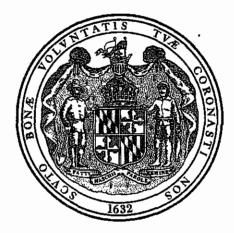
CALENDAR YEAR 2001 EIGHTIETH ANNUAL REPORT of the MARYLAND BUREAU OF MINES

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HON. PARRIS N. GLENDENING Governor of Maryland

DEPARTMENT OF THE ENVIRONMENT JANE T. NISHIDA, Secretary

WATER MANAGEMENT ADMINISTRATION ROBERT SUMMERS, Director

MINING PROGRAM C. EDMON LARRIMORE, Program Manager

> BUREAU OF MINES JOHN E. CAREY, Director



MARYLAND DEPARTMENT OF THE ENVIRONMENT 2500 Browning Highway Baltimore, Maryland 21224 410-631-3000 D 1-800-633-6101 D http://www.mde.state.md.us

Water Management Administration Parris N. Glendening Bureau of Mines 160 South Water Street * Frostburg, Maryland 21532 Governor Telephone: (301) 689-6104

Jane 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 2001, Maryland operators produced 4,771,802 tons of coal. Surface coal mine production was 1,488,062 tons ----826,013 in Allegany County and 682,049 in Garrett County. Deep coal mine production was 3,283,740 tons, all in Garrett County.

Eighty-six permitting actions were received and 78 permitting actions were issued, including issuance of five original permits and two permit amendments totaling 187 acres.

Two hundred five acres were affected, 306.5 acres backfilled, and 274.5 acres planted. Bond was totally released on 196 acres. Seven permits were completed, with bond being totally released. There was one permit forfeited.

Six hundred eighty-four inspections were performed on coal mining operations. Six Notices of Violations were issued. Sixty Citizen Complaints were received and investigated.

The Land Reclamation Committee met six times and approved two reclamation plans. The Committee also evaluated the revegetation on 138 acres eligible for Phase II bond release and approved 99 acres as meeting the standards for release, and approved 2 reclamation plan changes.

During 2001, there was one abandoned mine land project under construction which included 6 acres and totaled \$170,000. There was one forfeiture project under construction, which included 20 acres and totaled \$176,000.

FOR CALENDAR YEAR 2001

MINING PROGRAM

C. Edmon Larrimore	Program Manager, Mining Program
Ruth D. Booth.	Administrator

BUREAU OF MINES

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

Abandoned Mine Lands Section

Michael P. Gamer	Section Chief
John C. Ellers	Energy Resources Administrator
Bradley Nee	Water Resources Engineer
Randall Matthews	Conservation Associate

Permitting and Regulatory Section

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Stephen M. Lay	to	n	 , .					•	•	•								
Mark Carney			•	•			•	•	•	•	•	•	•					
Alan V, Hooker			•	•			•								 		•	
Salile Shuman.															 			

Planning, Research & Development Section

Tobias C. Joy . Joseph E. Mills.

Laboratory & Support Services

Mary Lynn Pegg.	•	•	•	•		-			•		•	•			•	•	•	•	•	•		•				
Julie O'Connor	•	•	•	•	•	·	•	٠	•	٠	•	•	•	•	•	•	•	•	•	•	•		•	•	•	·
J. Edward Lyons.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•			•				•
Mining Inspection	2	17	r	ſ	С	à	n	۱Ľ	h	la	lП	С	Ð													

Raymond Karlstrand		•	•	•	•	•		•						
Larry Johnson														
Thomas P. Murray.	,													

Section Chief Water Resources Engineer Energy Resources Administrator Administrative Specialist

Section Chief Natural Resources Planner Natural Resources Planner

Laboratory Scientist Chemist Computer User Support Specialist

Field Supervisor Env. Compliance Specialist Env. Compliance Specialist

FOR THE CALENDAR YEAR 2001 TONNAGE BY COAL SEAMS

Allegany County

Waynesburg																															
They house g		•	•	•	٠	•	• •		•	٠	•	• •	•	٠					•	•											48,621.47
Sewickley (Tyson)																															76,703,68
Redstone																															222,647,37
Pittsburgh																															342,053.79
Morantown																															61,747.23
L. Pittsburgh																															57,361.31
Franklin																								:						-	16,878,36
Harlem																													-	-	10,070.30
Bakerstown																															0
Freeport																								•							0
Kittanning																								•							0
Federal Hill																								-							0
	÷	٠	•	•	•	• •	•	•	·	•	• •	•	·	•	 ·	·	٠	·	•	• •	-	•	·	•		•	•	• •			0
Barton	•	•	•	•	• •				•					•					•									 			0

Garrett County

a		
Sewickley	8,963.	39
Pittsburgh	75,293.	41
Morantown	7,194.	
L. Pittsburgh	14,149.	
Franklin	38,762.	
Barton		
Elk Lick		21
Harlem	•••••••••••••••••••••••••••••••••••••••	
	····· · · · · · · · · · · · · · · · ·	
Bakerstown	734,921.5	58
Brush Creek		
Freeport		21
Kittanning	14,812.0	
Redstone	5,574.4	
	TOTAL	27

TONNAGE BY BASIN

Lower Youghiogheny		0
Upper Youghingheny		Ö
Casseman		. 0
Casselman (Cherry Creek)		Ō
Potomac		3.531.916.23
George's Creek		1.239.886.25
	TOTAL	4,771,802.48

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FOR THE CALENOAR YEAR 2001 REPORT OF THE MARYLAND BUREAU OF MINES

Coal production in Maryland during 2001 totalled 4,771,802.48 tons. Production in 2001 represents an Increase of 150,198.09 tons from the 2000 production of 4,821,804.39 tons.

