



Maryland
Department of
the Environment

One Hundred First Annual Report of the Maryland Bureau of Mines

-2022-

Prepared by:
Land and Materials Administration
Mining Program

Prepared for:
Senate Education, Health, and Environmental
Affairs Committee
House Environment and Transportation Matters Committee

Wes Moore, Governor
State of Maryland

Aruna Miller, Lt. Governor
State of Maryland

Bill Ferguson, Senate President
Maryland General Assembly

Adrienne A. Jones, House Speaker
Maryland General Assembly

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EXECUTIVE SUMMARY

This report is published by the Maryland Department of Environment (MDE), in accordance with the Environment Article, §15-203(g), Annotated Code of Maryland §15-827, covering coal mine operations.

During the calendar year 2022, Maryland operators produced 1.42 million tons of coal. Surface coal mining production totaled 0.81 million tons in Allegany County and 0.09 million tons in Garrett County. Deep coal mining production totaled 0.51 million tons, all in Garrett County.

The Maryland Department of Environment's Bureau of Mines received 58 applications for permitting actions and approved 60, including 2 new permits. Other actions approved included 23 operator's license renewals, insignificant modifications, transfers, and prospecting permits.

140 acres were affected, 122 acres were backfilled, and 122 acres were planted.

786 inspections were conducted on coal mining operations. Two Notice of Violation were issued. 15 Citizen Complaints were received and investigated and there was one cessation order issued. There were no Permit Revocations or Bond Forfeitures during this calendar year.

The Land Reclamation Committee met three times. The Committee evaluated the revegetation on 88 acres eligible for Phase II bond release and approved 80 acres as meeting the standards for release. There was one reclamation plan change during the year.

**SUMMARY OF STATISTICS FOR THE CALENDAR YEAR 2022
REPORT OF THE MARYLAND BUREAU OF MINES**

Coal production in Maryland during 2022 totaled 1,426,473.30 tons. Production in 2022 represents a decrease of 36,777.29 tons from the 2021 production of 1,463,250.59 tons.

**SUMMARY OF 2022
STATISTICS¹**

COAL PRODUCTION (TONS)

Mining Method	Allegany County	Garrett County	Total
Strip	813,091.87	95,204.03	908,295.90
Deep	.00	518,177.40	518,177.40
Auger	.00	.00	.00
TOTALS	813,091.87	613,381.43	1,426,473.30

EMPLOYEES²

Type of Mine	Allegany County	Garrett County	Total
Deep	0	81	81
Strip	74	17	91
TOTALS	74	98	172

¹Obtained from reports submitted by Maryland mining operators.

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

TONNAGE BY COAL SEAMS

ALLEGANY COUNTY

Waynesburg	85,793.51
Sewickley	67,612.25
Redstone	188,615.07
Pittsburgh	249,436.19
Morantown	31,660.82
L. Pittsburgh	118,144.13
Franklin	0.00
Harlem	0.00
Bakerstown	11,714.76
Freeport	37,885.92
Tyson	22,229.22
Borden	0.00
Barton	0.00
TOTAL	813,091.87

GARRETT COUNTY

Sewickley	2,248.74
Pittsburgh	165.95
Morantown	1,588.35
L. Pittsburgh	11,798.10
Franklin	1,649.89
Barton	6,716.46
Harlem	0.00
Bakerstown	71,036.54
Freeport	518,177.40
Upper Kittanning	0.00
Middle Kittanning	0.00
Redstone	0.00
Tyson	0.00
Waynesburg	0.00
TOTAL	613,381.43

TONNAGE BY BASIN

Lower Youghiogheny	0.00
Upper Youghiogheny	0.00
Casselman	518,177.40
Casselman-Cherry Creek	0.00
Potomac	53,411.50
George's Creek	864,884.40
TOTAL	1,426,473.30

**2022 COAL PRODUCTION, MINING, AND RECLAMATION STATISTICS BY PERMIT
FOR ALLEGANY & GARRETT COUNTIES***

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

ALLEGANY COUNTY

Operator	Permit Number	Total Tonnage Mined by Permit	Coal Seam	PRODUCTION (TONS)		
				Deep	Strip	Auger
ARJ Construction	464	37,885.92	Freeport		37,885.92	
Beechwood Coal, LLC	359	0.00	Pittsburgh		0.00	
			Morantown		0.00	
			Redstone		0.00	
	393	132,832.50	Pittsburgh		62,134.27	
			Redstone		57,729.57	
			Morantown		7,285.73	
			Tyson		5,682.93	
	439	292,006.92	Borden		11,714.76	
			Tyson		16,546.29	
			Sewickley		40,104.73	
			Pittsburgh		121,549.01	
			Waynesburg		8,649.93	
			Redstone		93,442.20	
			Morantown		0.00	
	442	68,086.10	Waynesburg		68,086.10	
	451	0.00	Redstone		0.00	
	457	0.00	Pittsburgh		0.00	
Redstone				0.00		
Morantown				0.00		
Tyson				0.00		
Redstone				0.00		
462	0.00	Redstone		0.00		
		Pittsburgh		0.00		
		Tyson		0.00		
C & S Coal	456	0.00	Pittsburgh		0.00	

