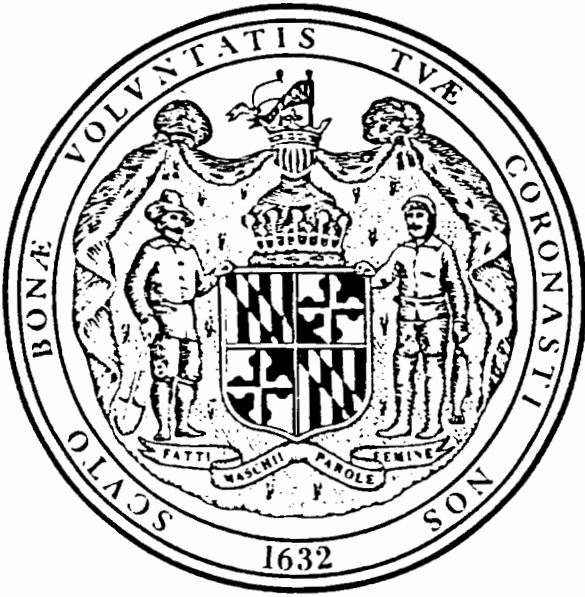


CALENDAR YEAR 1986
SIXTY-FOURTH ANNUAL REPORT
of the
MARYLAND BUREAU OF MINES



TO
HON. WILLIAM DONALD SCHAEFER
Governor of Maryland
DEPARTMENT OF NATURAL RESOURCES
TORREY C. BROWN, MD., The Secretary

From
MARYLAND BUREAU OF MINES
ANTHONY F. ABAR, Director



STATE OF MARYLAND
WILLIAM DONALD SCHAEFER
GOVERNOR

LOUIS L. GOLDSTEIN
COMPTROLLER OF THE TREASURY

LUCILLE MAURER
TEASURER

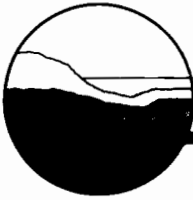
DEPARTMENT OF NATURAL RESOURCES
TORREY C. BROWN, M.D.
SECRETARY

CALENDAR YEAR 1986
SIXTY-FOURTH ANNUAL REPORT
of the
MARYLAND BUREAU OF MINES



TO
HON. WILLIAM DONALD SCHAEFER
Governor of Maryland
DEPARTMENT OF NATURAL RESOURCES
TORREY C. BROWN, MD., The Secretary

From
MARYLAND BUREAU OF MINES
ANTHONY F. ABAR, Director



Maryland Department of Natural Resources
Energy Administration — Bureau of Mines

69 Hill Street
Frostburg, Maryland 21532
(301) 689-4136

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

INTRODUCTION

Maryland is rich in natural resources. Its woods, wildlife, beaches, rivers, bays, and its mineral and energy resources provide a bountiful outdoor environment for our citizens. As Secretary of the Maryland Department of Natural Resources, I am convinced that public support of DNR's mission is essential if we are to properly protect, restore, and manage the State's bountiful natural resources. The information in this publication is designed to increase your understanding of our program and of Maryland's natural resources.

Torrey C. Brown, M.D.

FOR CALENDAR YEAR 1986

Anthony F. Abar Director
Stephen M. Layton Energy Resources Officer III
Fred L. Bagley Energy Resources Officer III
Alan V. Hooker Energy Resources Officer II
Jeffrey S. McCombs Energy Resources Officer I
Joseph M. Ruperto Energy Resources Officer I

(1/86-11/86)

Richard A. Gardner Energy Resources Officer I
Constance A. Lyons. Energy Resources Officer I
P. Douglas Curtis District Mine Inspector
John C. Eilers District Mine Inspector
Raymond Karlstrand District Mine Inspector
Joseph E. Mills District Mine Inspector
Ruth D. Booth Services Supervisor
Cathy A. Hooker Stenographer Clerk I
Sallie A. Ricker. Office Secretary II
Mary Lynn Pegg Laboratory Scientist IV
Buford J. McDonald Conservation Associate IV

(1/86-7/86)

FOR THE CALENDAR YEAR 1986
REPORT OF THE MARYLAND BUREAU OF MINES

Coal production in Maryland during 1986 totalled 4,055,312.47 tons. Production for 1986 represents an increase of 992,481.40 from the 1985 production of 3,062,831.07 tons.

SUMMARY OF 1986 STATISTICS¹

COAL PRODUCTION

Mining Method	Allegany County	Garrett County	Total	%
Strip	695,786.39	786,429.97	1,482,216.36	36.5
Deep	0	2,572,505.11	2,572,505.11	63.4
Auger	591.00	.00	591.00	.1
TOTALS . .	696,377.39	3,358,935.08	4,055,312.47	100%

EMPLOYEES¹

Type of Mine	Allegany County	Garrett County	Total	Fatalities
Deep	0	324	324	0
Strip	195	164	359	0
TOTALS² . .	195	488	683	0

Allegany County shows a production of 3,571.17 net tons per man employed during 1986.

Garrett County shows a production of 6,883.06 net tons per man employed during 1986.

¹Reports submitted by Maryland mining operators.

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

FOR THE CALENDAR YEAR 1986

TONNAGE BY COAL SEAMS

Allegheny County

Waynesburg	23,852.41
Sewickley (Tyson).	181,160.27
Redstone	118,482.27
Pittsburgh	257,588.30
Morantown.	32,515.90
L. Pittsburgh.	0
Franklin	48,206.70
Harlem	0
Bakerstown	20,527.25
Freeport	0
Kittanning	0
Federal Hill	2,117.95
Barton	11,926.34
TOTAL	696,377.39

Garrett County

Sewickley.	0
Pittsburgh	216,499.49
Morantown.	0
L. Pittsburgh	74,823.00
Franklin	105,055.01
Barton	13,395.55
Elk Lick	0
Harlem	25,720.00
Bakerstown	117,430.31
Brush Creek.	0
Freeport	2,724,625.33
Kittanning	67,802.39
Redstone	13,584.00
TOTAL	3,358,935.08

TONNAGE BY BASIN

Lower Youghiogheny	22,376.31
Upper Youghiogheny00
Casselman.	28,404.54
Casselman (Cherry Creek)	39,452.93
Potomac.	2,836,323.03
George's Creek	1,128,755.66
TOTAL	4,055,312.47

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE			ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved
Alpha Mining, Inc.	362	Pittsburgh	0	0	0		Complete		0.0	0.0	0.0	3.0
Andalex Resources, Inc.	251 284 389	Sewickley Franklin Pittsburgh	0 0 6	0 0 263	0 0 12,470		Complete		0.0 0.0 5.0	0.0 0.0 0.0	0.0 0.0 0.0	2.0 30.0 0.0
		Morantown Redstone Sewickley	- - -	- - -	- - -		7,113.15 54,997.26 341.42		- - -	- - -	- - -	- - -
Ayers Coal Co.	323	Franklin	2	207	1,420		2,714.00		1.0	2.0	2.0	0.0
Barton Mining Co.	338	Franklin	12	107	8,601		29,770.20		4.0	0.0	0.0	0.0
Bessemer Iron & Coal*	296	Bakerstown	0	0	0		.00		0.0	0.0	0.0	0.0
Brashear Coal Mines	264	Pittsburgh Morantown Franklin	9 - -	245 - -	14,304 - -		8,329.21 2,589.50 15,131.50		4.6 - -	8.0 0.0 0.0	8.0 0.0 0.0	0.0 - -
	398	Bakerstown	3	88	1,644		8,913.25		2.1	0.0	0.0	0.0
Buffalo Coal Co.	276 326 328	Pittsburgh Pittsburgh Sewickley	0 4 4	0 240 104	0 7,944 3,300		.00 23,555.00 4,292.00		0.0 7.5 1.0	0.0 6.0 0.0	0.0 6.0 0.0	0.0 0.0 0.0
	334 359	Franklin Pittsburgh	0 0	0 0	0 0		.00 .00		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
SC-83-104	SC-83-104	Tipple	4	142	4,545				0.0	0.0	0.0	0.0
SC-83-101	SC-83-101	Tipple	3	164	3,945							