SUMMARY OF 2001 STATISTICS1

COAL PRODUCTION

Mining Method	Allegany County	Garrett County	Total
Strlp	826,013.21	662,049.28	1,488,062.49
Deep	.00	3,283,739.99	3,283,739.99
Auger	.00	.00	.00
TOTALS	828,013.21	3,945,789.27	4,771,802.48

EMPLOYEES²

Type of Mine	Allegany County	Garrett County	Total
Deep	0	245	245
Strip	138	67	205
TOTALS	138	312	450

¹Reports submitted by Maryland mining operators.

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

COAL PRODUCTION. MINING AND RECLAMATION STATISTICS FOR ALLEGANY & GARRETT COUNTIES'

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"This table includes all parmits on which there was production, mining, backfilling or planting activity. This table does not which there was production or activity occurred.

ALLEGANY COUNTY

Operator		COBI SEBM		PRODUCTION (TONB)		ACTES	Acres	
	Number	Worked	Deep	Surb	Auger	Affected	Backfilled	Planted
	i					4.0	0	9.0
	330	uginganity		2,6,049.11			0.0	
	427	Pittsburgh		105,618,20		22.0	0.0	00
		L. Pittsburgh		22,821.70			;	:
		Morantown		33,566,98		:	:	:
		Sewickley		5,278.58		'	t	ł
		Redstone		35,897.08		1	:	'
	432	Plitstrugh		0.00		7.0	0.0	0.0
Brashear Coal Mines	264	Franktin		8,806.07		3.0	0.0	0.0
	436	Franktin		8,072,29		4.D	0.0	0.0
Buffato Coal Co., Inc	422	Pittsburgh		0.00		0.0	9.0	6.0
Clise Coal Co., Inc	213	Waynesburg		9,302,08		10	0.0	0.0
Cobre Mixing, Inc	184	Plasburgh		1.089.00		0.0	0.0	0.0
	437	Plttsburgh		23.522.40		10.0	•	;
		Morandown		5,675.30		;		
Fairview Coal Co Inc	365	Pittstrugh		3,592.62		0.0	9.0	9.0
		Redstone		5,295.52		;	I	I
		Moranitown		544.12		1	'	:
G & S Coal Company, Inc.	430	Pittetungh		17.,868.40		80	15.0	15.0
		Morastown		7,206.43		ł	ł	1
	440	L.Pittsburgh		5,236.13		60	0.0	0.0
Jenkins Development Co., Inc.	411	Waynerburg		39,229.39		9.0	9.6	9.5
Mountaineer Mining Corp	438	Personal P		1,380.13				
		Macanatrum		1,049,62				
Tn-Star Mining, Inc	419	Pittsburgh		28,784.49		34.0	12.0	12.0
		L. Pittsburgh		664.37		:	ŧ	;
		Morantown		7,637,60		:	•	:
		Sewichtery		16,126,60		;	,	1
		Redstone		13.700.57		,	;	1

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	Permit	Coal Seam		PRODUCTION (TONS)	ACres	Acres	Acres
Operator	Rumber	Worked	Oeep	Strip Auger	Affected		Ranted
United Energy Coal, Inc.	40	Plttsburgh		35,843,24	38.0	28.0	48.0
		Redistone	*	51,367 14	'	1	1
		Sewickley		4,061.22	'	•	'
		Morantown		609.55	1	•	1
	207	Pittsburgh		54,900.42	28 C	0.0	0.0
		Redstone		36,064.06	1	1	'
		Sewichtey		6,644,38	1	;	'
		Morantown		228.70	1	:	:
÷	247	Pitteburgh		36,914.18	22.0	47.D	47.0
		Radstone		23,068.56	ŀ	;	'
		Sewicidey		77,401.07	'	,	i
	368	Redstone		534.80	0.11	30.0	30.0
		Sewicklay		8,657.75	ı	:	1
	414 .	Redstone		22,414.66	0.0	0.4	0.0
		Servicidery		5,908.45	,	ł	'
	423	Sewicitley		00.0	27.0	14.0	14.0
	439 .	Plasturgh		26.285.76	0.0	0.0	0.0
		Redstone		30,461.17			
		Sewickley		12,627 32			
		Morantown		1,310,24			
Win-More Mining & Const. Co., Inc.	433	Pittsburgh		6,275.05	10	00	0.0
		Redstone		3,763.91	,	ı	1
		Morantown		3,858.69	1		'
TOTAL ALLEGANY COUNTY					225.00	177 60	104 60

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GARRETT COUNTY

	Permit	Coal Scam	₩d	PRODUCTION (TONS)	Acres			Acres
Operator	Number	Worked	Deep	Ship Auger	sr Affected		Backfilled	Planted
Buffalo Coal Co., Inc	367	Freeport		00.0		40		23.0
G & S Coal Company. Inc.	365	U.Freeport		33,062,97		10.0	35.0	35.0
		U.Nittanning		14,812,06		,	;	'
	421	Franklin		11.937 63		16.0	0.0	0.0
	Å	Bakerstown		9,677,58		18.0	0.0	0.0
George Creek, Inc	DM111	Barbin	5,367,75					
Patriot Minung Co. Inc.	DM109	Bekerstown	546,558,00			00	0.0	0.0
	124	Gekaratown		178,686.00		72.0	22.0	22.0
Pine Mountain Coal Company	424	Pitteburgh		7.563.52		20	3.0	3.0
		Morantown		2,714,36		t	I	•
		Redstone		1.201.72		,	4	1
Tn-Star Mining, Inc	6119	Pittsburgh		67.739.69	(See	8	Altegany	County)
		L. Pittathurgh		14,149,66		:	ı	ł
		Redstone		4.372.75		1	I	1
		Morantown		4,479,67		1	ł	1
		Sewickley		8,963,39		;	1	•
	429	Barton		275,873,46		23.0	41.0	0.0
	434	Frankin		26.624.42		27 0	0.0	0.0
Mettiki Coal Corporation	101MG	Freeport	2,731,814,24			00	0.0	0.0
TOTAL GARRETT COUNTY			3,283,739,99	662,049,25	1	172.00	129,00	83.00
TOTAL BOTH COUNTIES			3,283,739.99	1,488,062,48	ч	407.00	306.30	274.50