			Redstone	0.00
Cobra Mining	437	41,594.09	Pittsburgh	34,252.60
			Morantown	3,680.48
			Redstone	3,661.01
G & S Coal	440	0.00	Little Pittsburgh	0.00
			Pittsburgh	0.00
			Morantown	0.00
			Franklin	0.00
Tri-Star Mining	419	134,745.81	Pittsburgh	29,796.62
			Little Pittsburgh	21,767.86
			Morantown	12,834.04
			Redstone	33,782.29
			Sewickley	27,507.52
			Waynesburg	9,057.48
	436	105,940.53	Franklin	0.00
			Little Pittsburgh	96,376.27
			Pittsburgh	1,703.69
			Morantown	7,860.57
			Redstone	0.00
			Sewickley	0.00
Walker Bros. Mining, Inc.	453	0.00	Pittsburgh	0.00
			Morantown	0.00
			Redstone	0.00
			Tyson	0.00
TOTAL ALLEGANY COUNTY		813,091.87		813,091.87

GARRETT COUNTY

Operator	Permit Number	Total Tonnage Mined by Permit	Coal Seam	PRODUCTION (TONS)		
				Deep	Strip	Auger
ARJ Construction	DM111	0.00	Barton	0.00		
	SM114	17,625.04	Lower Bakerstown		17,625.04	
	463	0.00	Lower Bakerstown		0.00	
G & S Coal Company, Inc.	421	0.00	Franklin		0.00	
	435	0.00	Bakerstown		0.00	
			Barton		0.00	
			Harlem		0.00	
	454	0.00	Barton		0.00	
			Harlem		0.00	
			Bakerstown		0.00	
	465	53,411.50	Bakerstown		53,411.50	
MER, LLC	DM113	518,177.40	Upper Freeport	518,177.40		
Pine Mountain Coal Company	424	734.04	Pittsburgh		165.95	
			Morantown		0.00	
			Redstone		0.00	
			Franklin		568.09	
Savage Mountain Minerals, Inc.	445	8,427.14	Little Pittsburgh		8,427.14	
	446	2,248.74	Sewickley		2,248.74	
			Morantown		0.00	
			Pittsburgh		0.00	
	448	7,798.26	Barton		6,716.46	
			Pittsburgh		0.00	
			Franklin		1,081.80	
	461	0.00	Barton		0.00	
Tri-Star Mining, Inc.	419	4,959.31	Pittsburgh		0.00	
			Little Pittsburgh		3,370.96	
			Redstone		0.00	
			Morantown		1,588.35	
			Barton		0.00	
			Sewickley		0.00	
TOTAL GARRETT COUNTY		613,381.43		518,177.40	95,204.03	
TOTAL BOTH COUNTIES		1,426,473.30		518,177.40	908,295.90	

2022 SUMMARY OF ACRES PERMITTED, MINED, BACKFILLED, PLANTED, AND RELEASED

Allegany County						
Georges Creek Basin						
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres	Released Acres
Ritchie Trucking & Excavating	40	0	0	0	0	0
Beechwood Coal, LLC	359	0	0	0	0	0
Heritage Coal & Natural Resources	393	0	15	13	13	0
Tri-Star Mining, Inc.	419	0	9	9	9	20
Tri-Star Mining, Inc.	436	0	17	13	13	6
Cobra Mining	437	0	3	4	4	0
Heritage Coal & Natural Resources	439	0	7	15	15	0
G&S Coal Company, Inc.	440	0	0	0	0	0
Heritage Coal & Natural Resources	442	39	38	20	20	0
Beechwood Coal, LLC	447	0	0	0	0	0
Beechwood Coal, LLC	451	0	0	0	0	0
Heritage Coal & Natural Resources	453	0	0	0	0	0
Heritage Coal & Natural Resources	456	0	0	0	0	0
Beechwood Coal, LLC	457	0	0	0	0	0
Beechwood Coal, LLC	462	0	0	0	0	0
ARJ Construction Company	464	16	16	11	11	0
Heritage Coal & Natural Resources	SC-104	0	0	0	0	0
Franklin Coal Yard	SC-116	0	0	0	0	0
Tri-Star Mining, Inc.	SC-117	0	0	0	0	0
Allegany County						
Georges Creek Basin Total		55	105	85	85	26

Garrett County						
Georges Creek Basin						
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres	Released Acres
ARJ Construction Company	DM-111	0	0	11	11	0
ARJ Construction Company	DM-114	0	0	0	0	0
Pine Mountain Coal Company	424	0	1	0	0	0
Savage Mountain Minerals	445	0	0	0	0	0
Savage Mountain Minerals	446	0	0	0	0	0
Savage Mountain Minerals	448	0	0	0	0	0
Savage Mountain Minerals	461	0	0	0	0	0
ARJ Construction Company	463	0	0	0	0	0
JX5 Energy , LLC	466	115	1	0	0	0
Savage Mountain Minerals	467	72	1	0	0	0
Georges Creek Basin Garrett County		187	3	11	11	0
Georges Creek Basin Garrett + Allegany County		242	108	96	96	26
Potomac River Basin						
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres	Released Acres
Mettiki Coal, LLC	DM-101	0	0	2	2	0
Backbone Mountain, LLC	DM-112	0	0	0	0	0
G&S Coal Company, Inc.	421	0	0	0	0	0
G&S Coal Company, Inc.	435	0	0	0	0	0
G&S Coal Company, Inc.	441	0	0	0	0	0
G&S Coal Company, Inc.	454	0	0	24	24	0

