



# Maryland

## Department of the Environment

Larry Hogan, Governor  
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

February 26, 2021

The Honorable Bill Ferguson, President  
Senate of Maryland  
State House, H-107  
Annapolis, MD 21401-1991

The Honorable Adrienne Jones, Speaker  
House of Delegates  
State House, H-101  
Annapolis, MD 21401-1991

Dear President Ferguson and Speaker Jones:

As required in Section 15-203(g) of the Environment Article, *Annotated Code of Maryland*, I am enclosing a copy of the Calendar Year 2018 Ninety-Seventh Annual Report of the Maryland Bureau of Mines.

If the Department can provide you with any additional information, please contact me or Ms. Kaley Laleker, Director of the Land and Materials Administration, at 410-537-3304 or via email at [kaley.laleker@maryland.gov](mailto:kaley.laleker@maryland.gov).

Sincerely,

Ben Grumbles  
Secretary

Enclosures

cc: Kaley Laleker, Director, Land and Materials Administration  
Sarah Albert, Maryland Department of Legislative Services



**Maryland**  
Department of  
the Environment

# Ninety-Seventh (97<sup>th</sup>) Annual Report of the Maryland Bureau of Mines

- 2018-

Prepared by:  
Land and Materials Administration  
Mining Program

Prepared for:  
Larry Hogan, Governor  
State of Maryland

Boyd K. Rutherford, Lt. Governor  
State of Maryland

Bill Ferguson, Senate President  
Maryland General Assembly

Adrienne A. Jones, House Speaker  
Maryland General Assembly

Senate Education, Health, and Environmental Affairs Committee

House Environment and Transportation Committee

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
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Larry Hogan, Governor | Boyd K. Rutherford, Lt. Governor | Ben Grumble, Secretary

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## **EXECUTIVE SUMMARY**

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

During CY18, Maryland operators produced 1.74 million tons of coal. Surface coal mining production totaled 0.67 million tons in Allegany County and 0.24 million tons in Garrett County. Deep coal mining production totaled 0.81 million tons, all in Garrett County. MDE's Bureau of Mines received 65 coal mine permit applications and approved 66 permitting actions, including three permit amendments. Included in the permitting actions were 23 operator's license renewals. Other permit actions included modifications, transfers, and prospecting permits. Two hundred thirty-eight acres were affected, 119 acres rough backfilled, and 209 acres planted.

Eight hundred and eight inspections were conducted on coal mining operations. Four notices of violation were issued. Eleven citizen complaints were received and investigated and there were no cessation orders issued. There were no permit revocations or bond forfeitures during this calendar year.

The Land Reclamation Committee (Committee) met two times and approved three reclamation plans. The Committee also evaluated the revegetation on 163 acres eligible for Phase II bond release and approved 143 acres as meeting the standards for release. There were no reclamation plan changes during the year.

**SUMMARY OF STATISTICS FOR THE CY18  
REPORT OF THE MARYLAND BUREAU OF MINES**

Coal production in Maryland during 2018 totaled 1,742,616.47 tons. Production in 2018 represents a decrease of 419,393.15 tons from the 2017 production of 2,162,009.62 tons.

**SUMMARY OF 2018 STATISTICS<sup>1</sup>**

**COAL PRODUCTION (TONS)**

<b>Mining Method</b>	<b>Allegany County</b>	<b>Garrett County</b>	<b>Total</b>
<b>Strip</b>	678,697.46	245,235.57	923,933.03
<b>Deep</b>	.00	818,683.44	818,683.44
<b>Auger</b>	.00	.00	.00
<b>TOTALS</b>	678,697.46	1,063,919.01	1,742,616.47

**EMPLOYEES<sup>2</sup>**

<b>Type of Mine</b>	<b>Allegany County</b>	<b>Garrett County</b>	<b>Total</b>
<b>Deep</b>	0	130	130
<b>Strip</b>	83	79	162
<b>TOTALS</b>	83	209	292

<sup>1</sup>Obtained from reports submitted by Maryland mining operators.

<sup>2</sup>These figures do not include office, supervisors, or independent truck haulers.