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FOR CALENDAR YEAR 2001 SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 2001 (By Geological Basin)

ACRES THIS YEAR

					Bond
-	Permitted	Affected	Backfilled	Planted	Released*
Allegany County:					
Georges Creek Basin	186.00	235.00	177.50	191.50	128.00
Garrett County:					
Georges Creek Basin	0.00	52.00	44.00	3.00	0.00
Potomac River Basin	1.00	120.00	85.00	80.00	68.00
Casselman River Basin**	0.00	00.0	0.00	0.0	0:00
Cherry Creek Basin	00.0	0.00	00.0	0.00	0.00
Upper Yough Basin	0.00	0.00	0.00	0.00	0.00
Lower Yough Basin	0.00	00.0	0.00	0.00	00:0
TOTAL GARRETT COUNTY	1.00	172.00	129.00	83.00	68.00
TOTAL BOTH COUNTIES	187.00	407.00	306.50	274.50	196.00

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Atlegany County:					
Georges Creek Basin	6,924,00	5,715.00	5,185.47	5,272.30	4,367.00
Garrett County:		•			
Georges Creek Basin	2,613.00	2,518.95	2,306.85	2,531.01	2,609.60
Potomac River Basin	4,528.00	3,466.70	3,616.80	3,735.70	3,809.40
Casseiman River Basin**	1,416.60	1,135.00	1,260.50	1,142.20	1,265.80
Cherry Creek Basin**	00'299	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	1078.16	855.40
TOTAL GARRETT COUNTY	10,775.60	8,863.50	9,113,46	9,222.17	9,461.65
TOTAL ALLEGANY COUNTY	17,699.60	14,578.50	14,298.93	14,494,47	13,828.65

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

FOR THE CALENDAR YEAR 2001

Members:

The following members served on the Land Reclamation Committee during 2001:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

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

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Ed Golden, Wildlife Division (01/01 - 09/01) Jim Mullen, Wildlife Division (09/02 --12/31) Robert Webster, Forestry Division Alan Klotz, Freshwater Fisherles

CITIZEN REPRESENTATIVES

Edgar Harman, Garrett County Robert Davis, Allegany County

COUNTY REPRESENTATIVES:

Margaret Jamison, Garrett County Tim Carney, Allegany County

SOIL CONSERVATION DISTRICT REPRESENTATIVES.

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

.

COAL INDUSTRY REPRESENTATIVES:

Jerry Duckett Tim Schwinabart

					FING A DAR Y							
T ype of Application		Surface Mines		U	ndergrou Mines	and		Other Facilitie	s		Totals	
	App. Rec.	lssned	Acres	App. Rec.	Issued	Acres	App. Rec.	luned	Acres	App. Rec.	linned	Acres
Original Permits	5	4	161	D	0	0	0	0	D	5	4	161
Permit Increments	0	o	0	0	0	0	0	0	0	0	0	0
Modifications/Revisions With Acreage	2	2	26	0	0	Ð	0	0	0	2	2	26
Modifications/Revisions Without Acreage	31	24		3	3		0	0		34	27	
Transfers	0	0		0	1		0	0		0	1	
Renewala	7	4		0	1		1	0		8	5	
Prospecting Permits	1	ı		0	0		0	0		1	1	
Prospecting Letter of Intent	7	7		0	0		0	Ø		7	7	
Operators License Original	1	1		0	Ø		0	0		1	1.	
Operators License Renewals	24	26		4	4		0	Đ		28	30	
Totals	78	69	187	7	9	0	1	0	0	86	78	187

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FOR THE CALENDAR YEAR 2001 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 2001, the Land Reclamation Committee conducted site visits on 4 days. These visits included field reviews of 2 proposed mining sites and 9 revegetation planting reports.

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
- Recommend research and cost-sharing projects to promote optimum revegetation of surface coal mined lands.

During 2001, the Land Reclamation Committee met 6 times. During these meetings, the Land Reclamation Committee approved 2 reclamation plans, evaluated 138 acres of revegetation eligible for Phase II bond release, approved 99 acres as meeting the standards for release, and approved 2 reclamation plan changes.

	Reclamation Results Calendar Year 2001	
Bond Release Phase	Applicable Performance Standard	Acreage Released
Pháse I	Area restored to Approximate original contour Topsoll replaced Area seeded and mutched Completion of all reclamation work on the permit or the open acre limit is reduced	20
Phase II	 Revegetation extension 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 	203
• :•	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	
Phase III	Postmining land use/productivity restored Successful permanent vegetation established	
r 11685 111 - ,	 Groundwater recharge, quality and quantity restored 	196
-	 Surface water quality and quantity restored 	
	 Applicable bond liability period has expired 	

FOR CALENDAR YEAR 2001 ABANDOWED 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 2001, 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 2001

- i. Warnick Road Water Supply Replacement Project Location: .5 mile south of Midland along Warnick Road @ Gilmore, Allegany County. Size: 6 Acres
 - Nature: Extension of the Lonaconing Public Water Distribution System to provide a potable water supply to 6 residents whose water supplies had been impacted by abandoned mine drainage.
 - Cost: \$ 170,000.00 Fund Source: Federal/State AML Reclamation Fund Status: 20% complete as of 12/31/01

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 2001

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: \$ 152,000,00
	Revegetation Cost: \$ 24,000.00
	Fund Source: Bond Forfeiture and Bond Supplement Fund
	Status: 10% Complete as of 12/31/01

Deep Mine Fund Reglamation

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 2001 the Bureau completed the following projects using this fund.