G&S Coal Company, Inc.	455	0	0	0	0	0
Patriot Mining, LLC	459	0	0	0	0	49
Heritage Coal & Natural Resources	465	0	0	0	0	0
G&S Coal Company, Inc.	SC-120	0	0	0	0	0
Deer Haven Farms, LLC	SC-121	0	0	0	0	0
Patriot Mining, LLC	SC-122	0	0	0	0	0
Patriot Mining, LLC	SC-123	0	0	0	0	0
Potomac Basin Total		0	0	26	26	49
Casselman Basin						
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres	Released Acres
Maryland Energy Resources	DM-113	14	5	0	0	0
Maryland Energy Resources	DM-115	0	0	0	0	0
Casselman Basin Total		14	5	0	0	0
Youghiogheny River Basin						
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres	Released Acres
LAOC Corporation	460	0	0	0	0	0
Youghiogheny Basin Total		0	0	0	0	0
All Garrett County Basins Total		201	8	37	37	49
Maryland Totals		256	113	122	122	75

Acres Mined, Backfilled, Planted, and Released By Geological Basin

Acres Reported in 2022 Annual Mining and Progress Reports

Coal Basin	Permitted	Affected	Backfilled	Planted	Released
Georges Creek Allegany County	55	105	85	85	26
Georges Creek Garrett County	187	30	11	11	0
Potomac River	0	0	26	26	49
Casselman River	14	5	0	0	0
Cherry Creek	0	0	0	0	0
Upper Youghiogheny	0	0	0	0	0
Lower Youghiogheny	0	0	0	0	0
Total	256	140	122	122	75

Cumulative Acres from January 1, 1975 – December 31, 2022

Coal Basin	Permitted	Affected	Backfilled	Planted	Released
Georges Creek Allegany County	9555	8274	6776	7080	7148
Georges Creek Garrett County	3654	3181	2963	3198	3214
Potomac River	6214	5608	4977	5447	5393
Casselman River	1545	1169	1261	1142	1266
Cherry Creek	667	672	579	546	660
Upper Youghiogheny	230	157	215	189	262
Lower Youghiogheny	1335	921	1145	1088	885
Total	23200	19982	17916	18690	18828

2022 PERMITTING ACTIVITY

Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
Original Permits	0	2	72	0	0	0	0	0	0	0	2	72
Permit Increments	6	4	103	1	0	0	0	0	0	7	4	103
Incidental Boundary Revisions	1	1	17	1	1	0	0	0	0	2	2	17
Significant Amendments	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant Amendments	12	12		2	2		0	0		14	14	
Transfers	2	2		0	0		0	0		2	2	
Renewals	2	5		1	1		4	4		7	10	
Prospecting Permits	1	1		0	0		0	0		1	1	
Prospecting Letter of Intent	0	0		0	0		0	0		0	0	
Operators License Original	2	2		0	0		0	0		2	2	
Operators License Renewals	19	19		4	4		0	0		23	23	
Totals	45	48	192	9	8	0	4	4	0	58	60	192

MINE FOREMAN AND FIRE BOSS EXAMINATIONS AND CERTIFICATIONS

Mine Foreman and Fire Boss applicants examined and certified from 2018 through 2022.

YEAR	<u>APPLICANTS EXAMINED</u>		<u>APPLICANTS CERTIFIED</u>	
	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
2022	0	0	0	0
2021	0	0	0	0
2020	0	0	0	0
2019	0	0	0	0
2018	0	0	0	0

INSPECTION AND ENFORCEMENT ACTIVITIES 2018-2022

TYPE OF ACTION	2018	2019	2020	2021	2022
Inspections	808	743	640	782	786
Notices of Violations	4	8	1	6	2
Cessation Orders	0	1	0	0	1
Citizen Complaints	11	7	11	11	15
Bond Forfeitures	0	0	0	0	0

LAND RECLAMATION COMMITTEE

The following members served on the Land Reclamation Committee during 2022:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

Mike Garner, Chairman, Mining Program, Abandoned Mined Lands Division

John E. Carey, Mining Program, Bureau of Mines

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

George Eberling, Forestry Division

Kenny Wampler, Freshwater Fisheries

Rande Brown, Wildlife Division

CITIZEN REPRESENTATIVES:

Bill Murphy, Garrett County

Bill Pegg, Allegany County

COUNTY REPRESENTATIVES:

Jeff Barclay, Allegany County

Ivy Opel, Garrett County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

Adam Heavner, Allegany Soil Conservation District

Seth Metheny, Garrett Soil Conservation District

COAL INDUSTRY REPRESENTATIVES:

Tim Schwinabart

Steve Jenkins

LAND RECLAMATION COMMITTEE FUNCTIONS AND DUTIES

The Land Reclamation Committee is responsible for the approval of all reclamation plans submitted as part of an application for a coal mining permit. The committee also oversees 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 2022, the Land Reclamation Committee conducted site visits on three days. These visits included field reviews of 7 revegetation sites to evaluate the success of the revegetation.

