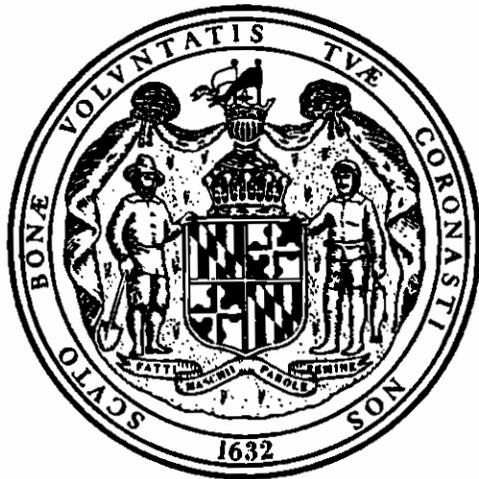


CALENDAR YEAR 2002
EIGHTY-FIRST ANNUAL REPORT
Of The
MARYLAND BUREAU OF MINES



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

DEPARTMENT OF THE ENVIRONMENT
KENDL P. PHILBRICK, Acting Secretary

WATER MANAGEMENT ADMINISTRATION
ROBERT SUMMERS, Director

MINING PROGRAM
C. EDMON LARRIMORE, Program Manager

BUREAU OF MINES
JOHN E. CAREY, Director

FOR THE CALENDAR YEAR 2002

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

FROSTBURG, MARYLAND 21532

LETTER OF TRANSMITTAL

To The Honorable:

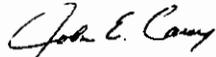
ROBERT L. EHRLICH, JR.

Governor of Maryland

Sir:

It is my honor to submit herewith the Eighty-First Annual Report of the Maryland Bureau Of Mines for the period of January 1, 2002 through December 31, 2002, in compliance with the mining laws of the State of Maryland. This report provides information pertaining to the conditions of the coal mining industry within the State.

Respectfully submitted,



John E. Carey, Director

Maryland Bureau of Mines

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EXECUTIVE SUMMARY

During Calendar Year 2002, Maryland operators produced 5,045,046 tons of coal. Surface coal mine production was 1,873,212 tons —937,613 in Allegany County and 935,599 in Garrett County. Deep coal mine production was 3,171,834 tons, all in Garrett County.

Ninety-seven permitting actions were received and 109 permitting actions were issued, including issuance of three original permits, six permit increments, and seven permit amendments totaling 239 acres.

Three hundred sixty-three acres were affected, 143 acres backfilled, and 211 acres planted. Bond was totally released on 96 acres. Three permits were completed, with bond being totally released. There were no permits forfeited.

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

The Land Reclamation Committee met six times and approved 4 reclamation plans. The Committee also evaluated the revegetation on 138 acres eligible for Phase II bond release and approved 99 acres as meeting the standards for release, and approved 2 reclamation plan changes.

The Abandoned Mine Land Section had 11 projects under construction during calendar year 2002. Three projects were completed using the Deep Mine Fund and the Bituminous Coal Open-pit Mining Reclamation Fund, totaling \$12,711.90. These projects eliminated two flooding hazards caused by abandoned surface mines and eliminated the impacts of acid mine drainage on a house foundation and basement. Two bond forfeiture projects are under construction totaling \$187,148 (\$44,648 from the Bond Supplemental Reserve) that will reclaim 25 acres on the revoked surface mine permits SM-84-405 and SM-84-233. Two Maryland-Federal Abandoned Mine Reclamation Projects were completed and four are under construction and will be complete in 2003. These projects, totaling \$3,322,443 will reclaim 60 acres and eliminate health and safety hazards and improve the environment. The projects will stabilize 32 acres of bare and eroding coal waste; a burning coal refuse pile; removal of an abandoned railroad embankment that impounded stream flow and created a potential for catastrophic flooding; stabilization of a landslide which was obstructing Georges Creek; and supplied potable water to 6 residence whose wells were contaminated by mine drainage.

The Planning, Research and Development Section, in conjunction with several other agencies, completed five acid mine drainage (AMD) projects during the calendar year 2002 with an additional project that was started in the fall of 2002, to be completed in early 2003. These six projects add an additional 5.5 miles of improved stream quality in the region with an overall total of 71.5 miles of improved streams since AMD remediation efforts were initiated in 1992. Construction costs for the year 2002 totaled \$918, 430.