Deep Mine Fund Projects Under Construction During 2001

1,	Franklin Hill	Bench Mine Drainage Control Project
	Location: 1.3	miles northwest of Brophytown, Allegany
	Cou	nty on the west side of MD State Rt. 36 on
		nklin Hill.
	Size: 1 A	cre
	stru abai elin	tallation of a surface drainage conveyance acture to control drainage from the adoned Franklin coal mine beach, to ainate flooding to Brophytown, Allegany
	Cou	
	Cost:	\$ 6,019.93
	Fund Source:	Deep Mine Fund
	Status:	Completed October 15, 2001

FOR CALENDAR YEAR 2001 ACID MINE DRAINAGE RECLAMATION

AMD Projects Under Construction During 2001

TEETS AND PROJECT 1.

Location: South on Rock Lodge Road approximately 1 mile from the intersection of Mosser Road.

Located on the west side of Rock Lodge Road. Size: 1 acre.

Reconstruction of the old SAPS Cell, addition Nature: of a PVC liner in the cell, construction of a large cell and plastic liner, placement of limestone gravel into both cells, and inoculation of the system with Pyrolucite. Cost: \$ 180,000.00

- Fund Source: Appalachian Clean Streams Initiative Grant, OSM Cooperative Grant to Western MD. RC&D.
- Complete as of 12/31/01 . Status:

CHERRY CREEK DOSER PROJECT 2.

Location: West side of Rock Lodge Road, Garrett County, Maryland.

Less than 1 acra. Siza:

- Installation of a Limestone Doser on the Nature: lower section of Cherry Creek. The Doser will abata the impacts of the AMD and the natural acids of Cherry Creek on the lower section of the stream. The stream will become the major spawning stream for Brown Trout in the Deep Creek Lake drainage basin (personal communications with Kan Pavol, Regional Fisheries Biologist).
- \$150,000 for construction (astimation by BOM Cost: staff)
- Fund Source: All funds were supplied by the Sprenger -Lang Foundation.
- Complete as of 12/31/01 Status:

ELELICE II AND PROJECT - (STEEL SLAG REVISIONS) 3.

- Location: North side of Mt. Zion Road, Garrett County, Maryland. Size: 2 acres.
- An additional cell was developed to Nature: facilitate the use of Steel Slag to increase the alkalinity of the discharge.

\$5,000 Cost:

- Fund Source: FY Appalachian Clean Streams Initiative Grant.
- Complete as of 12/31/01. Status:

- 4. NEFF RUN AMD, HABITAT AND FLOOD IMPROVEMENT PROJECT (WELL RETRO-FIT}
 - Location: One mile east of Midland off of Dan's Nountain Road. Located on the north side of the road.
 - Size: 1,200 lineal feet of stream. One acre of field for the leach bed.
 - Nature: Develop existing monitoring wells so that Water samples may be taken.

Cost: \$9,351

Fund Source; Appalachian Clean Streams Initiative Grant Status: Complete as of 12/31/01.

5. MILL RUN DIVERSION WELL

Location: Mill Run at Barton, Allegany County, Maryland.

- Size: 1 acre.
- Nature: Grading of the site (BOM portion of the project). Construction of a Carbon Dioxide/ Limestone Purge Diversion Well, construction of a limestone storage bin and a building to house the diversion wells (Conservation Fund portion of the project). This system is designed to treat about 75 gallons of AMD per minute with a pH of 3.5 and an iron concentration of 50 mg/l to pH 7.0 and iron of less than 3 mg/l.
- \$150,000 Cost:

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- Fund Source: \$5,000 from Deep Mine Funds to excavate a foundation for the housing and machine (BOM funds). \$115,000 from the Conservation Fund via a Grant from OSM. \$15,000 from EPA 104(b)(3) grant to MDE/BOM. \$15,000 from Appalachian Clean Streams Initiative Grant Status: Complete as of 12/31/01.
- 6. MILL RUN DIVERSION WELL (AND PIPE SYSTEM)
 - Location: Mill Run at Barton, Allegany County, Maryland.
 - Size: 1 acre.
 - Nature: This portion of the project involved installation of a pipe to convey the AMD from the mine mouth to the holding tank and to bypass any run-off water around the collection tank. Cost:

\$7,875

Fund Source: Appalachian Clean Streams Initiative Grant Status: Complete as of 12/31/01.

7. ELKLICK III AMD PROJECT (PLASTIC LINER)

Location: South side of Mt. Zion Crosscut Road, Garrett County, Maryland. Size: 2 acres. Nature: Repair a leak in the first oxidizing pond and to stabilize a small landslide on the outslope of SAPS #2. Cost: \$3,500

Funding Source: Appalachian Clean Streams Initiative Grant.

Status: Complete as of 12/31/01.

ELELICE III AND PROJECT (UNPLUG AND REWORK SYSTEM) 8.

Location:	South side of Mt. Zion Crosscut Road, Garrett
	County, Maryland.
Size:	2 acres.
Nature:	SAPS #2 has stopped flowing. Operator
	reworked the system and added an additional

- set of collection pipes in the SAP Cell. Cost: \$3,940
- Funding Source: Appalachian Clean Streams Initiative Grant.
- Status: Complete as of 12/31/01.

CONRY DRY CLEANERS ACID MINE DRAINAGE PROJECT 9.

Location: 4 mile north of Lonaconing, Allegany County, Maryland.

Size: 2 acres.

Nature: Construction of collection ditches, two separate AMD discharges to 2 separate Alkalinity Producing System Cells, one oxidizing/settling pond prior to discharging into an existing drainway before discharging into Georges Creek. This system treats about 30 gallons of AMD per minute with a pH 3.0 and an iron concentration of about 30 mg/1. The resultant discharge is pH 7.0 with iron concentration of less than 3.0 mg/1 with excess alkalinity.