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE				ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved	
Clise Coal Co.	213	Sewickley	10	281	22,520		43,855.53		9.5	7.0	7.0	0.0	
	234	Sewickley	0	0	0		.00		0.0	0.0	0.0	0.0	
	270	Sewickley	2	99	1,320		536.00		1.5	0.0	0.0	0.0	
	315	Sewickley	3	178	4,649		5,855.25		1.0	8.0	8.0	0.0	
	404		0	0	0		Not Started		0.0	0.0	0.0	0.0	
Commonwealth Coals	337	Morantown	0	0	0		.00		0.0	0.0	0.0	0.0	
	373	Pittsburgh	3	186	5,816		13,924.36		4.0	0.0	0.0	0.0	
		Morantown	-	-	-		3,971.33		-	0.0	0.0	-	
		Redstone	-	-	-		8,705.64		-	0.0	0.0	-	
Delta Coal Sales	SC-83-107	Tipple	5	207	4,016								
Delta Mining, Inc.	403	Sewickley	15	208	20,866		20,900.07		17.0	6.0	6.0	0.0	
		Redstone	-	-	-		16,495.86		-	0.0	0.0	-	
		Pittsburgh	-	-	-		53,194.45		-	0.0	0.0	-	
		Morantown	-	-	-		12,987.17		-	4.0	4.0	-	
		Waynesburg	-	-	-		1,123.26		-	0.0	0.0	-	
J. Duckworth Coal Co.	324	Pittsburgh	0	0	0		.00		0.0	0.0	0.0	0.0	
	352	Pittsburgh	4	237	7,584		17,325.32		2.0	4.5	4.5	0.0	
	372	Pittsburgh	2	237	4,440		4,901.04		1.0	0.0	0.0	0.0	
R. Duckworth Coal Co.	357	Bakerstown	0	0	0		.00		0.0	0.0	0.0	10.0	
	381	Bakerstown	3	215	4,872		9,122.81		6.0	6.0	6.0	0.0	
Eagle Mining Inc.	371	Freeport	2	55	850		Complete		0.0	32.0	32.0	0.0	
	378	Barton	6	201	10,478		11,926.34		4.0	18.0	18.0	0.0	
		Bakerstown	-	-	-		2,491.19		-	-	-	-	
		Federal Hill	-	-	-		2,117.95		-	-	-	-	

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE				ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved	
Eckhart Coal Co.	184A	Franklin	2	128	2,048			591.00	0.0	0.0	0.0	0.0	0.0
Evans Coal Co.	384	Pittsburgh	0	0	0		Complete		0.0	2.0	2.0	0.0	0.0
Ever, Inc.	SC-83-114	Gob Pile	0	0	0								
Fairview Coal Co.	399	Pittsburgh Morantown Redstone	3	231	5,589		12,127.98 2,490.95 684.14		8.8	0.0	0.0	0.0	0.0
Fetterolf Mining	340 388	Bakerstown Kittanning	0 0	0 0	0 0		Complete .00		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	8.0 0.0
Hi-Note, Inc.	231 355	Pittsburgh Barton	2 0	264 0	5,378 0		3,377.30 Complete		2.0 5.0	0.0 18.0	0.0 18.0	0.0 0.0	0.0 0.0
Jones Coal, Inc.	385 407	Waynesburg Sewickley Pittsburgh	4 - 0	214 - 0	8,075 - 0		14,029.15 758.00 Not Started		8.0 - 0.0	4.0 - 0.0	4.0 - 0.0	0.0 - 0.0	0.0 - 0.0
K & J Development, Inc.	182 393	Pittsburgh Redstone Morantown Morantown Pittsburgh Redstone	9 - - 9 - -	54 - - 162 - -	3,080 - - 9,252 - -		1,605.92 2,432.05 637.22 2,122.37 4,360.03 6,492.69		0.3 - - 0.0 - -	2.0 - - 0.0 - -	2.0 - - 0.0 - -	0.0 - - 0.0 - -	0.0 - - 0.0 - -
Clyde Marsh Coal Co.	268	Redstone	1	1	8		957.61		1.0	2.0	2.0	10.5	10.5

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE				ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved	
Michael McGowan	397	Pittsburgh	2	67	935		1,545.44		0.0	2.0	2.0	0.0	
Oliver Mining Co.*	233	Pittsburgh	0	0	0		.00		0.0	0.0	0.0	0.0	
Potomac Coal Co.	SC-83-110	Tipple	7	133	3,938								
Westvaco Resources	333	Pittsburgh	(See Garrett County)					5,381.00		8.0	0.0	0.0	0.0
Win-More Mining & Const.	273	Pittsburgh	4	210	6,720		7,720.95		2.0	4.0	4.0	0.0	
		Redstone	-	-	-		14,579.12		-	-	-	-	-
375		Morantown	-	-	-		291.07		-	-	-	-	
		Sewickley	-	-	-		1,532.00		-	-	-	-	
		Pittsburgh	4	24	768		875.15		0.0	0.0	0.0	0.0	
		Redstone	-	-	-		1,197.90		-	-	-	-	
Winner Bros. Coal Co.	40	Morantown	-	-	-		313.14		-	-	-	-	
		Redstone	3	198	4,723		11,940.00		0.0	0.0	0.0	0.0	
	207	Pittsburgh	19	242	39,811		64,950.00		5.0	10.3	10.3	0.0	
	227	Sewickley	0	0	0		70,130.00		-	-	-	-	
		Waynesburg	0	0	0		Complete		0.0	0.0	0.0	4.0	
247	Pittsburgh	5	198	9,154		10,260.00		0.0	0.0	0.0	0.0		
286	Sewickley	3	110	3,508		1,140.00		-	-	-	-		
		Sewickley	3	110	3,508		14,300.00		0.0	0.0	0.0	0.0	

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR ALLEGANY COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE			ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved
Winner Bros. Coal Co.	318	Sewickley	6	242	11,678		17,520.00		0.0	0.0	0.0	0.0
	329	Redstone	0	0	0		.00		0.5	0.4	0.4	0.0
	353	Waynesburg	5	220	8,984		8,700.00		0.0	0.0	0.0	0.0
	368	Pittsburgh	3	88	1,960		5,820.00		0.5	0.0	0.0	0.0
	374	Waynesburg	0	0	0		.00		0.0	0.0	0.0	0.0
	SC-83-112	Tipple	2	53	832				0.0	0.0	0.0	0.0
TOTAL ALLEGANY COUNTY			195	6,503	272,025		695,786.39	591.00	112.3	146.2	146.2	67.5

*Annual Report information was not submitted by this company.