FOR CALENDAR YEAR 2002

MINING PROGRAM

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

BUREAU OF MINES

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

Abandoned Mine Lands Section

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

Permitting and Regulatory Section

Stephen M. Layton..... Section Chief
 Jeffery Snyder..... Civil Engineer
 Alan V. Hooker..... Energy Resources Administrator

Planning, Research & Development Section

Constance A. Lyons..... Section Chief
 Tobias C. Joy (1/02-9/02)..... Natural Resources Planner
 Joseph E. Mills..... Natural Resources Planner
 Tamara Davis..... Natural Resources Planner

Laboratory & Support Services

Mary Lynn Pegg..... Laboratory Scientist
 Julie O'Connor..... Chemist
 J. Edward Lyons (1/02-6/02)..... Computer User Support Specialist

Mining Inspection and Compliance

Raymond Karlstrand..... Field Supervisor
 Larry Johnson..... Env. Compliance Specialist
 Thomas P. Murray..... Env. Compliance Specialist

FOR THE CALENDAR YEAR 2002
 REPORT OF THE MARYLAND BUREAU OF MINES

Coal production in Maryland during 2002 totaled 5,045,045.61 tons. Production in 2002 represents an increase of 273,243.13 tons from the 2001 production of 4,771,802.48 tons.

SUMMARY OF 2002 STATISTICS¹

COAL PRODUCTION

| Mining Method | Allegheny County | Garrett County | Total |
|---------------|------------------|----------------|--------------|
| Strip | 937,613.05 | 935,598.99 | 1,873,212.04 |
| Deep | .00 | 3,171,833.57 | 3,171,833.57 |
| Auger | .00 | .00 | .00 |
| TOTALS | 937,613.05 | 4,107,432.56 | 5,045,045.61 |

EMPLOYEES²

| Type of Mine | Allegheny County | Garrett County | Total |
|--------------|------------------|----------------|-------|
| Deep | 0 | 232 | 232 |
| Strip | 159 | 32 | 191 |
| TOTALS | 159 | 264 | 423 |

¹Reports submitted by Maryland mining operators.

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

**FOR THE CALENDAR YEAR 2002
TONNAGE BY COAL SEAMS**

| <u>Allegheny County</u> | |
|-------------------------|-------------------|
| Waynesburg | 53,392.87 |
| Sewickley (Tyson) | 71,523.95 |
| Redstone | 262,576.28 |
| Pittsburgh | 368,354.16 |
| Morantown | 104,661.40 |
| L. Pittsburgh | 58,742.51 |
| Franklin | 18,361.88 |
| Harlem | 0 |
| Bakerstown | 0 |
| Freeport | 0 |
| Kittanning | 0 |
| Federal Hill | 0 |
| Barton | 0 |
| TOTAL | 937,613.05 |

| <u>Garrett County</u> | |
|-----------------------|---------------------|
| Sewickley | 1,644.41 |
| Pittsburgh | 76,024.47 |
| Morantown | 11,797.56 |
| L. Pittsburgh | 18,861.68 |
| Franklin | 635,206.47 |
| Barton | 4,881.97 |
| Elk Lick | 6,888.61 |
| Harlem | 5,487.00 |
| Bakerstown | 517,473.33 |
| Brush Creek | 0 |
| Freeport | 2,792,915.12 |
| Upper Freeport | 24,535.55 |
| Kittanning | 726.50 |
| Redstone | 11,189.89 |
| TOTAL | 4,107,432.56 |

| <u>TONNAGE BY BASIN</u> | |
|--------------------------|---------------------|
| Lower Youghiogheny | 0 |
| Upper Youghiogheny | 0 |
| Casselman | 0 |
| Casselman (Cherry Creek) | 0 |
| Potomac | 3,363,193.78 |
| George's Creek | 744,238.78 |
| TOTAL | 4,107,432.56 |