Cost: \$200,385

Fund Source: \$68,112 from Small Creeks and Estuaries Grant to Allegany County, \$37,273 from Appalachian Clean Streams Initiative Grant to BOM, \$95,000 from Watershed Cooperative Grant to the Western MD RC&D. Status: Complete as of 12/31/01.

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FOR CALENDAR YEAR 2001

MINE FOREMAN AND FIRE BOSS **EXAMINATIONS AND CERTIFICATIONS**

The number of Mine Foreman and Fire Boss applicants examined and certified from 1987 through 2001 are identified below.

	APPLICANT8		APPLICANTS	CERTIFIED
YEAR	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
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
1988	15	. 0	11	- 0
1987	0	Ö	10*	0

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

INSPECTION AND ENFORCEMENT ACTIVITIES 1997-2001

TYPE OF ACTION	1997	1998	1999	2000	2001
Inspections	990	1058	. 914	819	784
Notices of Violations	11	13	7	12	6
Cessation Orders	1	1	0	3	0
Citizen Complaints	7	· 24	23	36	60
Sond Forfeitures	0	0	0	0	1_

		·	Permit	Year	
			No.	Issued	Permittee
	MINU	NG PERMITS ISSUED BY YEAR AND PERMITTEE	,		<u>Extinues</u>
	(4)6) # ()		44	1958	Yantus & Zubek Cosi Company*
Permit	Year		45	1958	Moran Coal Company
No.	issued	Permittee	48	1958	Casey Construction Company**
110.			' 4 7	1958	Moran Coal Company
1	1955	The George's Creek Lumber Company*	48	1958	Moran Coal Company*
ż	1955	Allegany Engineering Company"	49	1958	Sara-Ki Coal Company, Inc.*
· 3	1955	B.M.W. Coal Company	50	1958	Laurel Creek Company, Inc.**
4	1955	Old Hampshire Coal Company, Inc.*	51	1958	D.B.&B. Coal Company**
5	1955	Car and Gotfelly Construction Co.*	52	1968	Moon and Bons"
8	1955	M.H. Bigan Coal Company"	53	1959	George L. Smith Contracting Company*
7	1955	Moran Coal Company	54	1959	The Georges Creek Lumber Company
8	1955	Allegany Engineering Company*	55	1959	Moran Coal Company
9	1955	Schell Mining Company, Inc.*	56	1959	North Branch Coal Corporation*
10	1955	B & U Coal Company	57	1959	George Coal Company**
11	1955	Morgan Contracting Company**	58	1959	Samuel Compton & Company**
12	1955	Romadate Coal Corporation*	59	1959	Hoover & White*
13	1955	Cross Fuel Company	60	1959	Laurel Creek Company, Inc.**
1 4 ·	1955	Highland Construction Company	61	1959	The Eddy Fuel Company**
15	1955	Phoenix Big Vein Coal Company	62	1959	J.R. Thrasher Contracting & Stripping Co.*
		(Repermitted 338)*	63	1959	Pittsburgh Coal Company*
18	1955	Moran Coal Company	64	1959	Mineral Coal Company, Inc., of West Virginia*
17	1955	T.J. Crambielt**	65	1959	Laural Creek Company, Inc.*
18	1955	Moscow-Georges Creek Coal Company*	86	1959	The Georges Creek Lumber Company*
19	1955 1956	J.R. Thrasher Contracting & Stripping Co.*	67	1969	Chelsie A. Liller*
20		Moran Coal Company (Repermitted 333)* Schell Mitring Company, Inc.**	68	1959	Cessey Contracting Company**
21	1956 1958	Served winning Company	69	1959	Pine Mountain Coal Company*
22 23	1958	Moran Coal Company	70	1859	Opel and Branneman*
23	1956	The Georges Creek Coal & Land Co.*	71	1959	The Georges Creek Lumber Company*
25	1957	Charles T. Clize*	72	1959	P.&J. Coal Company*
26	1957	Allegany Engineering Company*	73	1959	Casey Contracting Company**
27	1957	Goodwill Fuel Company*	74	1959	Goodwill Fuel Company*
28	1957	D.B.&B. Coal Company	75	1959	D.B.&B. Coal Company*
29	1957	Queen George's Creek Coal Company**	76	1960	Baughman Contracting Company, Inc.*
30	1957	Mack Coal Company**	77	1960	P&K Coal Company
31	1957	White Crest Coal Company, Inc.**	76	1980	Morgan Contracting Company"
32	1957	D.B.&B. Cost Company	79	1960	Buffalo Coal Company, Inc.*
33	1957	Moran Coal Company*	80	1960	Buffalo Coal Company, Inc.*
33 34	1957	Cheisle A. Liller	81	1960	Randall Robertson*
35	1957	J.E. George Trucking Company**	82	1960	Hoover & White**
38 .	1957	D.B.&B. Coal Company*	83	1980	
37	1957	J.&M. Coal Company**	- 84	1980	James E. George*
38	t 957	Casey Construction Company**	- 64		B.M.W. Coal Company, Inc.*