The Land Reclamation Committee conducts meetings to:

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

During 2022, the Land Reclamation Committee met three times. At that time, the Land Reclamation Committee approved one reclamation plan. They also evaluated 88 acres of revegetation eligible for Phase II bond release and approved 80 acres as meeting the standards for release.

Reclamation Results of Surface Mined Lands 2022

Bond Release Phase	Applicable Performance Standard	Acreage Released
Phase I	<ul style="list-style-type: none"> • Area restored to Approximate Original Contour • Topsoil replaced • Area seeded and mulched • Completion of all reclamation work on the permit or the open acre limit is reduced 	59
Phase II	<ul style="list-style-type: none"> • Revegetation established in accordance with approved reclamation plan and standards for success of revegetation met • The lands are not contributing suspended solids to stream flow or runoff outside the permit area • Temporary drainage control structures are removed, or all permanent structures are inspected and approved • Land Reclamation Committee has inspected and approved the revegetation on the area 	183
Phase III	<ul style="list-style-type: none"> • Post-mining land use/productivity restored • Successful permanent vegetation established • Groundwater recharge, quality and quantity restored • Surface water quality and quantity restored • Applicable bond liability period has expired 	298

MINING PERMITS ISSUED BY YEAR AND PERMITTEE

Permit <u>No.</u>	<u>Year</u> <u>Issued</u>	<u>Permittee</u>
1	1955	The George's Creek Lumber Company*
2	1955	Allegany Engineering Company*
3	1955	B.M.W. Coal Company*
4	1955	Old Hampshire Coal Company, Inc.*
5	1955	Car and Glotfelty Construction Co.*
6	1955	M.H. Bigan Coal Company*
7	1955	Moran Coal Company*
8	1955	Allegany Engineering Company*
9	1955	Schell Mining Company, Inc.*
10	1955	B & U Coal Company*
11	1955	Morgan Contracting Company**
12	1955	Romadale Coal Corporation*
13	1955	Cross Fuel Company*
14	1955	Highland Construction Company*
15	1955	Phoenix Big Vein Coal Company (Repermitted 338)*
16	1955	Moran Coal Company*
17	1955	T.J. Cramblett**
18	1955	Moscow-Georges Creek Coal Company*
19	1955	J.R. Thrasher Contracting & Stripping Co.*
20	1956	Moran Coal Company (Repermitted 333)*
21	1956	Schell Mining Company, Inc.**
22	1956	Savage Coal Company*
23	1956	Moran Coal Company*
24	1956	The Georges Creek Coal & Land Co.*
25	1957	Charles T. Clise*
26	1957	Allegany Engineering Company*
27	1957	Goodwill Fuel Company*
28	1957	D.B.&B. Coal Company*
29	1957	Queen George's Creek Coal Company**
30	1957	Mack Coal Company**
31	1957	White Crest Coal Company, Inc.**
32	1957	D.B.&B. Coal Company*
33	1957	Moran Coal Company*
34	1957	Chelsie A. Liller*
35	1957	J.E. George Trucking Company**
36	1957	D.B.&B. Coal Company*
37	1957	J&M. Coal Company**
38	1957	Casey Construction Company**
39	1958	Moran Coal Company*
40	1958	United Energy Coal, Inc. **
40	2008	Ritchie Trucking & Excavating, Inc. (Reinstated)*
41	1958	Buffalo Coal Company, Inc.*
42	1958	Casey Construction Company**
43	1958	Sara-Ki Coal Company, Inc.*

44	1958	Yantus & Zubek Coal Company*
45	1958	Moran Coal Company*
46	1958	Casey Construction Company**
47	1958	Moran Coal Company*
48	1958	Moran Coal Company*
49	1958	Sara-Ki Coal Company, Inc.*
50	1958	Laurel Creek Company, Inc.**
51	1958	D.B.&B. Coal Company**
52	1958	Moon and Sons*
53	1959	George L. Smith Contracting Company*
54	1959	The Georges Creek Lumber Company*
55	1959	Moran Coal Company*
56	1959	North Branch Coal Corporation*
57	1959	George Coal Company**
58	1959	Samuel Compton & Company**
59	1959	Hoover & White*
60	1959	Laurel Creek Company, Inc.**
61	1959	The Eddy Fuel Company**
62	1959	J.R. Thrasher Contracting & Stripping Co.*
63	1959	Pittsburgh Coal Company*
64	1959	Mineral Coal Company, Inc., of West Virginia*
65	1959	Laurel Creek Company, Inc.*
66	1959	The Georges Creek Lumber Company*
67	1959	Chelsie A. Liller*
68	1959	Casey Contracting Company**
69	1959	Pine Mountain Coal Company*
70	1959	Opel and Brenneman*
71	1959	The Georges Creek Lumber Company*
72	1959	P.&J. Coal Company*
73	1959	Casey Contracting Company**
74	1959	Goodwill Fuel Company*
75	1959	D.B.&B. Coal Company*
76	1960	Baughman Contracting Company, Inc.*
77	1960	P&K Coal Company*
78	1960	Morgan Contracting Company*
79	1960	Buffalo Coal Company, Inc.*
80	1960	Buffalo Coal Company, Inc.*
81	1960	Randall Robertson*
82	1960	Hoover & White**
83	1960	James E. George*
84	1960	B.M.W. Coal Company, Inc.*
85	1960	Casey Contracting Company**
86	1960	Beener Coal Company*
87	1960	Moran Coal Company, Inc.*
88	1960	D&K Coal Company*
89	1960	Brenneman Brothers*
90	1960	Mack Coal Company*
91	1960	Clarence Rodamar*
92	1960	James E. George*

