000	2001	2002	2003
Inspections	914	819	784	960	919
Notices of Violations	7	12	6	9	19
Cessation Orders	0	3	0	1	4
Citizen Complaints	23	36	60	48	27
Bond Forfeitures	0	0	1	0	0

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*
3 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 22	1956 1956	Schell Mining Company, Inc.** Savage Coal Company*
22	1956	Moran Coal Company*
23	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	United Energy Coal, Inc.
41	1958	Buffalo Coal Company, Inc.*
42	1958	Casey Construction Company**
43	1958	Sara-Ki Coal Company, Inc.*

Permit	Year	
No.	Issued	Permittee
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.**
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*

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Permit	Year	-
No.	issued	Permittee
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 Comany*
102	1961	C.A. Liller Company*
103	1961	Cross & Brumage Coal Company*
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* W.R. Nethken and Company, Inc.*
126	1964	
127 128	1964 1964	Mack Coal Company* J.R. Thrasher Contracting & Stripping Co.*
129	1964	J. Russell Cravener*
130	1964	Chelsie A. Liller*
130	1964	The Georges Creek Lumber Company*
132	1964	Brenneman Brothers*
133	1965	W.R. Nethken and Company, Inc.*
133	1965	Richards and Parnell Coal Company*
134	1965	William Brashear*
155	1900	

Permit	Year	
No.	Issued	Permittee
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	Shailmar Coal Company, Inc.*
141	1966	Randall Robertson**
142	1966	Ace Dniling 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 Duppstadt)*
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*
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.*
170 171	1970 1970	Russel Shafer* 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 Duppstadt*
179	1971	Somerset Excavating, Inc.*
180	1971	Ayers Coal Company*
181	1971	Delta Mining, Inc.*
101	1971	bow mining, no.

Permit <u>No.</u>	Year Issued	Permittee
182	1971	Patriot Mining Company, Inc.*
183	1971	Chief Coal Company*
184	1971	Cobra Mining, Inc.
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. Fetteroif Coal Company, inc.***
195	1972	Buffelo Coel Company, Inc.*
196	1972	Bessemer Iron & Coal Company*
197	1972	Grafton Coal Company*
198	1972	Jet Fuel Coal Company*
19 9	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*
207	1972	United Energy Coal, Inc.
208	1973	Sanner Bros. Coal Company*
209	1973	Deita 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	Bridgevlew 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**

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Permit <u>No.</u>	Year Issued	Permittee
227	1974	Winner Bros. Coal Company, Inc.*
228	1974	Bittinger Coal Company*
229	1974	Charles M. Filsinger*
230	1974	G&H Coal Company, Inc.*
230	1974	Hi-Note, Inc.*
231	1974	Buffalo Coal Company, Inc.*
232	1974	Oliver Mining Company**
233	1974	Clise Coal Company
234	1974	Markat, inc.*
235	1974	Delta Mining, Inc.*
230	1974	Bridgeview Coal Company*
237	1974	Bumham Coal Company, Inc.*
230	1974	Highland Mining*
239	1974	Buffalo Coal Company, Inc.*
240	1975	Buffalo Coal Company, Inc.*
241	1975	
242	1975	Hopwood Strip Mine, Inc.** Ponderosa Coal Company, Inc.*
243	1975	Markat, Inc.*
244	1975	Phillips Coal, Inc.*
245	1975	
240	1975	Lambert Coal Company*
		United Energy Coal, Inc.
248 249	1975	Buffalo Coal Company, Inc.* Cobra Fuels*
249 250	1975 1975	Laoc Coal Company*
250	1975	
251	1975	Tower Resources, Inc.*
252	1975	Phillips Coal, Inc.* Pine Mt. Coal Company*
253	1975	T.G.&C. Coal Company*
255	1975	Allegheny Mining Company*
255	1975	Bridgeview Coal Company*
257	1975	A&R Coal Company
258	1975	Clinton Coal Company**
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*
209	1975	Clise Coal Company*
270	1975	A&R Coal Company*
271	1975	Action Mining, Inc.*
212	1913	

Permit	Year	
No.	Issued	Permittee
		·· · ·
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.*
310	1977	Oakland Coal Company*
311	1977	Primrose Coal Company*
312	1977	R.A.K. Coal Company, Inc.**
313	1977	G&S Coal Company*
314	1977	Wilhelm Coal, Inc.**
315	1977	Clise Coal Company*
316	1977	Brawal Mining, Inc.*
317	1977	John R. Livingston**
318	1977	Winner Bros. Coal Company, Inc.*