39	1958	Moran Coal Company*	60 86	1980	Casey Contracting Company**
40	1958	United Energy Coal, Inc.		1960	Beener Coal Company
41	1958	Buffaio Coal Company, Inc.*	87	1980	Moran Coal Company, Inc.*
42	1958	Casey Construction Company**	88	1980	D&K Coal Company*
43	1958	Sara-Ki Coal Company, Inc.*	· 89	1980	Brenneman Brothers*
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Permit	Year				Permit	Year	
No.	issued	Permittee			No.	lasued	Permittee
<u></u>	10petra	<u>i vimise</u>	•	`			
90	1960	Mack Coal Company*			138	1985	W.R. Nethken and Company, Inc.*
91	1960	Clarence Rodamar"			137	1965	G&S Coal Company, Inc.*
92	1960	James E. George*			138	1986	J.R. Thrasher Contracting & Stripping Co.*
· 93	1961	Casey Contracting Company**		,	139	1966	J.R. Thrasher Contracting & Stripping Co.*
94	1961	Winner Brothers*			140	1966	Shalimar Coal Company, Inc.*
95	1961	Meran Coal Company, Inc.*			141	1966	Randall Robertson**
96	1961	Big Vein Coal Company*			142	1986	Ace Drilling Coal Company, Inc.*
97	1981	Maryland Fuel Company, Inc.*			143	1988	Beenar Coal Company
98	1961	Yantus-Zubek Coal Company*			144	1966	Clarence Rodamer*
99	1961	J.R. Thrasher Contracting & Stripping Co.*			145	1967	Ginniman Coal Company*
100	· 1961	Trefail Bros., Inc.*			146	1967	Reymond A: Wolf Mining Company*
101	1961	Mack Coal Comany*			147	1 967	Menallen Coke Company*
102	1981	C.A. Liller Company*			148	1 967	Russel Shafer*
103	1961	Cross & Brumage Coal Company*			149	1967	Homage Cost Co. (Emmett Duppstadt)*
104	1961	Beener Coal Company			150	1967	Twin States Coal Company**
105	1981	D&K Coal Company*			151	1987	M.F. Fetterolf Coal Company, Inc.*
106	.1961	Mack Coal Company*			152	1967	Ebenaburg Coal and Clay Company*
107	1961	Yantus and Zubek*	4.7		153	1988	Raymond A. Welf Mining Co. (UPRC)*
108	1961	Potomac Mining Company*			154	1968	Michael Rostosky"
i 109	1962	Casey Contracting Company*			155	1988	Ginalman & Ware Coal Company*
110	1962	Wilhelm Coal Company*			158	1968	Harold H. Upole Coal Company"
111	1962	The Georges Creek Lumber Company*			157	1988	T.G.&C. Cosi Company, Inc.*
112	1982	Clark Coal Company*			158	1969	Clarence Rodamer Coal Company
113	1962	Casey Contracting Company*			159	1989	Michael Rostosky Coal Company
114	1962	Casey Contracting Company*			160	1969	Russel Shafar Cost Company*
115	1962	Douglas Coal Company*			161	1969	Buffalo Coal Company, Inc.*
118	1962	Red Lion Mining Corporation**			162	1969	J.R. Thrasher Contracting & Stripping Co.***
117	1962	Ebensburg Coal and Clay Company*			163	1989	Buffalo Cosl Company, Inc.*
¹ 118	1963	James E. George*			164	1989	Union Coal Company"
119	1983	Ebensburg Coal and Clay Company*			165	1970	Win-More Mining & Construction Co., Inc.*
120	1963	J.R. Thrasher Contracting & Stripping Co.*			166	1970	Ginniman Coal Company*
121	1963	Moran Coal Company, Inc.*			167	1970	Uppermen Coal Company*
122	1963	Buffalo Coal Company, Inc.*			168	1970	Frank Pulford**
123	1963	J.R. Thrasher Contracting & Stripping Co.*			169	1970	
124	1963	Win-More Mining & Construction Co., Inc.*			170	1970	Winner Bros. Coal Company, Inc.*
125	1963	Beenar Coal Company*			171	1970	Russel Shafer"
126	1964	W.R. Nethken and Company, Inc.*			172	1970	The Chief Caal Company*
127	1964	Mack Coal Company"			173		Mary Ruth Corporation*
128	1964	J.R. Thrasher Contracting & Stripping Co.*			174	1970	Oakland Coal Company*
129	1964	J. Russell Cravener*				1971	Bernard C. Drees*
130	1964	Chelsie A. Liller*			175 176	1971	Delta Mining, Inc.*
131	1964	The Georges Creek Lumber Company*		1		1971	D&K Coal Company, Inc.*
132	1964	Brenneman Brothers*			177	1971	T.G.&C. Coal Company, Inc.*
133	1965	W.R. Nethken and Company, Inc.*			178	1971	Emmett Duppstadt*
134	1965	Richards and Parnell Coal Company*			179	1971	Somerset Excavating, inc.*
134	1965	William Brashear"		•	180	1971	Ayers Coal Company*
199	1000				181	1971	Deita Mining, Inc.*