## TONNAGE BY COAL SEAMS, COUNTY, AND BASIN

### ALLEGANY COUNTY

Waynesburg .....	26,452.18
Sewickley .....	10,195.69
Redstone .....	200,029.33
Pittsburgh .....	342,226.83
Morantown .....	23,331.07
L. Pittsburgh .....	45,639.59
Franklin .....	0.00
Harlem .....	0.00
Bakerstown .....	0.00
Freeport .....	0.00
Tyson .....	30,822.77
Borden .....	0.00
Barton .....	0.00
<b>TOTAL .....</b>	<b>678,697.46</b>

### GARRETT COUNTY

Sewickley .....	32,446.15
Pittsburgh .....	36,849.76
Morantown .....	10,754.68
L. Pittsburgh .....	41,485.53
Franklin .....	22,025.00
Barton .....	109,421.63
Harlem .....	8,366.42
Bakerstown .....	72,687.18
Freeport .....	716,752.00
Upper Kittanning .....	0.00
Middle Kittanning .....	0.00
Redstone .....	13,130.66
Tyson .....	0.00
Waynesburg .....	0.00
<b>TOTAL .....</b>	<b>1,063,919.01</b>

### TONNAGE BY BASIN

Lower Youghiogheny .....	0.00
Upper Youghiogheny .....	0.00
Casselman .....	6,752.00
Casselman-Cherry Creek .....	0.00
Potomac .....	41,808.21
George's Creek .....	984,056.26
<b>TOTAL .....</b>	<b>1,742,616.47</b>

**2018 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	PRODUCTION (TONS)			
			Coal Seam	Deep	Strip	Auger
Beechwood Coal, LLC	359	0.00	Pittsburgh		0.00	
			Morantown		0.00	
			Redstone		0.00	
	393	195,985.65	Pittsburgh		119,309.80	
			Redstone		68,165.35	
			Morantown		8,510.50	
	439	205,023.14	Bakerstown		0.00	
			Tyson		30,822.77	
			Sewickley		2,455.16	
			Pittsburgh		100,576.66	
			Waynesburg		71,168.55	
			Redstone		0.00	
			Morantown		0.00	
	442	26,452.18	Waynesburg		26,452.18	
			Little Pittsburgh		0.00	
			Morantown		0.00	
	457	23,288.12	Pittsburgh		14,086.95	
			Redstone		9,201.17	
			Morantown		0.00	
	462	0.00	Tyson		0.00	
Redstone				0.00		
Pittsburgh				0.00		
Tyson				0.00		
C & S Coal	456	4,642.68	Pittsburgh		4,642.68	
			Redstone		0.00	
Cobra Mining	437	31,121.43	Pittsburgh		28,415.54	
			Morantown		543.96	
			Redstone		2,161.93	
G & S Coal	440	0.00	Little Pittsburgh		0.00	
			Pittsburgh		0.00	
			Morantown		0.00	
			Franklin		0.00	
Tri-Star Mining	419	0.00	Pittsburgh		0.00	
			Little Pittsburgh		0.00	
			Morantown		0.00	
			Redstone		0.00	
			Sewickley		0.00	
			Waynesburg		0.00	

	436	131,947.83	Franklin Little Pittsburgh Pittsburgh Morantown Redstone Sewickley	0.00 45,639.59 51,719.53 12,621.89 14,226.29 7,740.53
Walker Bros. Mining, Inc.	453	60,236.43	Pittsburgh Morantown Redstone	23,475.67 1,654.72 35,106.04
<b>TOTAL ALLEGANY COUNTY</b>		<b>678,697.46</b>		<b>678,697.46</b>

### GARRETT COUNTY

Operator	Permit Number	Total Tonnage Mined by Permit	PRODUCTION (TONS)			
			Coal Seam	Deep	Strip	Auger
ARJ Construction	DM111	90,747.29	Barton	90,747.29		
	DM114	11,184.15	Lower Bakerstown	11,184.15		
	463	35,347.20	Lower Bakerstown		35,347.20	
G & S Coal Company, Inc.	421	7,124.26	Franklin		7,124.26	
	435	161.70	Bakerstown		0.00	
			Barton		161.70	
			Harlem		0.00	
	454	34,522.25	Barton		0.00	
			Harlem		8,366.42	
455	0.00	Bakerstown Harlem		26,155.83 0.00		
MER, LLC	DM113	716,752.00	Upper Freeport	716,752.00		
Pine Mountain Coal Company	424	4,990.67	Pittsburgh		441.58	
			Morantown		26.00	
			Redstone		593.31	
			Franklin		3,929.78	
Savage Mountain Minerals, Inc.	445	0.00	Little Pittsburgh		0.00	
	446	14,685.96	Sewickley		14,685.96	
			Morantown		0.00	
	448	10,970.96	Pittsburgh		0.00	
			Barton		0.00	
461	18,512.64	Pittsburgh Franklin Barton		0.00 10,970.96 18,512.64		