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR GARRETT COUNTY

Name of Operator	Permit Number	Coal Seam Worked				TONNAGE			ACRES		
						Deep	Strip	Auger			
Action Mining, Inc.	272	Kittanning	0	0	0	Complete	0.0	0.0	0.0	0.0	0.0
	295	Freepport	0	0	0	Complete	0.0	6.0	6.0	0.0	0.0
	394	Harlem	4	242	7,579	15,136.00	13.0	0.0	0.0	0.0	0.0
Allegheny Mining Corp.	277	Freepport	13	235	24,440	39,399.93	22.8	24.0	24.0	0.0	0.0
Beener Coal Co.	143	Pittsburgh Franklin	20	283	49,750	179,125.49 98,836.51	37.0	41.0	41.0	0.0	0.0
Bittinger Coal Co.	265	Freepport	1	14	112	53.00	0.0	0.0	0.0	0.0	0.0
	298	Kittanning	0	0	0	Complete	0.0	0.0	0.0	0.0	0.0
Brawal Mining Inc.	354	Kittanning	0	0	0	Complete	0.0	0.0	0.0	28.5	0.0
Bridgeview Coal Co.	358	Bakerstown	0	0	0	Complete	0.0	0.0	0.0	0.0	23.0
Buffalo Coal Co., Inc.	215	Bakerstown	8	230	14,248	38,467.00	27.0	39.0	39.0	0.0	0.0
	240	Freepport	6	230	11,600	10,033.00	23.0	29.0	29.0	0.0	0.0
		Bakerstown	-	-	-	18,241.00	-	-	-	-	-
	360	Freepport	6	198	9,408	36,453.00	11.5	8.8	8.8	0.0	0.0
	366	Barton	0	0	0	.00	4.0	15.0	15.0	29.0	29.0
367	(in WV)	0	0	0							
409			0	0	0						

area of mineral extraction is entirely in the State of West Virginia
Not Started

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR GARRETT COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE			ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved
Buffalo Coal Co., Inc.	SC-83-102	Tipple	0	0	0							
	SC-83-103	Tipple	2	176	2,818							
	SC-83-105	Tipple	0	0	0							
Delta Mining, Inc.	345	Bakerstown	4	158	1,916		.00		0.0	35.0	35.0	33.0
	400	Bakerstown	6	70	1,972		3,438.54		10.0	0.0	0.0	0.0
J. Duckworth Coal Co.	SC-83-108	Tipple	2	15	92							
	364	Bakerstown	2	69	1,144		2,494.63		0.0	20.0	20.0	0.0
G&S Coal Co.	325	Barton	2	255	4,080				12.0	0.0	0.0	0.0
	365	Freeport	10	255	20,096				5.0	16.4	16.4	0.0
Highland Mining	239	Freeport	0	0	0		Complete		0.0	0.0	0.0	31.0
Hilltop Const.*	387	Freeport	0	0	0		.00		0.0	0.0	0.0	0.0
Inter-State Lumber Co.	330	Freeport	0	0	0		Complete		0.0	0.0	0.0	17.0
	335	Bakerstown	0	0	0		Complete		0.0	0.0	0.0	0.0
Jones Coal, Inc.	376	Kittanning	2	24	487		3,458.05		0.0	0.0	0.0	0.0
	405	Freeport	4	32	1,233		1,863.45		0.0	0.0	0.0	0.0
Jones Mining, Inc.	386	Kittanning	3	102	3,127		17,054.81		2.0	3.0	3.0	0.0
Keystone Mt. Dev. Co.	370	Morantown	0	0	0		Complete		0.0	0.0	0.0	7.0

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR GARRETT COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE			ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved
L.C. Coal Co.	343	Bakerstown	0	0	0		.00		0.0	0.0	0.0	0.0
Maestler Coal Co.	379 DM107	Bakerstown Eik Lick	1 1	18 253	185 2,350		.00		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
Mettiki Coal Corp.	DM101 DM104 DM105	Freeport Freeport Freeport	273 0 39	236 0 236	479,825 0 172,868	1,891,791.17 .00 633,424.41			0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0
T.L. Moran Co.	287	Harlem	0	0	0		Complete		0.0	0.0	0.0	3.0
Mt. Top Coal Co.	DM103	Kittanning	11	229	17,966	47,289.53			0.0	0.0	0.0	0.0
Oakland Coal Co.	297 377 383 396	Freeport Freeport Freeport Freeport	3 0 12 3	166 0 229 145	4,280 0 21,739 3,030		7,865.31 Complete 40,268.81 11,893.67		2.0 0.0 4.0 15.0	8.0 0.0 10.0 2.0	8.0 0.0 10.0 2.0	0.0 0.0 0.0 0.0
Patriot Mining Co., Inc.	406	Harlem Bakerstown	16 -	59 -	9,073 -		10,584.00 25,037.00		12.0 -	0.0 -	0.0 -	0.0 -
Pine Mt. Coal Co.	382 402	Franklin Bakerstown	3 3	3 255	72 6,600		148.50 19,922.14		0.0 7.0	1.6 3.0	1.6 3.0	0.0 0.0
Schwinbart & Green	348	Bakerstown	5	255	10,200		9,830.00		0.0	4.0	4.0	0.0
Stan-Jan Excavating	395	Freeport	0	0	0		Complete		0.0	2.0	2.0	0.0
Tri Star Mining, Inc.	408		0	0	0		Not Started		0.0	0.0	0.0	0.0

STATISTICS OF COAL PRODUCTION, CALENDAR YEAR 1986
FOR GARRETT COUNTY

Name of Operator	Permit Number	Coal Seam Worked	Employees	Days Worked	Man-Hour Exposure	TONNAGE			ACRES			
						Deep	Strip	Auger	Mined	Back-filled	Planted	Approved
Westvaco Resources	333	L.Pittsburgh	20	256	44,439		74,823.00		22.0	72.0	72.0	8.0
		Pittsburgh	-	-	-		37,374.00		-	-	-	-
		Franklin	-	-	-		6,070.00		-	-	-	-
		Redstone	-	-	-		13,584.00		-	-	-	-
	392	Pittsburgh	3	25	480		Complete		0.0	11.0	11.0	0.0
TOTAL GARRETT COUNTY			488	4,953	927,209		786,429.97	.00	229.3	350.8	350.8	179.5
TOTAL ALLEGANY COUNTY			195	6,503	272,025		695,786.39	591.00	112.3	146.2	146.2	67.5
TOTAL BOTH COUNTIES			683	11,456	1,199,234		1,482,216.36	591.00	341.6	497.0	497.0	247.0

*Annual Report information was not submitted by this company.

FOR CALENDAR YEAR 1986
SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 1986
(By Geological Basin)

Table No. 1

	Acres Approved By LRC	ACRES THIS YEAR*				Planted	Revers Bond Release	Final Reports
		Permitted	Mined	Backfilled				
Allegany County:								
Georges Creek Basin	164.00	177.10	112.30	146.20	146.20	67.50	4	
Garrett County:								
Georges Creek Basin	140.00	140.00	66.00	148.60	148.60	8.00	1	
Potomac River Basin	544.00	287.00	115.50	128.20	128.20	29.00	2	
Casselman River Basin**	0	72.00	23.00	45.00	45.00	64.50	2	
Cherry Creek Basin**	15.00	0	22.80	24.00	24.00	31.00	1	
Upper Yough Basin	0	0	0	2.00	2.00	0	1	
Lower Yough Basin	160.00	36.00	2.00	3.00	3.00	47.00	0	
TOTAL GARRETT COUNTY	859.00	535.00	229.30	350.80	350.80	179.50	7	
TOTAL BOTH COUNTIES	1,023.00	712.10	341.60	497.00	497.00	247.00	11	

Table 2

	ACRES CUMULATIVE FROM JANUARY 1, 1975 - DECEMBER 31, 1986			
	Approved By LRC	Permitted	Mined	Backfilled
Allegany County:				
Georges Creek Basin	6,502.78	5,662.80	4,081.40	3,452.47
Garrett County:				
Georges Creek Basin	1,695.00	1,497.00	1,517.45	1,399.85
Potomac River Basin	3,322.20	2,906.00	1,875.80	2,140.20
Casselman River Basin**	1,602.30	1,361.60	1,006.00	1,104.50
Cherry Creek Basin**	589.00	667.00	663.50	526.90
Upper Yough Basin	253.00	216.00	157.35	187.35
Lower Yough Basin	1,302.50	1,289.00	853.00	1,081.06
TOTAL GARRETT COUNTY	8,764.00	7,936.60	6,073.10	6,439.86
TOTAL BOTH COUNTIES	15,266.78	13,499.40	10,154.50	9,892.33

*Where difference occurs between Approved and Permitted, either Permit was approved in 1985 and not issued until 1986, or Permit was not issued.