Permit	Year			0	Martin	
No.	Issued	Permittee	•	Permit No.	Year	Descrittere
				140.	issued	Permittee
182	1971	Patriot Mining Company, Inc.*		227	1974	Winner Bros. Cosl Company, inc.*
183	1971	Chief Coal Company"		228	1974	Bittinger Coal Company ^e
184	1971	Cobra Mining, Inc.	,	229	1974	Charles M. Filsinger
185	1971	Bessemer Iron & Coal Company"		230	1974	G&H Coal Company, Inc.*
188	1971	Coal Lick Coal Company		231	1974	HI-Note, Inc.*
197	1971	Phillips Big Vein Coal Company		232	1974	Buffalo Coal Company, Inc.*
188	1971	Ace Erilling Coal Company, Inc.*		233	1974	Oliver Mining Company**
189	1971	Buffelo Coal Company, Inc.*		234	1974	Clise Coal Company*
190	1971	Buffalo Coal Company, Inc.*		235	1974	Markat, Inc.*
191	1971	Keystone Coal and Development Company		236	1974	Deita Mining, Inc.*
		(Liability Assumed by Garrett County Roads Department)		237	1974	Bridgeview Coal Company*
192	1971	Ace Drilling Company, Inc.*		238	1974	Bumham Coal Company, Inc.*
193	1972	Wilhelm Coal, Inc.*		239	1974	Highland Mining*
194	1972	M.F. Fetterolf Coal Company, Inc.***		240	1974	Buffalo Coal Company, Inc.*
195	1972	Buffalo Coal Company, Inc.*		241	1975	Buffalo Coal Company, Inc.*
196	1972	Bessemer Iron & Coal Company"		242	1975	Hopwood Strip Mine, Inc.**
197	1972	Grafton Coal Company		243	1975	Ponderose Cosi Company, Inc.*
198	1972	Jet Fuel Coal Company*		244	1975	Markat, Inc.*
199	1972	Beasemer Iron & Coal Company*		245	1975	Phillips Coal, Inc.*
200	1972	Chief Coal Company		246	1975	Lambert Coal Company*
201	1972	Brashear Coal Company"		247	1975	United Energy Cost, Inc.
202	1972	Winner Bros. Coal Company, Inc.*		248	1975	Buffalo Coal Company, Inc.*
203	1972	Mary Ruth Corporation*		249	1975	Cobra Fueis*
204	1972	Grafton Coal Company"		250	1975	Laoc Coal Company*
205	1972	Chief Coal Company		251	1975	Tower Resources, Inc.*
206	1972	Upperman Coal Company*		252	1975	Phillips Coal, Inc.*
207	1972	United Energy Cotal, Inc.		253	1975	Pine Mt. Coal Company*
208	1973	Sanner Bros. Coal Company*		254	1975	T.G.&C. Coal Company*
209	1973	Delta Mining, Inc.*		255	1975	Allegheny Mining Company*
210	1973	Markat, Inc.*		256	1975	Bridgeview Coal Company*
211	1973	Oakland Coal Company*		257	1975	A&R Coal Company*
212	1973	Bessemer fron & Coal Company*		258	1975	Clinton Coal Company**
213	1973	Clise Ceal Company		259	1975	Tower Resources, Inc.*
214	1973	Inter-State Lumber Company*		260	1975	Yough Tree Farm*
215	1973	Buffaio Coal Company, Inc.*		261	1975	Russel Shafer***
218	1973	Brashear Coal Company***		262	1975	Northwest Coal Company**
217	1973	Bernard Drees Coal Company		263	1975	Allegheny Mining Corporation*
218	1973	Buffalo Coal Company, Inc.*	1	264	1975	Brashear Coal Company
219	1973	G&S Coal Company, Inc.*	•	265	1975	Bittinger Coal Company*
220	1974	Evans Coal Company*		266	1975	Delta Mining, Inc.*
221	1974	Bridgeview Coal Company		267	1975	Bittinger Coal Company*
222	1974	John Duckworth Coal Company		268	1975	Clyde Marsh Coal Company*
223	1974	Edward Mikel*		269	1975	Hungry Hollow Coal Company*
224	1974	Deita Mining, Inc.*	ì	270	1975	Clise Coal Company*
225	1974	Northwest Coal Company, Inc.*		271	1975	A&R Coal Company*
226	1974	Thresher Coal Company**		272	1975	Action Mining, Inc.*
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Permit	Year	Permittee	`	t.			
No.	tssued	Follinga			Pormit	Year	
273	1975	Win-More Mining & Construction			No.	Issued	<u>Permittee</u>
274	1975	Evans Coal Company"			319	4077	
275	1975	Buffaio Coal Company, Inc.*		•	319	1977	John Duckworth Coal Company*
278	1975	Buffalo Cosl Company, Inc.*			320	1977	Kelley Enterprises*
277	1975	Allegheny Mining Corporation			321	1978	Delta Mining, Inc.*
278	1978	Inter-State Lumber Company*			322	1976	Bridgeview Coal Company*
279	1976	Buffalo Coal Company, Inc.*			323	1978	Ayers Coal Company
280	1978	Delta Mining, Inc.*			325	1978	John Duckworth Coal Company*
281	1976	Rondell Company*			326	1978	G&S Coal Company, Inc.
282	1976	Phillips Coal, Inc.*			320	1978	Buffalo Coal Company, Inc.
283	1976	G&H Coal Company, Inc.*				1978	Buffalo Coal Company, Inc.*
284	1978	Tower Resources, Inc.*			328 329	1978	Buffalo Coal Company, Inc.
285	1976	Clinton Coal Company**				1978	Winner Bros. Coal Company, Inc.*
286	1976	Winner Bros. Coal Company, Inc.*			330	1978	Inter-State Lumber Company*
280	1976	T.L. Moran, Inc.*			331	1978	R.A.K. Coal Company***
286	1976	Delta Mining, Inc.*			332	1978	Seneca Mining Company*
289	1976	Pine Mt. Coal Company*			333	1978	Westvaco Corporation*
290	1978	Delta Mining, Inc.*			334	1978	Buffalo Coal Company, Inc.*
290	1976	George Nolan**	÷.		335	1978	Inter-State Lumber Company**
291	1976	Alexander Coal Co.*	•		336	1978	Inter-State Lumber Company*
292 293	1976	Pine Mt. Coal Company*			337	1978	Kirby Energy, Inc.*
293	1976	Arien Miller***			338	1978	Barton Mining Company, Inc.
295	1976	Action Mining, Inc.*			339	1978	Wilhelm Coal, Inc.*
295	1978	Bessemer Iron & Coal Company**			340	1978	Fetterolf Mining, Inc.*
290	1977	Oakland Coal Company			341	1979	Eastern Mining Systems, Inc.**