93	1961	Casey Contracting Company**
94	1961	Winner Brothers*
95	1961	Moran Coal Company, Inc.*
96	1961	Big Vein Coal Company*
97	1961	Maryland Fuel Company, Inc.*
98	1961	Yantus-Zubek Coal Company*
99	1961	J.R. Thrasher Contracting & Stripping Co.*
100	1961	Trefall Bros., Inc.*
101	1961	Mack Coal Company*
102	1961	C.A. Liller Company*
103	1961	Cross & Brumage Coal Company*
104	1961	Beener Coal Company*
105	1961	D&K Coal Company*
106	1961	Mack Coal Company*
107	1961	Yantus and Zubek*
108	1961	Potomac Mining Company*
109	1962	Casey Contracting Company*
110	1962	Wilhelm Coal Company*
111	1962	The Georges Creek Lumber Company*
112	1962	Clark Coal Company*
113	1962	Casey Contracting Company*
114	1962	Casey Contracting Company*
115	1962	Douglas Coal Company*
116	1962	Red Lion Mining Corporation**
117	1962	Ebensburg Coal and Clay Company*
118	1963	James E. George*
119	1963	Ebensburg Coal and Clay Company*
120	1963	J.R. Thrasher Contracting & Stripping Co.*
121	1963	Moran Coal Company, Inc.*
122	1963	Buffalo Coal Company, Inc.*
123	1963	J.R. Thrasher Contracting & Stripping Co.*
124	1963	Win-More Mining & Construction Co., Inc.*
125	1963	Beener Coal Company*
126	1964	W.R. Nethken and Company, Inc.*
127	1964	Mack Coal Company*
128	1964	J.R. Thrasher Contracting & Stripping Co.*
129	1964	J. Russell Cravener*
130	1964	Chelsie A. Liller*
131	1964	The Georges Creek Lumber Company*
132	1964	Brenneman Brothers*
133	1965	W.R. Nethken and Company, Inc.*
134	1965	Richards and Parnell Coal Company*
135	1965	William Brashear*
136	1965	W.R. Nethken and Company, Inc.*
137	1965	G&S Coal Company, Inc.*
138	1966	J.R. Thrasher Contracting & Stripping Co.*
139	1966	J.R. Thrasher Contracting & Stripping Co.*
140	1966	Shallmar Coal Company, Inc.*
141	1966	Randall Robertson**

142	1966	Ace Drilling Coal Company, Inc.*
143	1966	Beener Coal Company*
144	1966	Clarence Rodamer*
145	1967	Ginniman Coal Company*
146	1967	Raymond A. Wolf Mining Company*
147	1967	Menallen Coke Company*
148	1967	Russel Shafer*
149	1967	Homage Coal Co. (Emmett Duppstadt)*
150	1967	Twin States Coal Company**
151	1967	M.F. Fetterolf Coal Company, Inc.*
152	1967	Ebensburg Coal and Clay Company*
153	1968	Raymond A. Wolf Mining Co. (UPRC)*
154	1968	Michael Rostosky*
155	1968	Ginniman & Ware Coal Company*
156	1968	Harold H. Upole Coal Company*
157	1968	T.G.&C. Coal Company, Inc.*
158	1969	Clarence Rodamer Coal Company*
159	1969	Michael Rostosky Coal Company*
160	1969	Russel Shafer Coal Company*
161	1969	Buffalo Coal Company, Inc.*
162	1969	J.R. Thrasher Contracting & Stripping Co.***
163	1969	Buffalo Coal Company, Inc.*
164	1969	Union Coal Company*
165	1970	Win-More Mining & Construction Co., Inc.*
166	1970	Ginniman Coal Company*
167	1970	Upperman Coal Company*
168	1970	Frank Pulford**
169	1970	Winner Bros. Coal Company, Inc.*
170	1970	Russel Shafer*
171	1970	The Chief Coal Company*
172	1970	Mary Ruth Corporation*
173	1970	Oakland Coal Company*
174	1971	Bernard C. Drees*
175	1971	Delta Mining, Inc.*
176	1971	D&K Coal Company, Inc.*
177	1971	T.G.&C. Coal Company, Inc.*
178	1971	Emmett Duppstadt*
179	1971	Somerset Excavating, Inc.*
180	1971	Ayers Coal Company*
181	1971	Delta Mining, Inc.*
182	1971	Patriot Mining Company, Inc.*
183	1971	Chief Coal Company*
184	1971	Cobra Mining, Inc.*
185	1971	Bessemer Iron & Coal Company*
186	1971	Coal Lick Coal Company*
187	1971	Phillips Big Vein Coal Company*
188	1971	Ace Drilling Coal Company, Inc.*
189	1971	Buffalo Coal Company, Inc.*
190	1971	Buffalo Coal Company, Inc.*