**CALENDAR YEAR 2002
COAL PRODUCTION, MINING AND RECLAMATION STATISTICS FOR ALLEGANY & GARRETT COUNTIES***

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

| Operator | Permit Number | Coal Seam Worked | PRODUCTION (TONS) | | | | Auger | Acres Affected | Acres Backfilled | Acres Planted |
|-------------------------------|---------------|------------------|-------------------|------|-----|-----|-------|----------------|------------------|---------------|
| | | | Shp | Deep | Shp | Shp | | | | |
| Barton Mining Company, Inc. | 338 | L. Pittsburgh | 36,417.64 | | | | 2.0 | 15.0 | 0.0 | |
| | 427 | Pittsburgh | 96,984.74 | | | | 6.0 | 0.0 | 0.0 | |
| | | L. Pittsburgh | 7,710.95 | | | | | | | |
| | | Morantown | 35,619.95 | | | | | | | |
| | 432 | Redstone | 35,650.36 | | | | | | | |
| | | Pittsburgh | 3,968.44 | | | | | | | |
| | | Morantown | 13,331.71 | | | | 40.0 | 0.0 | 0.0 | |
| | | Redstone | 5,639.02 | | | | | | | |
| Brashear Coal Mines | 264 | Sewickley | 3,180.85 | | | | | | | |
| | 436 | Franklin | 10,867.64 | | | | 0.0 | 0.0 | 0.0 | |
| Clise Coal Co. Inc. | 213 | Franklin | 6,940.62 | | | | 1.0 | 0.0 | 0.0 | |
| | 404 | Waynesburg | 10,528.15 | | | | 0.0 | 1.0 | 1.0 | |
| Cobra Mining, Inc. | 184 | Waynesburg | 0.00 | | | | 0.0 | 2.0 | 3.0 | |
| | 437 | Pittsburgh | 0.00 | | | | 0.0 | 1.0 | 1.0 | |
| | | Pittsburgh | 18,523.50 | | | | 26.0 | 0.0 | 0.0 | |
| Fairview Coal Co., Inc. | 399 | Morantown | 4,585.89 | | | | | | | |
| | | Pittsburgh | 3,707.77 | | | | 1.0 | 2.0 | 2.0 | |
| G & S Coal Company, Inc. | 430 | Redstone | 5,490.21 | | | | | | | |
| | | Morantown | 659.45 | | | | | | | |
| Jenkins Development Co., Inc. | 440 | Pittsburgh | 19,389.85 | | | | 16.0 | 0.0 | 0.0 | |
| | 411 | Morantown | 7,197.55 | | | | | | | |
| Mountainier Mining Corp. | 438 | L. Pittsburgh | 10,023.70 | | | | 6.0 | 0.0 | 0.0 | |
| | | Waynesburg | 42,864.72 | | | | 7.5 | 4.0 | 4.0 | |
| Tru-Star Mining, Inc. | 419 | Pittsburgh | 3,978.45 | | | | 13.0 | 0.0 | 2.0 | |
| | | Morantown | 12,126.27 | | | | | | | |
| | | Pittsburgh | 38,579.36 | | | | 2.0 | 18.0 | 18.0 | |
| | | L. Pittsburgh | 4,590.22 | | | | | | | |
| | | Morantown | 17,442.88 | | | | | | | |
| | | Sewickley | 10,748.38 | | | | | | | |
| | Redstone | 40,591.36 | | | | | | | | |
| | Franklin | 553.62 | | | | | | | | |

| Operator | Permit Number | Coal Seam | | Deep | PRODUCTION (TONS) | | | Auger | Acres Affected | Acres Backfilled | Acres Planted |
|----------------------------------|---------------|------------|------------|------|-------------------|--------------|-------------|-------------|----------------|------------------|---------------|
| | | Worksc | Shp | | Strip | Auger | | | | | |
| United Energy Coal, Inc | 40 | Pittsburgh | 15,567.95 | | 3.0 | 0.0 | 0.0 | | | | 0.0 |
| | | Sewickley | 1,008.83 | | | | | | | | |
| | 207 | Pittsburgh | 14,060.01 | | 10.0 | 0.0 | 0.0 | | | | 0.0 |
| | | Redstone | 19,694.06 | | | | | | | | |
| | | Sewickley | 2,168.82 | | | | | | | | |
| | 247 | Morantown | 844.33 | | | | | | | | |
| | | Redstone | 2,500.48 | | 0.0 | 18.0 | 0.0 | | | | 0.0 |
| | | Sewickley | 1,464.23 | | 0.0 | 0.0 | 6.0 | | | | 6.0 |
| | | Pittsburgh | 145,467.62 | | 38.0 | 0.0 | 0.0 | | | | 0.0 |
| | | Redstone | 151,240.94 | | | | | | | | |
| 439 | Sewickley | 52,932.84 | | | | | | | | | |
| | Morantown | 9,098.67 | | | | | | | | | |
| | Pittsburgh | 6,096.47 | | 5.0 | 0.0 | 0.0 | | | | 0.0 | |
| Win-More Mining & Const Co., Inc | 433 | Pittsburgh | 1,769.85 | | | | | | | | |
| | | Redstone | 5,764.70 | | | | | | | | |
| | | Morantown | | | | | | | | | |
| TOTAL ALLEGANY COUNTY | | | | | 937,613.05 | 178.5 | 61.0 | 37.0 | | | |