**Both Casselman Geological Basin.

FOR CALENDAR YEAR 1986
SUMMARY OF MINING AND RECLAMATION STATISTICS

Table No. 3

Year	Surface Mine Licenses Issued	Surface Mine Permits Issued	Deep Mine Permits Issued	A.M.&R.P.R.'s Processed	Amended Permits Processed	Forfeitures	Permits Completed & Planted	Site Evaluation Committee Days	Land Reclamation Committee Days
1986	4	6	0	72	1	1	11	19	11
1985	8	6	0	90	7	1	5	20	13
1984	5	7	0	71	4	3	9	28	9
1983	13	12	0	97	11	0	11	25	15
1982	8	11	1	99	15	0	16	31	12
1981	10	0	0	100	11	1	16	22	9
1980	6	19	0	111	19	5	15	25	11
1979	8	7	0	139	8	4	19	22	9
1978	9	20	5	156	24	1	17	23	13
1977	13	25	1	135	36	0	19	32	11
1976	12	19	0	111	38	0	3	28	12
1975	20	37	0	92	62	0	16	23	14
Cumulative	116	169	7	1,273	236	16	157	298	139
Total									

FOR THE CALENDAR YEAR 1986
LAND RECLAMATION COMMITTEE

Members:

The following members served on the Land Reclamation Committee during 1986:

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Kenneth N. Weaver (Chairman), Maryland Geological Survey
Stephen M. Layton, Bureau of Mines
Paul Mateer, Forest, Park, and Wildlife Service (1/86-2/86)
George Gilmore, Forest, Park, and Wildlife Service
(3/86-12/86)
Edward Golden, Forest, Park, and Wildlife Service

DEPARTMENT OF HEALTH AND MENTAL HYGIENE REPRESENTATIVE:

Robert V. Creter, Office of Environmental Programs

CITIZENS' REPRESENTATIVES:

June Neder, Allegany County
Jessie McCullough, Garrett County

COUNTY PLANNING & ZONING REPRESENTATIVES:

Tim Carney, Allegany County
Justin Thorne, Garrett County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

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

COAL INDUSTRY REPRESENTATIVES:

John E. Carey
James M. Coffroth (1/86-2/86)
Al Whitehouse (3/86-12/86)

Meetings

The Land Reclamation Committee meets at the Bureau of Mines' Office in Frostburg, Maryland. All meetings are open to the public and are announced in the Maryland Register and local papers.

Functions and Duties of the Committee:

The Land Reclamation Committee oversees land reclamation activities related to the surface mining of coal in Maryland. The Committee may enter on any open pit operation to determine land reclamation conditions and progress.

The Land Reclamation Committee visits sites for which mining permit applications have been submitted/approved to: (1) determine the suitability of the proposed reclamation plan; (2) review annual mining and reclamation progress; and (3) evaluate revegetation.

The specific duties addressed by the Committee during its monthly meetings include:

1. Review and approval of all reclamation plans;
2. Review and approval of all Annual Mining and Reclamation Progress Reports;
3. Establish amount of revegetation bond for each operation;
4. Review and approval of all revegetation prior to bond release.

Other functions of the Land Reclamation Committee include:

1. Study and recommend any amendments to the strip mining law and regulations;
2. Recommend to the Department the expenditure of funds for as much as 50% of the cost of lime, fertilizer and seed for an approved mining and reclamation plan;
3. Approve the expenditure of funds that are received by the Department from any sources for the reclamation and revegetation of any strip mined area within the State.

FOR CALENDAR YEAR 1986

REVEGETATION OF STRIP MINED LANDS

The State Land Reclamation Committee (LRC) voted to release 247 acres of reclaimed surface coal mined lands from a total of 292 acres eligible for revegetation bond release during 1986. The LRC also voted to reduce revegetation bond on 670 acres. This action was taken after consideration of 83 planting reports that were filed by 30 coals companies.

All reclaimed acres were planted with a grass and legume mixture to insure adequate erosion control protection. In addition trees and/or shrubs were planted on 191 acres.

The mining law requires that a Backfilling and Planting report be submitted to the Bureau within two weeks after the actual planting is completed. When this report is signed by the mine inspector, the five year evaluation period begins. The five year revegetation bond holding period is a requirement for all mining permits issued after July 1, 1979.

An amount of bond equal to one-half of the per acre rate for the revegetation bond may be released when:

1. Revegetation has been established in accordance with the approved reclamation plan and the standards for success of revegetation are met (see standards below);
2. 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;
3. With respect to prime farmlands, soil productivity has been returned to the level of yield required; and

4. All temporary drainage control structures not authorized to remain on the permit area are removed and the affected area is regraded, seeded and mulched; or all permanent structures are inspected and their deficiencies repaired.

The bond remaining on an area may be released when the permittee has successfully completed reclamation operations in accordance with the approved reclamation plan and achieved compliance with the requirements of the regulatory program, and the applicable liability period has expired.

The standards used by the LRC and the Bureau for revegetation bond release and reduction are as follows:

1. Area must be 90% covered.
2. Area must be covered by at least 10% permanent legume, well distributed.
3. Bare areas must not exceed 900 square at any particular location. However, the overall coverage of 90% must be obtained.
4. There must not be an depression or rills and gullies over nine inches in depth in the revegetated area.
5. There must not be any seeps discharging toxic water that causes degradation of the vegetation growing on the area.
6. There must not be any permit suspension/revocation, bond forfeiture, or other enforcement action pending on the permit area.

7. A minimum of 450 living stems well distributed per acre is required when trees and shrubs are planted.
8. Any special reclamation requirements approved in the mining permit must be met.
9. Bond reductions are not considered before at least two years from the date of approved planting.

When all of the above requirements have been achieved, it is possible that a longer evaluation time may be required if the health conditions of the vegetation are questionable. The Bureau of Mines has the final authority to release bond after LRC approval of revegetation.

Bond monies cannot be returned to permittees until they comply with three procedural requirements of the mining law: (1) advertise once a week for four consecutive weeks in a newspaper of general circulation in the jurisdiction affected, (2) notify adjoining property owners, local government bodies, sewage authorities and water companies by certified mail of the pending bond release, and (3) make application for bond release to the Bureau (The Bureau of Mines must receive copies of the advertisements and landowner notifications.)

In January of each year, a listing of acres eligible for revegetation bond release during that year is compiled and available from the Bureau of Mines.

FOR CALENDAR YEAR 1986

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 Natural Resources Article, Title 7, 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 (BCMRF) under the authority of Natural Resources Article (NRA), Title 7, Subtitle 5; the Deep Mining Fund under the authority of NRA, Title 7, Subtitle 5A; and the Mine Reclamation and Water Quality Restoration Loan under the authority of NRA, Title 7, Subtitle 6.

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 1986, grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provide \$1,070,977.00 for the

reclamation of approximately 121 acres of abandoned mine lands in Allegany and Garrett Counties, Maryland.

Projects Under Construction During 1986

1. Amish Road/Tarkiln Run Reclamation Project

Location: Approximately 3 miles SW OF Grantsville,
Garrett County.

Size: 30 acres.

Scope of Work: Backfill, regrade and revegetate abandoned surface mine pit to eliminate sediment and acid mine drainage to North Branch Casselman River, health and safety hazards associated with highwall and pit, and unauthorized dumping of garbage into the pit.

Cost: \$233,865.00

Fund Source: Federal RAMP Appropriation

2. Foxtown Road Reclamation Project

Location: Approximately 8½ miles SE of Grantsville,
Garrett County.

Size: 18 acres.

Scope of Work: Backfill, regrade and revegetate an abandoned surface mine pit to reduce acid and sediment pollution loading into Cherry Creek.