297	1977	Bittinger Coal Company"			342	1979	Primrose Coal Company*
298	1977	Inter-State Lumber, Inc.*			343	1979	L.C. Coal Company
299 300	1977	Garbart Coal Company			344	1979	Bridgeview Coal Company*
300	1977	Pine Mt. Coal Company*			345	1979	Oelta Mining, Inc.**
301	1977	L.C. Coal Company, Inc.*			346	1979	Inter-State Lumber Company*
302	1977.	Ginniman Brothers Coal Company**			347	1979	Keiley Enterprises*
303	1977	Buffalo Coal Company, Inc.*			348	1979	Schwinzbart & Green, Joint Venture*
304	1977	Wood Products, Inc.*			349	1979	Wilhelm Coal, Inc.**
	1977	Bridgeview Coal Company*			350	1980	Bridgeview Coal Company*
306 307	1977	T.L. Moran, Inc.*			351	1980	Winner Bros. Coal Company, Inc.*
	1977	Best Coal Stripping, Inc.**			352	1980	John Duckworth Coal Company*
308	1977	Delta Mining, Inc.*			353	1980	Winner Bros. Coal Company, Inc.*
309	1977	Oakland Cosl Company*			354	1980	Brawal Mining, Inc.*
310		Primrose Coal Company*			355	1980	HI-Note, Inc.*
311	1977	R.A.K. Coal Company, Inc.**			356	1980	G&S Coal Company, Inc.***
312	1977	G&S Coal Company*			357	1980	Richard Duckworth Coal Company*
313	1977	Wilhelm Coal, Inc.**			358	1980	Bridgeview Coal Company*
314	1977	Clise Coal Company			359	1980	Buffaio Coal Company, Inc.
315	1977	Brawal Mining, Inc.*			360	1980	Buffalo Coal Company, Inc.*
316	1977	John R. Livingston**			361	1980	Pamela Mines, Inc.**
317	1977	Winner Bros, Coal Company, Inc.			362	1980	Alpha Mining, Inc.*
318	1977			1	363	1980	Pamela Mines, Inc.**
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				Permit	Year	
				No.	Issued	Permittee
Permit	Year					
No.	ssued	Permittee		410	1987	J. Walter Wassell
				411	1987	Jenkins Development Company
364	1980	John Duckworth Coal Company*	-	· 412	1987	John Duckworth Coal Company***
365	1980	G&S Coal Company, Inc.		413	1988	Buffalo Coal Company, Inc.*
366	1980	Buffato Coal Company, Inc.*		414	1989	United Energy Coal, Inc.
367	1980	Buffaio Coal Company, Inc.		415	1989	Pine Mt. Coal Company*
368	1980	United Energy Coal, Inc.		416	1989	Action Mining, Inc.*
369	1980	Bittinger Coal Company		417	1989	Tri Star Mining, Inc.*
370	1982	Keystone Mt. Development Company		418	1991	Tri Star Mining, Inc.*
371	1982	Eagle Mining, Inc.*		419	1991	Tri Star Mining, Inc.
372	1982	John Duckworth Coal Company		420	1991	Pine Mt. Coal Company
373	1982	Kirby Energy, Inc.		421	1992	G&S Coal Company, Inc.
374	1982	Winner Bros. Coal Company, Inc.		422	1992	Buffalo Coal Company, Inc.
375	1982	Win-More Mining & Construction Company		423	1992	United Energy Coal, Inc.
376	1982	Jones Coal, Inc.**		424	1995	Pine Mt. Coal Company
377	1982	Allegheny Mining Corporation*		425	1995	Tri Star Mining, Inc.
378	1982	Delta Mining, Inc.**		426	1996	Tri Star Mining, Inc.*
379	1982	Masteller Coal Company*		427	1996	Barton Mining Company, Inc.
380	1982	Fairview Coal Company (Repermitted 399)*		428	1997	Mettiki Coal, LLC
381	1982	Richard Duckworth Coal Company*		429	1997	Tri Star Mining, Inc.
382	1983	Pine Mt. Coat Company"		430	1998	G&S Coal Company, Inc.
383	1983	Allegheny Mining Corporation*		431	1998	Patriot Mining Company, Inc.
384	1983	Evans Coal Company*		432	1999	Barton Mining Company, Inc.
385	1983	Winner Bros. Coal Company, Inc.		433	1999	Win-More Mining & Construction
386	1983	Jones Mining, Inc.*		434	1999	Tri Star Mining, Inc.
387	1983	Hilltop Construction Company**		435	2000	G&S Coal Company, Inc.
388	1983	Fetterolf Mining, Inc.*		436	2000	Cobra Minining, Inc.
389	1983	Winner Bros. Coal Company, Inc.*		437	2001	Cobra Mining, Inc.
390	1983	C.J. Merlo, Inc.*		438	2001	Mountaineer Mining Corp.
391	1983	Oak Springs Coal Company*		439	2001	United Energy Coal, Inc.
392	1984	Westvaco Resources, Inc.*		440	2001	G&S Coal Company, Inc.
393	1984	Patriot Mining Company, Inc.				
394	1984	Action Mining, Inc.*		DEEP MINES		
395	1984	Stan-Jan Excavating, inc.*		DM 101	1977	Mettiki Coel, LLC
398	1984	Allegheny Mining Corporation*		DM 102	1977	Masteller Coal Company*
,397	1985	Michael R. McGowan*		DM 103	1977	Mt. Top Coal Company*
398	1985	Brashear Coal Company		DM 104	1977	Mettiki Coal Corporation
399	1985	Fairview Coal Company		DM 105	1977	Mettiki Coal Corporation
400	1985	Deita Mining, Inc.*		DM 106	1978	A&J Coal Corporation**
401	1985	Buffalo Coal Company, Inc.***		DM 107	1982	Masteller Coal Company*
402	1985	Pine Mt. Cost Company*		OM 108	1989	Anker West Virginia Mining Co., Inc.
403	1985	T.D. Mining Company**		DM 109	1991	Patriot Mining Company, Inc.
404	1986	Clise Coal Company		DM 110	1992	Masteller Coal Company
405	1988	Jones Coal, Inc.**		DM 111	2000	George Creek, 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.*				

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Permit No.	Year <u>issued</u>	Permittee
TIPPLES ANI	GOB PILES	
8C-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	Suffalo Coal Company"
SC-83-106		Pennit 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.

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Operation Completed and Bond Released
 Forfeiture of Bond
 Not Activated