GARRETT COUNTY

| Operator | Permit Number | Coal Seam | | Deep | PRODUCTION (TONS) | | | Auger | Acres Affected | Acres Backfilled | Acres Planted |
|----------------------------|-----------------------------|--------------|--------------|----------|---------------------|---------------------|--------------|--------------|----------------|------------------|---------------|
| | | Worksc | Shp | | Strip | Auger | | | | | |
| G & S Coal Company, Inc | 365 | U.Freesport | 24,535.55 | | 19.0 | 17.0 | 17.0 | | | | 17.0 |
| | | U.Kittanning | 726.50 | | | | | | | | |
| | 421 | Franklin | 10,485.70 | | 0.0 | 0.0 | 0.0 | | | | 0.0 |
| | | Bakerslown | 20,042.85 | | 26.0 | 0.0 | 0.0 | | | | 0.0 |
| | | Elk Lick | 6,688.61 | | | | | | | | |
| 435 | Harlem | 5,487.00 | | | | | | | | | |
| | George Creek, Inc | DM111 | Barton | 4,881.97 | | 9.0 | 0.0 | | | | 0.0 |
| Palmer Mining Co., Inc | DM109 | Bakerslown | 374,036.48 | | 0.0 | 0.0 | | | | | 0.0 |
| | 431 | Bakerslown | 123,394.00 | | 67.6 | 15.8 | 38.0 | | | | |
| Matwki Coal Corporation | DM101 | Freesport | 2,792,915.12 | | 1.8 | 1.8 | 1.8 | | | | 1.8 |
| | 424 | Pittsburgh | 5,209.99 | | 2.0 | 1.0 | 1.0 | | | | |
| Morantown | | 1,520.06 | | | | | | | | | |
| Redstone | | 2,152.51 | | | | | | | | | |
| Tr-Star Mining, Inc | 419 | Pittsburgh | 70,814.48 | | | | | | | | |
| | | L.Pittsburgh | 16,861.68 | | | | | | | | |
| | | Redstone | 9,037.38 | | | | | | | | |
| | | Morantown | 10,277.50 | | | | | | | | |
| | | Sewickley | 1,644.41 | | | | | | | | |
| | | Franklin | 538,520.59 | | 35.0 | 24.0 | 24.0 | | | | 94.0 |
| 434 | Franklin | 86,200.18 | | 24.0 | 22.0 | 22.0 | | | | 22.0 | |
| | TOTAL GARRETT COUNTY | | | | | 3,171,833.57 | 184.4 | 81.6 | 173.8 | | |
| TOTAL BOTH COUNTIES | | | | | 3,171,833.57 | 1,873,212.04 | 362.9 | 142.6 | 210.8 | | |

FOR CALENDAR YEAR 2002
SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 2002
(By Geological Basin)

| | ACRES THIS YEAR | | | | Bond Released* |
|-----------------------------|-----------------|---------------|---------------|---------------|----------------|
| | Permitted | Affected | Backfilled | Planted | |
| Allegheny County: | | | | | |
| Georges Creek Basin | 162.00 | 178.50 | 61.00 | 37.00 | 29.00 |
| Garrett County: | | | | | |
| Georges Creek Basin | 10.00 | 61.00 | 47.00 | 118.80 | 34.00 |
| Potomac River Basin | 67.00 | 123.40 | 34.60 | 55.60 | 33.00 |
| Casselman River Basin** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cherry Creek Basin | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Upper Yough Basin | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Lower Yough Basin | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL GARRETT COUNTY | 77.00 | 184.40 | 81.60 | 173.80 | 67.00 |
| TOTAL BOTH COUNTIES | 239.00 | 362.90 | 142.60 | 210.80 | 96.00 |

ACRES CUMULATIVE FROM JANUARY, 1975- DECEMBER 31, 2002

| | | | | | |
|-----------------------------|------------------|------------------|------------------|------------------|------------------|
| Allegheny County: | | | | | |
| Georges Creek Basin | 7,086.00 | 5,893.50 | 5,246.47 | 5,309.30 | 4,396.00 |
| Garrett County: | | | | | |
| Georges Creek Basin | 2,623.00 | 2,579.95 | 2,353.85 | 2,649.81 | 2,643.80 |
| Potomac River Basin | 4,595.00 | 3,580.10 | 3,651.40 | 3,790.70 | 3,842.40 |
| Casselman River Basin** | 1,416.60 | 1,135.00 | 1,260.50 | 1,142.20 | 1,285.80 |
| Cherry Creek Basin** | 667.00 | 671.50 | 578.90 | 545.80 | 659.95 |
| Upper Yough Basin | 216.00 | 157.35 | 215.35 | 189.30 | 261.50 |
| Lower Yough Basin | 1,335.00 | 914.00 | 1,135.06 | 1,078.16 | 855.40 |
| TOTAL GARRETT COUNTY | 10,852.60 | 9,047.90 | 9,195.06 | 9,395.97 | 9,528.65 |
| TOTAL BOTH COUNTIES | 17,938.60 | 14,941.40 | 14,441.53 | 14,705.27 | 13,924.65 |