Cost: Approximately \$22,750.00

Fund Source: Maryland-Federal AML Fund

3. Foxtown Road - Negro Mt. Reclamation Project

Location: Approximately 8½ miles SE of Grantsville,
Garrett County.

Size: 10 acres.

Scope of Work: Backfill, regrade and revegetate an abandoned
surface mine pit to reduce acid and sediment
pollution loading into the Casselman River.

Cost: \$14,957.50

Fund Source: Maryland-Federal AML Fund

4. Austin/Kelly Reclamation Project

Location: Approximately 2.6 miles ESE of Grantsville,
Garrett County.

Size: 22 acres.

Scope of Work: Backfill, regrade and revegetate two
abandoned surface mine pits.

Cost: \$49,997.00

Fund Source: Maryland-Federal AML Fund

Cooperative Reclamation Projects

The Maryland Bureau of Mines executed a Cooperative Agreement with the Office of Surface Mining on January 31, 1985. The Cooperative Agreement provides Federal funds for up to 75% of the costs of the Upper Georges Creek Mine Drainage Pollution

Abatement Project. The project is designed to reduce infiltration of surface stream water, from three stream segments in the Upper Georges Creek Basin, into underground mine workings, and, thus, reduce discharges from the Hoffman Mine Drainage Tunnel. One of the three stream segments (on Vale Run) was constructed during 1986.

Vale Run Stream Channel Lining Project

Location: Approximately 1½ miles SSE of Frostburg, Allegany County.

Size: 2700 lineal feet.

Scope of Work: Reconstruct Vale Run to reduce stream flow into underground deep mine working by placing 2700 lineal feet of clay channel lining in the reconstructed stream channel.

Cost: \$161,555.00

Fund Source: (1) OSM administered Appalachian Regional Commission Funds and (2) Mine Reclamation and Water Quality Restoration Loan Funds

Maryland Mine Reclamation Program

Utilizing monies from the Bituminous Coal Open-Pit Mining Reclamation Fund, (derived from a 9¢ per ton of coal mined surcharge) and the Deep Mine Fund, 11 acres of abandoned mine lands were reclaimed during 1986. Funding for these reclamation projects totalled \$212,465.00.

Projects Under Construction During 1986

1. Kitzmiller Water Supply Reservoir Landslide Stabilization Project

Location: Approximately 1 mile NW of Kitzmiller,
Garrett County.

Size: 5 acres.

Scope of Work: Regrade and stabilize landslide on coal spoil
material above the Kitzmiller Water Supply
Reservoir on Wolfden Run.

Cost: Approximately \$82,000.00

Fund Source: (1) BCMRF-Garrett County
(2) Deep Mine Fund

2. Jennings Deep Mine Reclamation Project

Location: Approximately 0.2 mile E of Jennings, Garrett
County.

Size: 1 acre.

Scope of Work: Backfill a deep mine entry area and provide
drainage from an abandoned deep mine complex
that is causing subsidence on Jennings Road.

Cost: \$29,865.00

Fund Source: Deep Mine Fund

3. Mt. Savage/Slabtown Road Deep Mine Reclamation Project

Location: Approximately 1/2 mile S of Mt. Savage,
Allegany County.

Size: 1 acre.

Scope of Work: Backfill a deep mine entrance area and
provide drainage from an abandoned deep mine
complex that is causing subsidence on
Slabtown Road.

Cost: \$22,000.00

Fund Source: Deep Mine Fund

4. Eckhart/Westernport Subsidence Control Project

Location: Eckhart, Allegany County, adjacent Old Route
40. Westernport, Allegany County, Spruce
Street.

Size: 1 acre.

Scope of Work: Control subsidence beneath the Eckhart
Baptist Church and two residences in
Westernport by drilling access borings and
injecting a stabilizing cement/fly ash grout
beneath the structures.

Cost: \$36,400.00

Fund Source: Deep Mine Fund

5. Moran Manor Reclamation Project

Location: Franklin, Allegany County, 1½ miles north of
Westernport.

Size: 3 acres.

Scope of Work: Dispose of a 10,000 cubic yard coal refuse pile, regrade the disturbed area, and revegetate. Control mine drainage with ditches.

Cost: \$42,200.00

Fund Source: Deep Mine Fund.

FOR CALENDAR YEAR 1986

MINE FOREMAN AND FIRE BOSS
EXAMINATIONS AND CERTIFICATIONS

The number of Mine Foremen and Fire Boss applicants examined and certified from 1976 through 1986 are identified below.

YEAR	APPLICANTS EXAMINED		APPLICANTS CERTIFIED	
	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
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
1981	0	0	0	0
1980	8	36	3	21
1979	14	28	12	26
1978	30	16	22	16
1977	0	0	0	0
1976	11	0	11	0

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

INSPECTION AND ENFORCEMENT ACTIVITIES
1982-1986

TYPE OF ACTION	1982	1983	1984	1985	1986
Inspections	1513	1811	1777	1910	1873
Notices of Violations	148	147	127	94	84
Cessation Orders	8	65	43	43	25
Citizen Complaints	10	16	20	17	19
Bond Forfeitures	0	0	3	1	1

COMPARATIVE ACCIDENT REPORT

Year	Man-Hour Exposure	Tons Produced	Fatalities	Lost Time Accidents	Frequency	Fatalities Per Million Man-Hours	Fatalities Per Million Short Tons	Non-Fatal Per Million Man-Hours	Non-Fatal Per Million Short Tons	Tons Per Fatality	Tons Per Non-Fatal Injuries
1986	1,199,234.00	4,055,312.47	0	15	12.51	0	0	12.51	3.70	0	270,354.16
1985	1,351,526.00	3,062,831.07	0	30	22.20	0	0	22.20	9.79	0	102,094.37
1984	1,749,464.25	3,993,299.82	1	35	20.00	.57	.25	20.00	8.76	3,993,299.82	114,094.28
1983	1,367,297.75	3,086,835.57	0	5	3.65	0	0	3.65	1.61	0	617,367.11
1982	2,085,157.75	3,459,891.66	0	5	2.39	0	0	2.39	1.44	0	691,978.33
1981	2,218,325.69	4,451,559.31	0	82	36.96	0	0	36.96	18.42	0	54,287.30
1980	2,089,982.5	3,176,092.25	0	61	29.18	0	0	29.18	16.22	0	61,640.85
1979	1,855,326.73	2,716,617.07	3	29	15.63	1.61	1.10	14.01	9.51	905,539.02	104,485.27
1978	1,429,612	2,851,321.89	1	24	16.78	.69	.35	16.08	8.06	2,851,321.89	123,970.51
1977	1,373,626.25	3,028,629.66	0	15	10.90	0	0	10.92	4.95	--	201,908.64
1976	1,287,997.5	2,695,178.96	0	4	3.10	0	0	3.10	1.48	--	673,794.74
1975	981,372	2,520,765.27	1	5	5.09	1.01	.39	4.07	1.58	2,520,765.27	630,191.31
1974	697,707.5	2,221,412.94	1	0	0	1.43	.45	0	0	2,221,412.94	N.A.
1973	541,210	1,754,130.93	0	3	5.54	0	0	5.54	1.71	1,754,130.93	584,710.31
1972	520,285	1,638,418.46	0	5	9.61	0	0	9.61	3.05	1,638,418.46	327,683.69
1971	806,056	1,591,677.20	0	6	7.44	0	0	7.44	3.77	1,591,677.20	265,279.53

FOR THE CALENDAR YEAR 1986

ACCIDENT REPORT

COMPANY	PERMIT NUMBER	NUMBER OF NON-FATAL ACCIDENTS	WORKING DAYS LOST	FATAL ACCIDENTS
Mettiki Coal	DM-104	6	78	0
Mettiki Coal	DM-105	9	297	0