191	1971	Keystone Coal and Development Co. (Liability assumed by Garrett County Roads Dept.)
192	1971	Ace Drilling Company, Inc.*
193	1972	Wilhelm Coal, Inc.*
194	1972	M.F. Fetterolf Coal Company, Inc.***
195	1972	Buffalo Coal Company, Inc.*
196	1972	Bessemer Iron & Coal Company*
197	1972	Grafton Coal Company*
198	1972	Jet Fuel Coal Company*
199	1972	Bessemer Iron & Coal Company*
200	1972	Chief Coal Company*
201	1972	Brashear Coal Company*
202	1972	Winner Bros. Coal Company, Inc.*
203	1972	Mary Ruth Corporation*
204	1972	Grafton Coal Company*
205	1972	Chief Coal Company*
206	1972	Upperman Coal Company*
207	1972	United Energy Coal, Inc.**
208	1973	Sanner Bros. Coal Company*
209	1973	Delta Mining, Inc.*
210	1973	Markat, Inc.*
211	1973	Oakland Coal Company*
212	1973	Bessemer Iron & Coal Company*
213	1973	Clise Coal Company*
214	1973	Inter-State Lumber Company*
215	1973	Buffalo Coal Company, Inc.*
216	1973	Brashear Coal Company***
217	1973	Bernard Drees Coal Company*
218	1973	Buffalo Coal Company, Inc.*
219	1973	G&S Coal Company, Inc.*
220	1974	Evans Coal Company*
221	1974	Bridgeview Coal Company*
222	1974	John Duckworth Coal Company*
223	1974	Edward Mikel*
224	1974	Delta Mining, Inc.*
225	1974	Northwest Coal Company, Inc.*
226	1974	Thrasher Coal Company**
227	1974	Winner Bros. Coal Company, Inc.*
228	1974	Bittinger Coal Company*
229	1974	Charles M. Filsinger*
230	1974	G&H Coal Company, Inc.*
231	1974	Hi-Note, Inc.*
232	1974	Buffalo Coal Company, Inc.*
233	1974	Oliver Mining Company**
234	1974	Clise Coal Company*
235	1974	Markat, Inc.*
236	1974	Delta Mining, Inc.*
237	1974	Bridgeview Coal Company*
238	1974	Burnham Coal Company, Inc.*

239	1974	Highland Mining*
240	1974	Buffalo Coal Company, Inc.*
241	1975	Buffalo Coal Company, Inc.*
242	1975	Hopwood Strip Mine, Inc.**
243	1975	Ponderosa Coal Company, Inc.*
244	1975	Markat, Inc.*
245	1975	Phillips Coal, Inc.*
246	1975	Lambert Coal Company*
247	1975	United Energy Coal, Inc.**
248	1975	Buffalo Coal Company, Inc.*
249	1975	Cobra Fuels*
250	1975	Laoc Coal Company*
251	1975	Tower Resources, Inc.*
252	1975	Phillips Coal, Inc.*
253	1975	Pine Mt. Coal Company*
254	1975	T.G.&C. Coal Company*
255	1975	Allegheny Mining Company*
256	1975	Bridgeview Coal Company*
257	1975	A&R Coal Company*
258	1975	Clinton Coal Company**
259	1975	Tower Resources, Inc.*
260	1975	Yough Tree Farm*
261	1975	Russel Shafer***
262	1975	Northwest Coal Company**
263	1975	Allegheny Mining Corporation*
264	1975	Tri-Star Mining, Inc.*
265	1975	Bittinger Coal Company*
266	1975	Delta Mining, Inc.*
267	1975	Bittinger Coal Company*
268	1975	Clyde Marsh Coal Company*
269	1975	Hungry Hollow Coal Company*
270	1975	Clise Coal Company*
271	1975	A&R Coal Company*
272	1975	Action Mining, Inc.*
273	1975	Win-More Mining & Construction *
274	1975	Evans Coal Company*
275	1975	Buffalo Coal Company, Inc.*
276	1975	Buffalo Coal Company, Inc.*
277	1975	Allegheny Mining Corporation *
278	1976	Inter-State Lumber Company*
279	1976	Buffalo Coal Company, Inc.*
280	1976	Delta Mining, Inc.*
281	1976	Rondell Company*
282	1976	Phillips Coal, Inc.*
283	1976	G&H Coal Company, Inc.*
284	1976	Tower Resources, Inc.*
285	1976	Clinton Coal Company**
286	1976	Winner Bros. Coal Company, Inc.*
287	1976	T.L. Moran, Inc.*