*Total Bond Release by the Bureau

**Total Casselman Geological Basin

PERMITTING ACTIVITY
CALENDAR YEAR 2002

| 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 | 1 | 3 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 153 |
| Permit Increments | 6 | 6 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 35 |
| Modifications/Revisions With Acreage | 6 | 6 | 28 | 1 | 1 | 23 | 0 | 0 | 0 | 7 | 7 | 51 |
| Modifications/Revisions Without Acreage | 34 | 39 | | 4 | 4 | | 0 | 0 | | 38 | 43 | |
| Transfers | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Renewals | 2 | 6 | | 0 | 0 | | 2 | 3 | | 4 | 9 | |
| Prospecting Permits | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Prospecting Letter of Intent | 7 | 4 | | 3 | 2 | | 0 | 0 | | 10 | 6 | |
| Operators License Original | 1 | 1 | | 0 | 0 | | 0 | 0 | | 1 | 1 | |
| Operators License Renewals | 26 | 28 | | 4 | 6 | | 0 | 0 | | 30 | 34 | |
| Totals | 83 | 93 | 216 | 12 | 13 | 23 | 2 | 3 | 0 | 97 | 109 | 239 |

FOR THE CALENDAR YEAR 2002
LAND RECLAMATION COMMITTEE

Members

The following members served on the Land Reclamation Committee during 2002:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES

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

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Ed Golden, Wildlife Division (01/02 - 8/02)
Jim Mullan, Wildlife Division (09/02 - 12/31/02)
Robert Webster, Forestry Division
Alan Klotz, Freshwater Fisheries

CITIZEN REPRESENTATIVES

Edgar Harman, Garrett County
Robert Davis, Allegany County

COUNTY REPRESENTATIVES:

Margaret Jamison, Garrett County
Tim Carney, Allegany County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

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

COAL INDUSTRY REPRESENTATIVES:

Jerry Duckett, (01/02 - 06/02)
Vaughn Miller, (07/02 - 12/31/02)
Tim Schwinabart

FOR THE CALENDAR YEAR 2002
FUNCTIONS AND DUTIES OF THE LAND RECLAMATION COMMITTEE

The Land Reclamation Committee is responsible for the approval of all reclamation plans submitted, as part of an application for a permit, to the Bureau of Mines and for the oversight of land reclamation activities on surface coal mining operations in Maryland.

The Land Reclamation Committee visits proposed and active mining sites to:

- (1) determine the suitability of proposed reclamation plans;
- (2) review mining and reclamation progress; and
- (3) evaluate the success of revegetation practices.

During 2002, the Land Reclamation Committee conducted site visits on 6 days. These visits included field reviews of 4 proposed mining sites and 23 revegetation sites to evaluate the success of the revegetation.

The Land Reclamation Committee conducts meetings to:

1. Review and approve reclamation plans;
2. Review reclamation progress on active mining permits;
3. Evaluate the revegetation on areas eligible for Phase II bond release;
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 surface coal mined lands.

During 2002, the Land Reclamation Committee met 6 times. During these meetings, the Land Reclamation Committee approved 4 reclamation plans, evaluated 326 acres of revegetation eligible for Phase II bond release, approved 176 acres as meeting the standards for release, and approved 2 reclamation plan changes.

| Reclamation Results Calendar Year 2002 | | |
|---|---|------------------|
| 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 | 66 |
| 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 | 131 |
| Phase III | <ul style="list-style-type: none"> Postmining land use/productivity restored Successful permanent vegetation established Groundwater recharge, quality and quantity restored Surface water quality and quantity restored Applicable bond liability period has expired | 96 |

ABANDONED MINE LAND RECLAMATION FOR CALENDAR YEAR 2002

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 Land Reclamation Program, implemented utilizing Federal funds available under the Federal Surface Mining Control and Reclamation Act of 1977 (U.S. Public Law 95-87) under the authority of Environment Article, Title 15, Subtitle 9 of the Annotated Code of Maryland, and (2) Maryland Mine Reclamation Program implemented utilizing funds from the Bituminous Coal Oper-Pit Mining Reclamation Fund (BCOMRF) under the authority of Environment Article, Title 15, Subtitle 5; the Deep Mining Fund under the authority of Environment Article, Title 15, Subtitle 6; and the Mine Reclamation and Water Quality Restoration Loan under the authority of Environment Article, Title 15, Subtitle 7.

The Maryland Abandoned Mine Land Section also reclaims mine sites on which the permit has been revoked through regulatory action using funds generated by the forfeiture of bonds or other sureties and the Bond Supplemental Reserve under the authority of Title 15, Subtitle 8; Forfeiture of Bond and Subtitle 5; bond supplemental surcharge.

Maryland - Federal Abandoned Mine Land 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. Grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provided funds for the following abandoned mine land reclamation projects.

1. Warnick Road Water Supply Replacement Project

Location: .5 mile south of Midland along Warnick Road @
Gilmore, Allegany County.

Size: 6 Acres

Nature: Extension of the Lonaconing Public Water Distribution System to provide a potable water supply to 6 residents whose water supplies had been impacted by abandoned mine drainage.

Cost: \$ 170,000.00

Fund Source: Federal/State AML Reclamation Fund

Status: Completed October 18, 2002

2. Shallmar Coal Refuse Stabilization Project

Location: Town of Shallmar, Garrett County, MD

Size: 26 Acres

Nature: Stabilization of approximately 26 acres of abandoned coal refuse and collection and routing of Acid Mine Drainage to eliminate health, safety, and environmental hazards associated with the site.