FOR CALENDAR YEAR 1986

Permit No. 1 The George's Creek Lumber Company*

Permit No. 2 Allegany Engineering Company*

Permit No. 3 B.M.W. Coal Company*

Permit No. 4 Old Hampshire Coal Company, Inc.*

Permit No. 5 Car and Gotfelty Construction Co.*

Permit No. 6 M.H. Bigan Coal Company*

Permit No. 7 Moran Coal Company*

Permit No. 8 Allegany Engineering Company*

Permit No. 9 Schell Mining Company, Inc.*

Permit No. 10 B & U Coal Company*

Permit No. 11 Morgan Contracting Company**

Permit No. 12 Romadale Coal Corporation*

Permit No. 13 Cross Fuel Company*

Permit No. 14 Highland Construction Company*

Permit No. 15 Phoenix Big Vein Coal Company (Repermitted 338)*

Permit No. 16 Moran Coal Company*

Permit No. 17 T.J. Cramblett**

Permit No. 18 Moscow-Georges Creek Coal Company*

Permit No. 19 J.R. Thrasher Contracting & Stripping Co.*

Permit No. 20 Moran Coal Company (Repermitted 333)*

Permit No. 21 Schell Mining Company, Inc.**

Permit No. 22 Savage Coal Company*

Permit No. 23 Moran Coal Company*

Permit No. 24 The Georges Creek Coal & Land Co.*

Permit No. 25 Charles T. Clise*

Permit No. 26 Allegany Engineering Company*

Permit No. 27 Goodwill Fuel Company*

Permit No. 28 D.B.&B. Coal Company*

Permit No. 29 Queen George's Creek Coal Company**

Permit No. 30 Mack Coal Company**

Permit No. 31 White Crest Coal Company, Inc.**

Permit No. 32 D.B.&B. Coal Company*

Permit No. 33 Moran Coal Company*

Permit No. 34 Chelsie A. Liller*

Permit No. 35 J.E. George Trucking Company**

Permit No. 36 D.B.&B. Coal Company*

Permit No. 37 J.&M. Coal Company**

Permit No. 38 Casey Construction Company**

Permit No. 39 Moran Coal Company*

Permit No. 40 Winner Bros. Coal Company, Inc.

Permit No. 41 Buffalo Coal Company, Inc.*

Permit No. 42 Casey Construction Company**

Permit No. 43 Sara-Ki Coal Company, Inc.*

Permit No. 44 Yantus & Zubek Coal Company*

Permit No. 45 Moran Coal Company*

Permit No. 46 Casey Construction Company**

Permit No. 47 Moran Coal Company*

Permit No. 48 Moran Coal Company*

Permit No. 49 Sara-Ki Coal Company, Inc.*

Permit No. 50 Laurel Creek Company, Inc.**

Permit No. 51 D.B.&B. Coal Company**

Permit No. 52 Moon and Sons*

Permit No. 53 George L. Smith Contracting Company*
 Permit No. 54 The Georges Creek Lumber Company*
 Permit No. 55 Moran Coal Company*
 Permit No. 56 North Branch Coal Corporation*
 Permit No. 57 George Coal Company**
 Permit No. 58 Samuel Compton & Company**
 Permit No. 59 Hoover & White*
 Permit No. 60 Laurel Creek Company, Inc.**
 Permit No. 61 The Eddy Fuel Company**
 Permit No. 62 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 63 Pittsburgh Coal Company*
 Permit No. 64 Mineral Coal Company, Inc., of West Virginia*
 Permit No. 65 Laurel Creek Company, Inc.*
 Permit No. 66 The Georges Creek Lumber Company*
 Permit No. 67 Chelsie A. Liller*
 Permit No. 68 Casey Contracting Company**
 Permit No. 69 Pine Mountain Coal Company*
 Permit No. 70 Opel and Brenneman*
 Permit No. 71 The Georges Creek Lumber Company*
 Permit No. 72 P.&J. Coal Company*
 Permit No. 73 Casey Contracting Company**
 Permit No. 74 Goodwill Fuel Company*
 Permit No. 75 D.B.&B. Coal Company*
 Permit No. 76 Baughman Contracting Company, Inc.*
 Permit No. 77 P&K Coal Company*
 Permit No. 78 Morgan Contracting Company*
 Permit No. 79 Buffalo Coal Company, Inc.*
 Permit No. 80 Buffalo Coal Company, Inc.*
 Permit No. 81 Randall Robertson*
 Permit No. 82 Hoover & White**
 Permit No. 83 James E. George*
 Permit No. 84 B.M.W. Coal Company, Inc.*
 Permit No. 85 Casey Contracting Company**
 Permit No. 86 Beener Coal Company*
 Permit No. 87 Moran Coal Company, Inc.*
 Permit No. 88 D&K Coal Company*
 Permit No. 89 Brenneman Brothers*
 Permit No. 90 Mack Coal Company*
 Permit No. 91 Clarence Rodamar*
 Permit No. 92 James E. George*
 Permit No. 93 Casey Contracting Company**
 Permit No. 94 Winner Brothers*
 Permit No. 95 Moran Coal Company, Inc.*
 Permit No. 96 Big Vein Coal Company*
 Permit No. 97 Maryland Fuel Company, Inc.*
 Permit No. 98 Yantus-Zubek Coal Company*
 Permit No. 99 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 100 Trefall Bros., Inc.*
 Permit No. 101 Mack Coal Company*
 Permit No. 102 C.A. Liller Company*
 Permit No. 103 Cross & Brumage Coal Company*
 Permit No. 104 Beener Coal Company*
 Permit No. 105 D&K Coal Company*
 Permit No. 106 Mack Coal Company*

Permit No. 107 Yantus and Zubek*
 Permit No. 108 Potomac Mining Company*
 Permit No. 109 Casey Contracting Company*
 Permit No. 110 Wilhelm Coal Company*
 Permit No. 111 The Georges Creek Lumber Company*
 Permit No. 112 Clark Coal Company*
 Permit No. 113 Casey Contracting Company*
 Permit No. 114 Casey Contracting Company*
 Permit No. 115 Douglas Coal Company*
 Permit No. 116 Red Lion Mining Corporation**
 Permit No. 117 Ebensburg Coal and Clay Company*
 Permit No. 118 James E. George*
 Permit No. 119 Ebensburg Coal and Clay Company*
 Permit No. 120 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 121 Moran Coal Company, Inc.*
 Permit No. 122 Buffalo Coal Company, Inc.*
 Permit No. 123 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 124 Win-More Mining & Construction Co., Inc.*
 Permit No. 125 Beener Coal Company*
 Permit No. 126 W.R. Nethken and Company, Inc.*
 Permit No. 127 Mack Coal Company*
 Permit No. 128 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 129 J. Russell Cravener*
 Permit No. 130 Chelsie A. Liller*
 Permit No. 131 The Georges Creek Lumber Company*
 Permit No. 132 Brenneman Brothers*
 Permit No. 133 W.R. Nethken and Company, Inc.*
 Permit No. 134 Richards and Parnell Coal Company*
 Permit No. 135 William Brashear*
 Permit No. 136 W.R. Nethken and Company, Inc.*
 Permit No. 137 G&S Coal Company, Inc.*
 Permit No. 138 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 139 J.R. Thrasher Contracting & Stripping Co.*
 Permit No. 140 Shallmar Coal Company, Inc.*
 Permit No. 141 Randall Robertson***
 Permit No. 142 Ace Drilling Coal Company, Inc.*
 Permit No. 143 Beener Coal Company
 Permit No. 144 Clarence Rodamer*
 Permit No. 145 Ginniman Coal Company*
 Permit No. 146 Raymond A. Wolf Mining Company*
 Permit No. 147 Menallen Coke Company*
 Permit No. 148 Russel Shafer*
 Permit No. 149 Homage Coal Co. (Emmett Duppstadt)*
 Permit No. 150 Twin States Coal Company**
 Permit No. 151 M.F. Fetterolf Coal Company, Inc.*
 Permit No. 152 Ebensburg Coal and Clay Company**
 Permit No. 153 Raymond A. Wolf Mining Co. (UPRC)*
 Permit No. 154 Michael Rostosky*
 Permit No. 155 Ginniman & Ware Coal Company*
 Permit No. 156 Harold H. Upole Coal Company*
 Permit No. 157 T.G.&C. Coal Company, Inc.*
 Permit No. 158 Clarence Rodamer Coal Company*
 Permit No. 159 Michael Rostosky Coal Company*
 Permit No. 160 Russel Shafer Coal Company*