Tri-Star Mining, Inc.	419	118,919.93	Pittsburgh	36,408.18
			Little Pittsburgh	41,485.53
			Redstone	12,537.35
			Morantown	10,728.68
			Barton	0.00
			Sewickley	17,760.19
<b>TOTAL GARRETT COUNTY</b>		<b>1,063,919.01</b>		<b>818,683.44 245,235.57</b>
<b>TOTAL BOTH COUNTIES</b>		<b>1,742,616.47</b>		<b>818,683.44 923,933.03</b>

## SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED

### Allegany County George's Creek Basin

Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres
Beechwood Coal, LLC	359	0	0	0	0
Beechwood Coal, LLC	393	224	35	16	16
Beechwood Coal, LLC	404	0	0	0	0
Beechwood Coal, LLC	439	0	9	0	0
Beechwood Coal, LLC	442	0	0	0	0
Beechwood Coal, LLC	451	0	4	22	22
Beechwood Coal, LLC	457	0	2	3	3
Beechwood Coal, LLC	462	0	3	10	10
C & S Coal Company	456	0	3	0	0
Cobra Mining	437	18	6	0	0
G&S Coal Company, Inc.	440	0	3	0	0
Ritchie Trucking., Inc.	40	0	0	0	0
Tri-Star Mining, Inc.	419	0	8	9	9
Tri-Star Mining, Inc.	436	49	6	0	0
Vindex Energy, LLC	432	0	0	0	0
Walker Brothers Mining	453	2	16	0	0
<b>George's Creek Basin (Allegany County) Total</b>		<b>293</b>	<b>95</b>	<b>60</b>	<b>60</b>

### Garrett County George's Creek Basin

Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres
ARJ Construction Company, Inc.	111	0	0	0	0
ARJ Construction Company, Inc.	463	19	28	27	27
Pine Mountain Coal Company	424	0	0	0	1
Savage Mountain Minerals	445	0	0	1	6
Savage Mountain Minerals	446	0	0	26	0
Savage Mountain Minerals	448	10	0	0	0

Savage Mountain Minerals	461	0	31	0	16
<b>George's Creek Basin (Garrett County) Total</b>		<b>29</b>	<b>59</b>	<b>54</b>	<b>50</b>
<b>Total for Georges Creek Basin in both Garrett &amp; Allegany Counties</b>		<b>322</b>	<b>154</b>	<b>114</b>	<b>110</b>
<b>Garrett County Casselman Basin</b>					
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres
Maryland Energy Resources, LLC	113	0	0	0	0
<b>Casselman Basin Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Potomac River Basin</b>					
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres
Backbone Mountain, LLC	112	0	0	0	0
G&S Coal Company, Inc.	421	0	0	0	0
G&S Coal Company, Inc.	435	0	14	0	0
G&S Coal Company, Inc.	454	0	4	5	0
G&S Coal Company, Inc.	455	0	0	0	0
LAOC Corporation	458	0	0	0	0
Mettiki Coal, LLC	101	0	0	0	0
Vindex Energy Corporation	459	34	66	0	99
Wolf Run Mining Company	109	0	0	0	0
<b>Potomac River Basin Total</b>		<b>34</b>	<b>84</b>	<b>5</b>	<b>99</b>
<b>Youghiogheny River Basin</b>					
Mining Company	Permit	Acres Permitted	Affected Acres	Backfilled Acres	Planted Acres
LAOC Corporation	460	0	0	0	0
<b>Youghiogheny River Basin Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>Total All Garrett County Basins</b>	<b>63</b>	<b>143</b>	<b>59</b>	<b>149</b>
<b>Total All Allegany County Basins</b>	<b>293</b>	<b>95</b>	<b>60</b>	<b>60</b>
<b>Total All Garrett &amp; Allegany Basins</b>	<b>356</b>	<b>238</b>	<b>119</b>	<b>209</b>

**SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 2018  
(By Geological Basin)**

	<u>ACRES THIS YEAR</u>			
	Permitted	Affected	Backfilled	Planted
Georges Creek Basin	322.00	154.00	114.00	110.00
Potomac River Basin	34.00	84.00	5.00	99.00
Casselman Basin**	0.00	0.00	0.00	0.00
Cherry Creek Basin	0.00	0.00	0.00	0.00
Upper Yough Basin	0.00	0.00	0.00	0.00
Lower Yough Basin	0.00	0.00	0.00	0.00
TOTAL GARRETT COUNTY	63.00	143.00	59.00	149.00
TOTAL BOTH COUNTIES	356.00	238.00	119.00	209.00

ACRES CUMULATIVE FROM JANUARY 1, 1975 - DECEMBER 31, 2018

<b>Allegany County:</b>				
Georges Creek Basin	9057.00	7903.00	6,492.00	6,796.00
<b>Garrett County:</b>				
Georges Creek Basin	3436.00	3,086.00	2,746.00	2,985.00
Potomac River Basin	6,110.00	5,429.00	4,851.00	5,227.00
Casselman Basin**	1,452.00	1,163.00	1,261.00	1,142.00
Cherry Creek Basin**	667.00	672.00	579.00	546.00
Upper Yough Basin	230.00	157.00	215.00	189.00
Lower Yough Basin	1,335.00	921.00	1,145.00	1,088.00
TOTAL GARRETT COUNTY	13,230.00	11,428.00	10,797.00	11,177.00
TOTAL BOTH COUNTIES	22287.00	19,331.00	17,289.00	17,973.00

\*\*Casselman Geologic Basin

## 2018 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	3	0	0	0	0	0	0	0	0	3	0	0
Permit Increments	2	3	57	0	0	0	0	0	0	2	3	57
Incidental Boundary Revisions	3	2	5	1	1	2	0	0	0	4	3	7
Significant Amendments	1	2	242	0	1	0	0	0	0	1	3	242
Insignificant Amendments	17	17		4	5		0	0		21	22	
Transfers	0	0		0	0		0	0		0	0	
Renewals	6	7		2	1		0	1		8	9	
Prospecting Permits	1	1		0	0		0	0		1	1	
Prospecting Letter of Intent	2	2		0	0		0	0		2	2	
Operator's License Original	0	0		0	0		0	0		0	0	
Operator's License Renewals	18	18		5	5		0	0		23	23	
<b>Totals</b>	<b>53</b>	<b>52</b>	<b>304</b>	<b>12</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>65</b>	<b>66</b>	<b>306</b>

## MINE FOREMAN AND FIRE BOSS EXAMINATIONS AND CERTIFICATIONS

Mine Foreman and Fire Boss applicants examined and certified from 2014 through 2018

YEAR	<u>APPLICANTS EXAMINED</u>		<u>APPLICANTS CERTIFIED</u>	
	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
2018	0	0	0	0
2017	19	1	19	1
2016	0	0	0	0
2015	15	0	15	0
2014	11	0	11	0

## INSPECTION AND ENFORCEMENT ACTIVITIES 2014-2018

TYPE OF ACTION	2014	2015	2016	2017	2018
Inspections	839	865	768	770	808
Notices of Violations	11	19	15	7	4
Cessation Orders	2	5	6	0	0
Citizen Complaints	20	26	18	15	11
Bond Forfeitures	0	0	1	0	0

## **LAND RECLAMATION COMMITTEE MEMBERSHIP**

The following members served on the Land Reclamation Committee during 2018:

### DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

Ed Larrimore, Chairman, MDE Land and Materials Administration  
John E. Carey, MDE Bureau of Mines

### DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Jim Mullan, Wildlife Division (1/2018 – 5/2018)  
George Eberling, Forestry Division  
Alan Klotz, Freshwater Fisheries  
Rande Brown, Wildlife Division (7/2018 – 12/2018)