Permit No.	Year Issued	Permittee
<u>INO.</u>	issued	Fermicee
319	1977	John Duckworth Coal Company*
320	1977	Kelley Enterprises*
321	1978	Delta Mining, Inc.*
322	1978	Bridgeview Coal Company*
323	1978	Ayers Coal Company*
324	1978	John Duckworth Coal Company*
325	1978	G&S Coal Company, Inc.*
326	1978	Buffalo Coal Company, Inc.
327	1978	Buffalo Coal Company, Inc.*
328	1978	Buffalo Coal Company, Inc.
329	1978	Winner Bros. Coal Company, Inc.*
330	1978	Inter-State Lumber Company*
331	1978	R.A.K. Coal Company***
332	1978	Seneca Mining Company*
333	1978	Westvaco Corporation*
334	1978	Buffalo Coal Company, Inc.*
335	1978	Inter-State Lumber Company**
336	1978	Inter-State Lumber Company*
337	1978	Kirby Energy, Inc.*
338	1978	Barton Mining Company, Inc.
339	1978	Wilhelm Coal, Inc.*
340	1978	Fetterolf Mining, Inc.*
341	1979	Eastem Mining Systems, Inc.**
342	1979	Primrose Coal Company*
343	1979	L.C. Coal Company*
344	1979	Bridgeview Coal Company*
345	1979	Delta Mining, Inc.**
346	1979	Inter-State Lumber Company*
347	1979	Kelley Enterprises*
348	1979	Schwinabart & Green, Joint Venture*
349	1979	Wilhelm Coal, Inc.**
350	1980	Bridgeview Coal Company*
351	1980	Winner Bros. Coal Company, Inc.*
352	1980	John Duckworth Coal Company*
353	1980	Winner Bros. Coal Company, Inc.*
354	1980	Brawal Mining, Inc.*
355	1980	Hi-Note, Inc.*
356	1980	G&S Coal Company, Inc.***
357	1980	Richard Duckworth Coal Company*
358	1980	Bridgeview Coal Company*
359	1980	Buffalo Coal Company, Inc.
360	1980	Buffalo Coal Company, Inc.*
361	1980	Pamela Mines, Inc.**
362	1980	Alpha Mining, Inc.*
363	1980	Pamela Mines, Inc.**

Permit <u>No.</u>	Year Issued	Permittee
364	1980	John Duckworth Coal Company*
365	1980	G&S Coal Company, Inc.
366	1980	Buffalo Coal Company, Inc.*
367	1980	Buffalo Coal Company, Inc.
368	1980	United Energy Coal, Inc.
369	1980	Bittinger Coal Company*
370	1982	Keystone Mt. Development Company*
371	1982	Eagle Mining, Inc.*
372	1982	John Duckworth Coal Company
373	1982	Kirby Energy, Inc.
374	1982	Winner Bros. Coal Company, Inc.
375	1982	Win-More Mining & Construction Company
376	1982	Jones Coal, Inc.**
377	1982	Allegheny Mining Corporation*
378	1982	Delta Mining, Inc.**
379	1982	Masteller Coal Company*
380	1982	Fairview Coal Company (Repermitted 399)*
381	1982	Richard Duckworth Coal Company*
382	1983	Pine Mt. Coal Company*
383	1983	Allegheny Mining Corporation*
384	1983	Evans Coal Company*
385	1983	Winner Bros, Coal Company, Inc.
386	1983	Jones Mining, Inc.*
387	1983	Hilltop Construction Company**
388	1983	Fetterolf Mining, Inc.*
389	1983	Winner Bros. Coal Company, Inc.*
390	1983	C.J. Merio, Inc.*
391	1983	Oak Springs Coal Company*
392	1984	Westvaco Resources, Inc.*
393	1984	Patriot Mining Company, Inc.
394	1984	Action Mining, Inc.*
395	1984	Stan-Jan Excavating, Inc.*
396	1984	Allegheny Mining Corporation*
397	1985	Michael R. McGowan*
398	1985	Brashear Coal Company
399	1985	Fairview Coal Company
400	1985	Delta Mining, Inc.*
401	1985	Buffalo Coal Company, Inc.***
402	1985	Pine Mt. Coal Company*
403	1985	T.D. Mining Company**
404	1986	Clise Coal Company
405	1986	Jones Coal, Inc.**
406	1986	Patriot Mining Company, Inc.*
407	1986	United Energy Coal, Inc.
408	1986	Tri Star Mining, Inc.*
409	1986	Buffalo Coal Company, Inc.*

Permit No.	Year Issued	Permittee
		· · · · · · · · · · · · · · · · · · ·
410	1987	J. Walter Wassell*
411	1987	Jenkins Development Company
412	1987	John Duckworth Coal Company***
413	1988	Buffalo Coal Company, Inc.*
414	1989	United Energy Coal, 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	United Energy Coal, 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.
428	1997	Mettiki Coal, LLC
429	1997	Tri Star Mining, Inc.
430	1998	G&S Coal Company, Inc.
431	1998	Patriot Mining Company, Inc.
432	1999	Barton Mining Company, Inc.
433	1999	Win-More Mining & Construction
434	1999	Tri Star Mining, Inc.
435	2000	G&S Coal Company, Inc.
436	2000	Cobra Minining, Inc.
437	2001	Cobra Mining, Inc.
438	2001	Mountaineer Mining Corp.
439	2001	United Energy Coal, Inc.
440	2001	G&S Coal Company, Inc.
441	2002	Millennium Resources, LLC
442	2002	Buffalo Coal Company, Inc.
443	2002	Vindex Energy Corporation
444	2003	Tri Star Mining, Inc.
DEEP MINE	S	
DM 101	1977	Mettiki Coal, LLC
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	Anker West Virginia Mining Co., Inc.
DM 109	1991	Patriot Mining Company, Inc.
DM 110	1992	Masteller Coal Company
DM 111	2000	George Creek, Inc.

DM 112	2003	Backbone Mountain, LLC
Permit	Үеаг	
No.	Issued	Permittee
TIPPLES AN	D 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	United Energy Coal, Inc.
SC-83-111	1983	Westvaco Corporation*
SC-83-112	1983	United Energy Coal, Inc.*
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