288	1976	Delta Mining, Inc.*
289	1976	Pine Mt. Coal Company*
290	1976	Delta Mining, Inc.*
291	1976	George Nolan**
292	1976	Alexander Coal Co.*
293	1976	Pine Mt. Coal Company*
294	1976	Arlen Miller***
295	1976	Action Mining, Inc.*
296	1976	Bessemer Iron & Coal Company**
297	1977	Oakland Coal Company *
298	1977	Bittinger Coal Company*
299	1977	Inter-State Lumber, Inc.*
300	1977	Garbart Coal Company*
301	1977	Pine Mt. Coal Company*
302	1977	L.C. Coal Company, Inc.*
303	1977	Ginniman Brothers Coal Company**
304	1977	Buffalo Coal Company, Inc.*
305	1977	Wood Products, Inc.*
306	1977	Bridgeview Coal Company*
307	1977	T.L. Moran, Inc.*
308	1977	Best Coal Stripping, Inc.**
309	1977	Delta Mining, Inc.*
310	1977	Oakland Coal Company*
311	1977	Primrose Coal Company*
312	1977	R.A.K. Coal Company, Inc.**
313	1977	G&S Coal Company*
314	1977	Wilhelm Coal, Inc.**
315	1977	Clise Coal Company*
316	1977	Brawal Mining, Inc.*
317	1977	John R. Livingston**
318	1977	Winner Bros. Coal Company, Inc. *
319	1977	John Duckworth Coal Company*
320	1977	Kelley Enterprises*
321	1978	Delta Mining, Inc.*
322	1978	Bridgeview Coal Company*
323	1978	Ayers Coal Company*
324	1978	John Duckworth Coal Company*
325	1978	G&S Coal Company, Inc.*
326	1978	Buffalo Coal Company, Inc.**
327	1978	Buffalo Coal Company, Inc.*
328	1978	Buffalo Coal Company, Inc. *
329	1978	Winner Bros. Coal Company, Inc.*
330	1978	Inter-State Lumber Company*
331	1978	R.A.K. Coal Company***
332	1978	Seneca Mining Company*
333	1978	Westvaco Corporation*
334	1978	Buffalo Coal Company, Inc.*
335	1978	Inter-State Lumber Company**
336	1978	Inter-State Lumber Company*

337	1978	Kirby Energy, Inc.*
338	1978	Vindex Energy Corporation*
339	1978	Wilhelm Coal, Inc.*
340	1978	Fetterolf Mining, Inc.*
341	1979	Eastern Mining Systems, Inc.**
342	1979	Primrose Coal Company*
343	1979	L.C. Coal Company*
344	1979	Bridgeview Coal Company*
345	1979	Delta Mining, Inc.**
346	1979	Inter-State Lumber Company*
347	1979	Kelley Enterprises*
348	1979	Schwinabart & Green, Joint Venture*
349	1979	Wilhelm Coal, Inc.**
350	1980	Bridgeview Coal Company*
351	1980	Winner Bros. Coal Company, Inc.*
352	1980	John Duckworth Coal Company*
353	1980	Winner Bros. Coal Company, Inc.*
354	1980	Brawal Mining, Inc.*
355	1980	Hi-Note, Inc.*
356	1980	G&S Coal Company, Inc.***
357	1980	Richard Duckworth Coal Company*
358	1980	Bridgeview Coal Company*
359	1980	Buffalo Coal Company, Inc.**
359	2008	Beechwood Coal, LLC. (Reinstated)
360	1980	Buffalo Coal Company, Inc.*
361	1980	Pamela Mines, Inc.**
362	1980	Alpha Mining, Inc.*
363	1980	Pamela Mines, Inc.**
364	1980	John Duckworth Coal Company*
365	1980	G&S Coal Company, Inc.*
366	1980	Buffalo Coal Company, Inc.*
367	1980	Buffalo Coal Company, Inc.**
368	1980	United Energy Coal, Inc.**
369	1980	Bittering Coal Company*
370	1982	Keystone Mt. Development Company*
371	1982	Eagle Mining, Inc.*
372	1982	John Duckworth Coal Company*
373	1982	Kirby Energy, Inc.**
374	1982	Winner Bros. Coal Company, Inc.*
375	1982	Win-More Mining & Construction Company*
376	1982	Jones Coal, Inc.**
377	1982	Allegheny Mining Corporation*
378	1982	Delta Mining, Inc.**
379	1982	Masteller Coal Company*
380	1982	Fairview Coal Company (Repermitted 399)*
381	1982	Richard Duckworth Coal Company*
382	1983	Pine Mt. Coal Company*
383	1983	Allegheny Mining Corporation*
384	1983	Evans Coal Company*