### CITIZEN REPRESENTATIVES:

Margaret Jamison, Garrett County (1/2018 – 6/2018)  
Bill Pegg, Allegany County

### COUNTY REPRESENTATIVES:

Jeff Barclay, Allegany County  
Gary Aronhalt, Garrett County

### SOIL CONSERVATION DISTRICT REPRESENTATIVES:

Adam Heavner, Allegany Soil Conservation District  
Shaun Sanders, Garrett Soil Conservation District

### COAL INDUSTRY REPRESENTATIVES:

Tim Schwinabart  
Jim Ashby

## **LAND RECLAMATION COMMITTEE FUNCTIONS AND DUTIES**

The Land Reclamation Committee (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 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 2018, the Committee conducted site visits on six days. These visits included field reviews of three proposed mining sites and 18 revegetation sites to evaluate the success of the revegetation.

The 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 mine lands.

During 2018, the Committee met two times. During these meetings, the Committee approved three reclamation plans for new mining areas. They also evaluated 163 acres of revegetation eligible for Phase II bond release and approved 143 acres as meeting the standards for release. There were no reclamation plan changes during the year.



## Reclamation Results of Surface Mined Lands 2018

<b>Bond Release Phase</b>	<b>Applicable Performance Standard</b>	<b>Acreage Released</b>
<b>Phase I</b>	<ul style="list-style-type: none"> <li>● Area restored to Approximate Original Contour</li> <li>● Topsoil replaced</li> <li>● Area seeded and mulched</li> <li>● Completion of all reclamation work on the permit or the open acre limit is reduced</li> </ul>	278
<b>Phase II</b>	<ul style="list-style-type: none"> <li>● Revegetation established in accordance with approved reclamation plan and standards for success of revegetation met</li> <li>● The lands are not contributing suspended solids to stream flow or runoff outside the permit area</li> <li>● Temporary drainage control structures are removed or all permanent structures are inspected and approved</li> <li>● Land Reclamation Committee has inspected and approved the revegetation on the area</li> </ul>	435
<b>Phase III</b>	<ul style="list-style-type: none"> <li>● Post-mining land use/productivity restored</li> <li>● Successful permanent vegetation established</li> <li>● Groundwater recharge, quality and quantity restored</li> <li>● Surface water quality and quantity restored</li> <li>● Applicable bond liability period has expired</li> </ul>	549

## 2018 RECLAMATION AWARD

### Permit SM-06-451 Beechwood Coal, LLC

The 100-acre site is located on Federal Hill near Eckhart, Maryland. Mining began in 2006 on the Pittsburgh (Big Vein) coal seam. During the mining operation, the operator was careful to save sufficient topsoil to reclaim the site to a condition that exceeded the grass ground cover requirement. Being an agricultural area, most of the site was reclaimed to pasture. Grasses suitable for cattle forage were planted creating a site favorable for pasture. Upon request of one of the landowners, hardwood trees were placed on a small portion of the site. The reclaimed site now blends into the surrounding area.

### Past Reclamation Award Winners\*

<u>Year</u>	<u>Name of Company</u>	<u>Permit</u>
1984	Bridgeview Coal Company	356
1985	Brashear Coal Company	264
1986	Buffalo Coal Company	366
1987	Delta Mining, Inc.	345
1988	Beener Coal Company	143
1989	Brashear Coal Company	264
1990	Action Mining Company	394
1991	Patriot Mining Company	406
1992	S & G Coal Company	348
1993	Buffalo Coal Company	215
1994	G & S Coal Company	365
1995	John Duckworth Coal _____	372
1996	Buffalo Coal Company	409
1997	Tri Star Mining Inc.	418
1998	G & S Coal Company	325
1999	Buffalo Coal Company	409
2000	Winner Bros. Coal Company	286
2001	Clise Coal Company	315
2002	Win-More Mining	273
2003	Pine Mountain Coal Company	420
2004	G & S Coal Company	365
2005	Mountaineer Mining Corp.	438
2006	Winner Brothers Coal Company	385
2007	Tri Star Mining Inc	429
2008	Cobra Mining, Inc.	184
2009	Vindex Energy Corporation	338
2010	Clise Coal Company Inc.	213
2011	Mettiki Coal, LLC	428
2012	Tri-Star Mining, Inc.	434
2013	Vindex Energy Corporation	431
2014	Tri-Star Mining, Inc.	419
2015	Beechwood Coal, LLC	403
2016	Ritchie Trucking and Excavating, Inc.	040
2017	Vindex Energy, LLC	427

\*Each year the Committee selects a coal mining operation that has achieved outstanding reclamation on a permit site. The award is presented by the Committee.