Cost: \$ 1,144,943

Fund Source: Federal/State AML Reclamation Fund

- Status: 70% Complete
3. **Oak Hill Landslide Stabilization Project**
 Location: ½ mile north of Lonacoming, Allegany County
 Size: 6 Acres
 Nature: Stabilization of a coal refuse landslide to eliminate blockage to the stream channel of Georges Creek, and protect adjacent residences from flooding. Project includes treatment of AMD emanating from an abandoned deep mine portal.
 Cost: \$ 250,000
 Fund Source: Federal/State AML Reclamation Fund
 Status: 90% Complete
4. **Spruce Hollow Abandoned Mine Reclamation Project**
 Location: 1 mile east of Clarysville, Allegany County
 Size: 6 Acres
 Nature: Removal of an abandoned railroad embankment to eliminate blockage to the stream channel of Spruce Hollow and protect downstream residences and property from flooding.
 Cost: \$ 250,000
 Fund Source: Federal/State AML Reclamation Fund
 Status: 95% Complete
5. **Kitzmiller Coal Waste Stabilization Project**
 Location: ½ mile east of Kitzmiller, Garrett County
 Size: 16 Acres
 Nature: Reclamation of two abandoned coal refuse piles to eliminate blockage to the stream channel of the North Branch of the Potomac River, and eliminate health, safety, and environmental hazards associated with the site.
 Cost: \$ 1,483,000
 Fund Source: Federal/State AML Reclamation Fund
 Status: 15% Complete
6. **Mud Mine Deep Mine Blowout Control Project**
 Location: Westport, Allegany County
 Size: ½ acre
 Nature: Implementation of a wet seal to control drainage from a deep mine portal blowout at the site of the former Mud Mine Drainage Control Project completed in October, 1995.
 Cost: \$ 24,500.00
 Fund Source: Federal/State AML Reclamation Fund
 Status: Completed December 27, 2002

Maryland Mine Reclamation Program

The Maryland Bureau of Mines administers the Deep Mine Fund, under the authority of Environment Article, Title 15, Subtitle 6, to reclaim deep mine related land and water problems in which there is not continuing liability or responsibility. During calendar year 2001 the Bureau completed the following projects using this fund.

1. **Winkler Mine Drainage Control Project**
 Location: German Street, Barton, Allegany County
 Size: .15 acres
 Nature: Reconstruction of 100 linear feet of stream channel impacted by abandoned surface mines to eliminate flooding to adjacent residences.
 Cost: \$ 1,495.00
 Fund Source: Deep mine Fund
 Status: Completed August 10, 2002
2. **Franklin Bench Diversion Project**
 Location: ½ mile west of Franklin, Allegany County
 Size: ½ acre
 Nature: Diverting of Acid Mine Drainage and surface water runoff from and abandoned surface mine bench to eliminate flooding to residences of Brophytown, Allegany County. Project construction completed under the BOM Maintenance Contract, and BOM revegetation crew.
 Cost: \$ 6,569.00
 Fund Source: BCOMRF
 Status: Completed October 30, 2002
3. **Morgan Mine Drainage Control Project**
 Location: Midlothian, Allegany County
 Size: ¼ acre
 Nature: Implementation of subsurface drain to eliminate Acid Mine Drainage impacts to Morgan Residence.
 Cost: \$ 4,647.90
 Fund Source: Deep Mine Fund
 Status: Completed August 10, 2002

Bond Forfeiture Reclamation

The Maryland Bureau of Mines administers the reclamation of lands affected by operations on which the permit has been revoked and the bond forfeited. The funds received from the forfeiture of bonds and the bond supplement reserve, when the bond is not sufficient, are used to reclaim the lands affected by operations on which the liability was charged on the bonds.

1. **Oliver Permit # 233 Mine Forfeiture Reclamation Project**

Location: .5 miles east of Barton, Allegany County, MD
 Size: 20 Acres
 Nature: Reclamation of 20 acres of surface coal mine bond forfeiture land associated with the Oliver Mining Company Permit SM-84-233 Bond Forfeiture. Reclamation is being completed in conjunction with active backfilling operations on Barton Mining Company, Inc. Permit SM-96-432.

Construction Cost: \$ 152,000
 Revegetation Cost: \$ 24,000
 Fund Source: Bond Forfeiture & Bond Supplement Fund
 Status: 50% Complete

2. **Jones Coal Permit 405 Forfeiture Reclamation Proj.-Phase III**

Location: 2 miles northeast of Selbysport, Garrett Co.
 Size: 5 acres
 Nature: Reclamation of 5 acres of surface coal mine bond forfeiture land associated with the Jones Coal, Inc. Permit SM-84-405 Bond Forfeiture. Project construction completed under the BOM Maintenance Contract, and BOM revegetation crew. Construction represents the third and final Phase of reclamation at the site.