Permit No. 161 Buffalo Coal Company, Inc.*
 Permit No. 162 J.R. Thrasher Contracting & Stripping Co.***
 Permit No. 163 Buffalo Coal Company, Inc.*
 Permit No. 164 Union Coal Company*
 Permit No. 165 Win-More Mining & Construction Co., Inc.*
 Permit No. 166 Ginniman Coal Company*
 Permit No. 167 Upperman Coal Company*
 Permit No. 168 Frank Pulford*
 Permit No. 169 Winner Bros. Coal Company, Inc.*
 Permit No. 170 Russel Shafer*
 Permit No. 171 The Chief Coal Company*
 Permit No. 172 Mary Ruth Corporation*
 Permit No. 173 Oakland Coal Company*
 Permit No. 174 Bernard C. Drees*
 Permit No. 175 Delta Mining, Inc.*
 Permit No. 176 D&K Coal Company, Inc.*
 Permit No. 177 T.G.&C. Coal Company, Inc.*
 Permit No. 178 Emmett Dupstadt*
 Permit No. 179 Somerset Excavating, Inc.*
 Permit No. 180 Ayers Coal Company*
 Permit No. 181 Delta Mining, Inc.*
 Permit No. 182 K&J Development, Inc.
 Permit No. 183 Chief Coal Company*
 Permit No. 184 Eckhart Coal Company
 Permit No. 185 Bessemer Iron & Coal Company*
 Permit No. 186 Coal Lick Coal Company*
 Permit No. 187 Phillips Big Vein Coal Company*
 Permit No. 188 Ace Drilling Coal Company, Inc.*
 Permit No. 189 Buffalo Coal Company, Inc.*
 Permit No. 190 Buffalo Coal Company, Inc.*
 Permit No. 191 Keystone Coal and Development Company
 (Liability Assumed by Garrett County
 Roads Department)
 Permit No. 192 Ace Drilling Company, Inc.*
 Permit No. 193 Wilhelm Coal, Inc.*
 Permit No. 194 M.F. Fetterolf Coal Company, Inc.***
 Permit No. 195 Buffalo Coal Company, Inc.*
 Permit No. 196 Besemer Iron & Coal Company*
 Permit No. 197 Grafton Coal Company*
 Permit No. 198 Jet Fuel Coal Company*
 Permit No. 199 Bessemer Iron & Coal Company
 Permit No. 200 Chief Coal Company*
 Permit No. 201 Brashear Coal Company*
 Permit No. 202 Winner Bros. Coal Company, Inc.*
 Permit No. 203 Mary Ruth Corporation*
 Permit No. 204 Grafton Coal Company*
 Permit No. 205 Chief Coal Company*
 Permit No. 206 Upperman Coal Company*
 Permit No. 207 Winner Bros. Coal Company, Inc.
 Permit No. 208 Sanner Bros. Coal Company*
 Permit No. 209 Delta Mining, Inc.*
 Permit No. 210 Markat, Inc.*
 Permit No. 211 Oakland Coal Company*
 Permit No. 212 Bessemer Iron & Coal Company*

Permit No. 213 Clise Coal Company
 Permit No. 214 Inter-State Lumber Company*
 Permit No. 215 Buffalo Coal Company, Inc.
 Permit No. 216 Brashear Coal Company***
 Permit No. 217 Bernard Drees Coal Company*
 Permit No. 218 Buffalo Coal Company, Inc.*
 Permit No. 219 G&S Coal Company, Inc.*
 Permit No. 220 Evans Coal Company*
 Permit No. 221 Brideview Coal Company*
 Permit No. 222 John Duckworth Coal Company*
 Permit No. 223 Edward Mikel*
 Permit No. 224 Delta Mining, Inc.*
 Permit No. 225 Northwest Coal Company, Inc.*
 Permit No. 226 Thrasher Coal Company**
 Permit No. 227 Winner Bros. Coal Company, Inc.*
 Permit No. 228 Bittering Coal Company*
 Permit No. 229 Charles M. Filsinger*
 Permit No. 230 G&H Coal Company, Inc.*
 Permit No. 231 Hi-Note, Inc.
 Permit No. 232 Buffalo Coal Company, Inc.*
 Permit No. 233 Oliver Mining Company
 Permit No. 234 Clise Coal Company
 Permit No. 235 Markat, Inc.*
 Permit No. 236 Delta Mining, Inc.*
 Permit No. 237 Bridgeview Coal Company*
 Permit No. 238 Burnham Coal Company, Inc.*
 Permit No. 239 Highland Mining*
 Permit No. 240 Buffalo Coal Company, Inc.
 Permit No. 241 Buffalo Coal Company, Inc.*
 Permit No. 242 Hopwood Strip Mine, Inc.**
 Permit No. 243 Ponderosa Coal Company, Inc.*
 Permit No. 244 Markat, Inc.*
 Permit No. 245 Phillips Coal, Inc.*
 Permit No. 246 Lambert Coal Company*
 Permit No. 247 Winner Bros. Coal Company, Inc.
 Permit No. 248 Buffalo Coal Company, Inc.*
 Permit No. 249 Cobra Fuels*
 Permit No. 250 Laoc Coal Company*
 Permit No. 251 Tower Resources, Inc.*
 Permit No. 252 Phillips Coal, Inc.*
 Permit No. 253 Pine Mt. Coal Company*
 Permit No. 254 T.G.&C. Coal Company*
 Permit No. 255 Allegheny Mining Company*
 Permit No. 256 Bridgeview Coal Company*
 Permit No. 257 A&R Coal Company*
 Permit No. 258 Clinton Coal Company**
 Permit No. 259 Tower Resources, Inc.*
 Permit No. 260 Yough Tree Farm*
 Permit No. 261 Russel Shafer***
 Permit No. 262 Northwest Coal Company**
 Permit No. 263 Allegheny Mining Corporation*
 Permit No. 264 Brashear Coal Company
 Permit No. 265 Bittering Coal Company
 Permit No. 266 Delta Mining, Inc.*