## MINING PERMITS ISSUED BY YEAR AND PERMITTEE

<u>Permit No.</u>	<u>Year 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. **
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 & Constuction 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.
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.**
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	Bittinger Coal Company*
370	1982	Keystone Mt. Development Company*
371	1982	Eagle Mining, Inc.*

372	1982	John Duckworth Coal Company*
373	1982	Kirby Energy, Inc. **
374	1982	Winner Bros. Coal Company, Inc. *
375	1982	Win-More Mining & Construction Company *
376	1982	Jones Coal, Inc.**
377	1982	Allegheny Mining Corporation*
378	1982	Delta Mining, Inc.**
379	1982	Masteller Coal Company*
380	1982	Fairview Coal Company (Repermitted 399)*
381	1982	Richard Duckworth Coal Company*
382	1983	Pine Mt. Coal Company*
383	1983	Allegheny Mining Corporation*
384	1983	Evans Coal Company*
385	1983	Winner Bros. Coal Company, Inc.*
386	1983	Jones Mining, Inc.*
387	1983	Hilltop Construction Company**
388	1983	Fetterolf Mining, Inc.*
389	1983	Winner Bros. Coal Company, Inc.*
390	1983	C.J. Merlo, Inc.*
391	1983	Oak Springs Coal Company*
392	1984	Westvaco Resources, Inc.*
393	1984	Patriot Mining Company, Inc.
394	1984	Action Mining, Inc.*
395	1984	Stan-Jan Excavating, Inc.*
396	1984	Allegheny Mining Corporation*
397	1985	Michael R. McGowan*
398	1985	Brashear Coal Company*
399	1985	Fairview Coal Company
400	1985	Delta Mining, Inc.*
401	1985	Buffalo Coal Company, Inc.***
402	1985	Pine Mt. Coal Company*
403	1985	T.D. Mining Company**
404	1986	Clise Coal Company
405	1986	Jones Coal, Inc.**
406	1986	Patriot Mining Company, Inc.*
407	1986	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	Vindex Energy Corp.
440	2001	G&S Coal Company, Inc.
441	2002	G&S Coal Company, Inc.
442	2002	Vindex Energy Corp.
443	2002	Vindex Energy Corporation
444	2003	Tri Star Mining, Inc.
445	2003	United Energy, Inc.**
446	2004	Moran Coal Company
447	2004	Moran Coal Company
448	2005	Jenkins Development Company
449	2005	Savage Mountain Minerals, Inc.
450	2005	Clise Coal Company
451	2006	LAOC Corporation
452	2006	Mountaineer Mining Corporation
453	2006	WPO, Inc.**
454	2007	Walker Brothers Mining, Inc.
455	2007	G&S Coal Company, Inc.
455	2008	G&S Coal Company, Inc.
456	2008	Ritchie Trucking & Excavating, Inc. (Reinstated)
457	2008	Beechwood Coal, LLC. (Reinstated)
458	2009	C&S Coal Company
459	2011	Beechwood Coal, LLC
460	2011	LAOC Corporation
461	2011	Vindex Energy Corporation
462	2012	LAOC Corporation
463	2013	Savage Mountain Minerals
464	2013	Beechwood Coal, LLC

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.

TIPPLES AND GOB PILES

SC-83-101	1983	Buffalo Coal Company*
SC-83-102	1983	Buffalo Coal Company*
SC-83-103	1983	Buffalo Coal Company*
SC-83-104	1983	Buffalo Coal Company **
SC-83-105	1983	Buffalo Coal Company*
SC-83-106		Permit Not Issued
SC-83-107	1983	Delta Coal Sales, Inc**
SC-83-108	1984	Delta Coal Sales, Inc*
SC-83-109		Permit Not Issued
SC-83-110	1983	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-08-121	2008	Beechwood Coal, LLC (Reinstated)
SC-17-122	2017	Deerhaven Farms, LLC

\* Operation Completed and Bond Released    \*\*Forfeiture of Bond    \*\*\* Not Activate