Construction Cost: \$ 9,908.75
 Revegetation Cost: \$ 1,240.00
 Fund Source: Bond Forfeiture and Bond Supplement Fund
 Status: 45% Complete

Planning, Research and Development AMD Projects completed in 2002

The Planning, Research, and Development Section, in partnership with several agencies, completed five acid mine drainage (AMD) projects during the period of Jan 1, 2001 to December 30, 2002. One project, the Oak Hill Remediation Project under the direction of the Abandoned Mine Lands Section, began construction during the fall of 2002 with final work completed in early 2003. These six projects add an additional 5.5 miles of improved stream quality for the year 2002, for an overall total of 71.75 miles of improved stream quality in the coal region since AMD remediation efforts were initiated in 1992. Construction costs totaled \$918,430 with most projects involving multiple fund sources.

FAZENBAKER AMD REMEDIATION PROJECT

PAD: MD-243-SGA
 Federal Grant: ACSI
 Location: Laurel Run at Barton, Allegany County, Maryland.
 Size: 2 acres.
 Nature, Goal, Type of Treatment System: Construction of an Alkalinity Producing Cell, an Oxidizing/Settling Pond and a Wetland. The System treats an average of 100 gallons of AMD per minute. The effluent is net alkaline.
 Current Status: Complete.
 Contractor: Pine Mountain Coal Company
 Construction Start: April 4, 2002
 Construction Completion: July 3, 2002
 Cost: \$152,000 for construction.
 Fund Source: \$115,000 from OSM Cooperative Watershed Grant to RC&D, \$37,000 from ACSI.
 Bureau Coordinator: Joe Mills working with the RC&D.
 Directions: Approximately 1 mile north of Barton, adjacent to the Laurel Hill Cemetery.

MCDONALD MINE DOSER PROJECT

PAD: MD-169-SGA
 Federal Grant: ACSI
 Location: One mile south of Barton, MD on the west side of Georges Creek.
 Size: 2 acres.
 Nature, Goal, Type of Treatment System: Upgraded the road to facilitate access by a lime delivery truck and installed a doser. The doser eliminates the impacts of the AMD from the abandoned McDonald Mine on the water quality of Georges Creek.
 Status: Complete.
 Contractor: Carl Belt, Inc.
 Construction Start: September 12, 2002
 Construction Completion: October 2, 2002
 Cost: \$143,581 for construction

Bureau Coordinator: Joe Mills working with the RC&D.

Fund Source: \$18,581 from ACSI Grant, and \$125,000 from Watershed Cooperative Grant to the RC&D.

Directions: Go south through Barton, MD on Main Street; continue past the playground and ball field for about ¼ mile to the site.

POTOMAC HILL AMD ABATEMENT PROJECT

PAL: MD-064-SGA

Federal Grant: ACSI

Location: One mile upstream on Potomac Hill Run from its confluence with Georges Creek. Barton, Allegany County, Maryland.

Size: 5 acres.

Nature, Goal, Type of Treatment System: Collection ditches divert AMD to a Steel Slag Leach Bed, Oxidizing/Settling Pond and Alkalinity Producing System. The system is designed to remove the iron and acid from the AMD and discharge net alkaline water into Potomac Hill Run and ultimately into Georges Creek.

Approximately 5 acres of abandoned spoil material has been removed and reshaped and the area vegetated.

Status: Complete.

Contractor: IA Construction

Construction Start: August 19, 2002

Construction Completion: November 1, 2002

Cost: \$209,855 for construction

Bureau Coordinator: Joe Mills working with the Allegany County Board of Public Works and the Georges Creek Watershed Association and Barton Mining Company

Fund Source: \$75,000 from Small Creeks and Estuaries Grant to Allegany County, and \$25,000 from Appalachian Clean Streams Initiative, and \$120,000 from Watershed Cooperative Grant to the Georges Creek Watershed Association.

Directions: Through Barton Mining Permit SM-338.

OAK HILL LANDSLIDE PROJECT

Location: Lonaconing, Allegany County, Maryland.

Size: 5 acres.

Nature, Goal, Type of Treatment System: Construction of two Alkalinity Producing Cells, an Oxidizing/Settling Pond and a Limestone Channel. The System treats an average of 100 gallons of AMD per minute. The effluent is designed to be net alkaline.

Status: Under construction (as of Sept. 30, 2002)

Contractor: IA Construction

Construction Start: August 2002

Construction Completion: Summer 2003

Cost: \$240,000 for construction.

Funding Source: Title IV.