385	1983	Winner Bros. Coal Company, Inc.*
386	1983	Jones Mining, Inc.*
387	1983	Hilltop Construction Company**
388	1983	Fetterolf Mining, Inc.*
389	1983	Winner Bros. Coal Company, Inc.*
390	1983	C.J. Merlo, Inc.*
391	1983	Oak Springs Coal Company*
392	1984	Westvaco Resources, Inc.*
393	1984	Heritage Coal and Natural Resources, LLC
394	1984	Action Mining, Inc.*
395	1984	Stan-Jan Excavating, Inc.*
396	1984	Allegheny Mining Corporation*
397	1985	Michael R. McGowan*
398	1985	Brashear Coal Company*
399	1985	Fairview Coal Company*
400	1985	Delta Mining, Inc.*
401	1985	Buffalo Coal Company, Inc.***
402	1985	Pine Mt. Coal Company*
403	1985	T.D. Mining Company**
403	2003	United Energy, Inc.**
403	2008	Beechwood Coal, LLC*
404	1986	Clise Coal Company*
405	1986	Jones Coal, Inc.**
406	1986	Patriot Mining Company, Inc.*
407	1986	Ritchie Trucking & Excavating*
408	1986	Tri Star Mining, Inc.*
409	1986	Buffalo Coal Company, Inc.*
410	1987	J. Walter Wassell*
411	1987	Jenkins Development Company*
412	1987	John Duckworth Coal Company***
413	1988	Buffalo Coal Company, Inc.*
414	1989	United Energy Coal, Inc.**
415	1989	Pine Mt. Coal Company*
416	1989	Action Mining, Inc.*
417	1989	Tri Star Mining, Inc.*
418	1991	Tri Star Mining, Inc.*
419	1991	Tri Star Mining, Inc.
420	1991	Pine Mt. Coal Company *
421	1992	G&S Coal Company, Inc.
422	1992	Buffalo Coal Company, Inc. **
423	1992	United Energy Coal, Inc. **
424	1995	Pine Mt. Coal Company
425	1995	Tri Star Mining, Inc.*
426	1996	Tri Star Mining, Inc.*
427	1996	Vindex Energy Corp.*
428	1997	Mettiki Coal, LLC *
429	1997	Tri Star Mining, Inc.*
430	1998	G&S Coal Company, Inc.*
431	1998	Vindex Energy Corp.*

432	1999	Vindex Energy Corp.*
433	1999	Win-More Mining & Construction*
434	1999	Tri Star Mining, Inc.*
435	2000	G&S Coal Company, Inc.
436	2000	Tri-Star Mining
437	2001	Cobra Mining, Inc.
438	2001	Mountaineer Mining Corp.*
439	2001	Heritage Coal and Natural Resources, LLC
440	2001	G&S Coal Company, Inc.*
441	2002	G&S Coal Company, Inc.*
442	2002	Heritage Coal and Natural Resources, LLC
443	2002	Vindex Energy Corporation*
444	2003	Tri Star Mining, Inc.*
445	2004	Savage Mountain Minerals, Inc.
446	2004	Savage Mountain Minerals, Inc.
447	2005	Beechwood Coal, LLC*
448	2005	Savage Mountain Minerals, Inc.
449	2005	Clise Coal Company*
450	2006	LAOC Corporation*
451	2006	Beechwood Coal, LLC
452	2006	WPO, Inc.**
453	2007	Heritage Coal and Natural Resources, LLC
454	2007	Heritage Coal and Natural Resources, LLC
455	2008	G&S Coal Company, Inc.
456	2009	C&S Coal Company
457	2011	Beechwood Coal, LLC*
458	2011	LAOC Corporation*
459	2011	Patriot Mining, LLC
460	2012	LAOC Corporation*
461	2013	Savage Mountain Minerals
462	2013	Beechwood Coal, LLC
463	2013	ARJ Construction Company, Inc.
464	2019	ARJ Construction Company, Inc.
465	2021	Heritage Coal and Natural Resources, LLC
466	2022	JX5 Energy, LLC
467	2022	Savage Mountain Minerals, Inc.

DEEP MINES

DM 101	1977	Mettiki Coal, LLC
DM 102	1977	Masteller Coal Company*
DM 103	1977	Mt. Top Coal Company*
DM 104	1977	Mettiki Coal Corporation*
DM 105	1977	Mettiki Coal Corporation*
DM 106	1978	A&J Coal Corporation**
DM 107	1982	Masteller Coal Company*
DM 108	1989	Wolf Run Mining*
DM 109	1991	Wolf Run Mining*
DM 110	1992	Masteller Coal Company **
DM 111	2000	ARJ Construction

DM 112	2003	Backbone Mountain, LLC
DM 113	2009	Maryland Energy Resources, LLC
DM 114	2017	ARJ Construction Company, Inc.
DM 115	2020	Maryland Energy Resources, LLC

TIPPLES AND GOB PILES

SC-83-101	1983	Buffalo Coal Company*
SC-83-102	1983	Buffalo Coal Company*
SC-83-103	1983	Buffalo Coal Company*
SC-83-104	1983	Buffalo Coal Company **
SC-08-104	2008	Heritage Coal and Natural Resources, LLC
SC-83-105	1983	Buffalo Coal Company*
SC-83-106		Permit Not Issued
SC-83-107	1983	Delta Coal Sales, Inc**
SC-83-108	1984	Delta Coal Sales, Inc*
SC-83-109		Permit Not Issued
SC-83-110	1983	United Energy Coal, Inc. **
SC-83-111	1983	Westvaco Corporation*
SC-83-112	1983	United Energy Coal, Inc.*
SC-83-113		Permit Not Issued
SC-83-114	1984	Ever, Inc.*
SC-83-115		Permit Not Issued
SC-87-116	1987	Franklin Coal Yard, LLC
SC-87-117	1987	Tri Star Mining, Inc.
SC-87-118	1987	Vindex Energy Corp.*
SC-06-119	2006	Clise Coal Company, Inc.*
SC-07-120	2007	G&S Coal Company, Inc.*
SC-17-121	2017	Deerhaven Farms, LLC
SC-21-122	2021	Patriot Mining, LLC
SC-21-123	2021	Patriot Mining, LLC

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