Permit No. 267 Bittering Coal Company*
 Permit No. 268 Clyde Marsh Coal Company
 Permit No. 269 Hungry Hollow Coal Company*
 Permit No. 270 Clise Coal Company
 Permit No. 271 A&R Coal Company*
 Permit No. 272 Action Mining, Inc.
 Permit No. 273 Win-More Mining & Construction
 Permit No. 274 Evans Coal Company*
 Permit No. 275 Buffalo Coal Company, Inc.*
 Permit No. 276 Buffalo Coal Company, Inc.
 Permit No. 277 Allegheny Mining Corporation
 Permit No. 278 Inter-State Lumber Company*
 Permit No. 279 Buffalo Coal Company, Inc.*
 Permit No. 280 Delta Mining, Inc.*
 Permit No. 281 Rondell Company*
 Permit No. 282 Phillips Coal, Inc.*
 Permit No. 283 G&H Coal Company, Inc.*
 Permit No. 284 Tower Resources, Inc.
 Permit No. 285 Clinton Coal Company**
 Permit No. 286 Winner Bros. Coal Company, Inc.
 Permit No. 287 T.L. Moran, Inc.*
 Permit No. 288 Delta Mining, Inc.*
 Permit No. 289 Pine Mt. Coal Company*
 Permit No. 290 Delta Mining, Inc.*
 Permit No. 291 George Nolan**
 Permit No. 292 Alexander Coal Co.*
 Permit No. 293 Pine Mt. Coal Company*
 Permit No. 294 Arlen Miller***
 Permit No. 295 Action Mining, Inc.
 Permit No. 296 Bessemer Iron & Coal Company*
 Permit No. 297 Oakland Coal Company
 Permit No. 298 Bittering Coal Company
 Permit No. 299 Inter-State Lumber, Inc.*
 Permit No. 300 Garbart Coal Company*
 Permit No. 301 Pine Mt. Coal Company*
 Permit No. 302 L.C. Coal Company, Inc.*
 Permit No. 303 Ginniman Brothers Coal Company**
 Permit No. 304 Buffalo Coal Company, Inc.*
 Permit No. 305 Wood Products, Inc.*
 Permit No. 306 Bridgeview Coal Company*
 Permit No. 307 T.L. Moran, Inc.*
 Permit No. 308 Best Coal Stripping, Inc.**
 Permit No. 309 Delta Mining, Inc.*
 Permit No. 310 Oakland Coal Company*
 Permit No. 311 Primrose Coal Company*
 Permit No. 312 R.A.K. Coal Company, Inc.**
 Permit No. 313 G&S Coal Company*
 Permit No. 314 Wilhelm Coal, Inc.
 Permit No. 315 Clise Coal Company
 Permit No. 316 Brawal Mining, Inc.*
 Permit No. 317 John R. Livingston**
 Permit No. 318 Winner Bros. Coal Company, Inc.
 Permit No. 319 John Duckworth Coal Company*
 Permit No. 320 Kelley Enterprises*

Permit No. 321 Delta Mining, Inc.*
 Permit No. 322 Bridgeview Coal Company*
 Permit No. 323 Ayers Coal Company
 Permit No. 324 John Duckworth Coal Company
 Permit No. 325 G&S Coal Company, Inc.
 Permit No. 326 Buffalo Coal Company, Inc.
 Permit No. 327 Buffalo Coal Company, Inc.*
 Permit No. 328 Buffalo Coal Company, Inc.
 Permit No. 329 Winner Bros. Coal Company, Inc.
 Permit No. 330 Inter-State Lumber Company*
 Permit No. 331 R.A.K. Coal Company***
 Permit No. 332 Seneca Mining Company*
 Permit No. 333 Westvaco Resources, Inc.
 Permit No. 334 Buffalo Coal Company, Inc.
 Permit No. 335 Inter-State Lumber Company
 Permit No. 336 Inter-State Lumber Company*
 Permit No. 337 Commonwealth Coals, Inc.
 Permit No. 338 Barton Mining Company, Inc.
 Permit No. 339 Wilhelm Coal, Inc.*
 Permit No. 340 Fetterolf Mining, Inc.
 Permit No. 341 Eastern Mining Systems, Inc.**
 Permit No. 342 Primrose Coal Company*
 Permit No. 343 L.C. Coal Company
 Permit No. 344 Bridgeview Coal Company*
 Permit No. 345 Delta Mining, Inc.
 Permit No. 346 Inter-State Lumber Company*
 Permit No. 347 Kelley Enterprises*
 Permit No. 348 Schwinabart & Green, Joint Venture
 Permit No. 349 Wilhelm Coal, Inc.**
 Permit No. 350 Bridgeview Coal Company*
 Permit No. 351 Winner Bros. Coal Company, Inc.
 Permit No. 352 John Duckworth Coal Company
 Permit No. 353 Winner Bros. Coal Company, Inc.
 Permit No. 354 Brawal Mining, Inc.*
 Permit No. 355 Hi-Note, Inc.
 Permit No. 356 G&S Coal Company, Inc.***
 Permit No. 357 Richard Duckworth Coal Company
 Permit No. 358 Bridgeview Coal Company*
 Permit No. 359 Buffalo Coal Company, Inc.
 Permit No. 360 Buffalo Coal Company, Inc.
 Permit No. 361 Pamela Mines, Inc.**
 Permit No. 362 Alpha Mining, Inc.
 Permit No. 363 Pamela Mines, Inc.**
 Permit No. 364 John Duckworth Coal Company
 Permit No. 365 G&S Coal Company, Inc.
 Permit No. 366 Buffalo Coal Company, Inc.
 Permit No. 367 Buffalo Coal Company, Inc.
 Permit No. 368 Winner Bros. Coal Company, Inc.
 Permit No. 369 Bittinger Coal Company
 Permit No. 370 Keystone Mt. Development Company*
 Permit No. 371 Eagle Mining, Inc.
 Permit No. 372 John Duckworth Coal Company
 Permit No. 373 Commonwealth Coals, Inc.

Permit No. 374 Winner Bros. Coal Company, Inc.
 Permit No. 375 Win-More Mining & Construction Company
 Permit No. 376 Jones Coal, Inc.
 Permit No. 377 Oakland Coal Company
 Permit No. 378 Delta Mining, Inc.
 Permit No. 379 Masteller Coal Company
 Permit No. 380 Fairview Coal Company (Repermitted 399)*
 Permit No. 381 Richard Duckworth Coal Company
 Permit No. 382 Pine Mt. Coal Company
 Permit No. 383 Oakland Coal Company
 Permit No. 384 Evans Coal Company
 Permit No. 385 Jones Coal, Inc.
 Permit No. 386 Jones Mining, Inc.
 Permit No. 387 Hilltop Construction Company
 Permit No. 388 Fetterolf Mining, Inc.***
 Permit No. 389 Tower Resources, Inc.
 Permit No. 390 C.J. Merlo, Inc.
 Permit No. 391 Oak Springs Coal Company
 Permit No. 392 Westvaco Resources, Inc.
 Permit No. 393 K&J Development, Inc.
 Permit No. 394 Action Mining, Inc.
 Permit No. 395 Stan-Jan Excavating, Inc.
 Permit No. 396 Oakland Coal Co.
 Permit No. 397 Michael R. McGowan
 Permit No. 398 Brashear Coal Company
 Permit No. 399 Fairview Coal Company
 Permit No. 400 Delta Mining, Inc.
 Permit No. 401 Buffalo Coal Company, Inc.***
 Permit No. 402 Pine Mt. Coal Company
 Permit No. 403 Delta Mining, Inc.
 Permit No. 404 Clise Coal Company***
 Permit No. 405 Jones Coal, Inc.
 Permit No. 406 Patriot Mining Company, Inc.
 Permit No. 407 Jones Coal, Inc.***
 Permit No. 408 Tri Star Mining, Inc.***
 Permit No. 409 Buffalo Coal Company, Inc.

DEEP MINES

Permit DM 101 Mettiki Coal Corporation
 Permit DM 102 Masteller Coal Company*
 Permit DM 103 Mt. Top Coal Company
 Permit DM 104 Mettiki Coal Corporation
 Permit DM 105 Mettiki Coal Corporation
 Permit DM 106 A&J Coal Corporation**
 Permit DM 107 Masteller Coal Company

TIPPLES AND GOB PILES

Permit SC-83-101 Buffalo Coal Company
Permit SC-83-102 Buffalo Coal Company
Permit SC-83-103 Buffalo Coal Company
Permit SC-83-104 Buffalo Coal Company
Permit SC-83-105 Buffalo Coal Company***
Permit SC-83-106 Permit Not Issued
Permit SC-83-107 Delta Coal Sales, Inc.
Permit SC-83-108 Delta Coal Sales, Inc.
Permit SC-83-109 Permit Not Issued
Permit SC-83-110 Potomac Coal Company
Permit SC-83-111 Westvaco Resources, Inc.
Permit SC-83-112 Winner Bros. Coal Company
Permit SC-83-113 Permit Not Issued
Permit SC-83-114 Ever, Inc.
Permit SC-83-115 Permit Not Issued

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