Bureau Coordinator: John Eilers and Mark Carney are in charge of the AMI. Project; Joe Mills will work with them on the AMD portion of the project

MILL RUN DIVERSION WELL

PAD: MD 031 SGA

Federal Grant: ACSI

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

Size: 1 acre.

Nature, Goal, Type of Treatment System: Construction of a Pulse Limestone Bed Diversion Well, construction of a limestone storage bin and a building to house the diversion wells (Conservation Fund portion of the project). This system is designed to treat about 75 gallons of AMD per minute with a pH of 3.5 and an iron concentration of 50 mg/l to pH 7.0 and iron of less than 3 mg/l.

Current Status: Complete.

Contractor: Hardley-Able Construction Co. (Site Grading), Marshall Ruby and Sons (Project Construction), Jim Clark Excavating (Pipe System)

Construction Start: December of 2000.

Construction Completion: December of 2001, fully operational Spring, 2002.

Estimated Cost: \$137,875 [\$5,000 for site grading, \$125,000 for project construction, \$7,875 pipe system modification].

Fund Source: \$5,000 from Deep Mine Funds to excavate a foundation for the housing and machine (Bureau of Mines funds). \$115,000 from the Conservation Fund via a Grant from OSM; \$15,000 from EPA 104(b)(3) grant to MDE/BOM; \$7,875 ACSI Grant.

Bureau Coordinator: Joe Mills working with the Conservation Fund and the Georges Creek Watershed Association.

Directions: Approximately 1 mile west on Mill Run Road from the intersection of Mill Run Road and Georges Creek Road.

ROUND GLADE RUN LANDFILL WETLAND PROJECT

PAD: None

Federal Grant: Deep Mine Fund

Location: McHenry, Garrett County, Maryland.

Size: 2 acres.

Nature, Goal, Type of Treatment System: Construction of a treatment Wetland System. The System treats an average of 30 gallons of AMD per minute and reduces the iron concentration from 100ppm to 1 ppm. The effluent is net alkaline.

Current Status: Complete.

Contractor: Garrett County Office of Solid Waste and Recycling

Construction Start: July 12, 2002

Construction Completion: September 4, 2002

Cost: \$35,119 for construction.

Fund Source: \$35,119 from Bureau's Deep Mine Fund.

Bureau Coordinator: Joe Mills working with the Garrett County Office of Solid Waste and Recycling.

Directions: West of the Waste Disposal Cells of the Completed Garrett County Sanitary Disposal Facility.

FOR CALENDAR YEAR 2001

MINE FOREMAN AND FIRE BOSS
EXAMINATIONS AND CERTIFICATIONS

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

| YEAR | APPLICANTS EXAMINED | | APPLICANTS CERTIFIED | |
|------|---------------------|-----------|----------------------|-----------|
| | Mine Foreman | Fire Boss | Mine Foreman | Fire Boss |
| 2001 | 0 | 0 | 0 | 0 |
| 2000 | 14 | 8 | 14 | 8 |
| 1999 | 17 | 5 | 17 | 5 |
| 1998 | 13 | 5 | 13 | 5 |
| 1997 | 18 | 5 | 18 | 5 |
| 1996 | 0 | 0 | 4 | 0 |
| 1995 | 0 | 0 | 14* | 0 |
| 1994 | 24 | 4 | 24 | 4 |
| 1993 | 25 | 8 | 25 | 8 |
| 1992 | 0 | 0 | 5* | 0 |
| 1991 | 6 | 0 | 6 | 0 |
| 1990 | 19 | 4 | 18 | 4 |
| 1989 | 0 | 0 | 25* | 0 |
| 1988 | 15 | 0 | 11 | 0 |
| 1987 | 0 | 0 | 10* | 0 |

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

INSPECTION AND ENFORCEMENT ACTIVITIES
1997-2001

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

MINING PERMITS ISSUED BY YEAR AND PERMITTEE

| Permit No. | Year Issued | Permittee |
|------------|-------------|---|
| 1 | 1955 | The George's Creek Lumber Company* |
| 2 | 1955 | Allegany Engineering Company* |
| 3 | 1955 | B.M.W. Coal Company* |
| 4 | 1955 | Old Hampshire Coal Company, Inc.* |
| 5 | 1955 | Car and Gottfely 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.* |

| Permit No. | Year Issued | Permittee |
|------------|-------------|---|
| 44 | 1958 | Yantus & Zubek Coal Company* |
| 45 | 1958 | Moran Coal Company* |
| 46 | 1958 | Casey Construction Company** |
| 47 | 1958 | Moran Coal Company* |
| 48 | 1958 | Moran Coal Company* |
| 49 | 1958 | Sara-Ki Coal Company, Inc.* |
| 50 | 1958 | Laurel Creek Company, Inc.** |
| 51 | 1958 | D.B.&B. Coal Company** |
| 52 | 1958 | Moon and Sons* |
| 53 | 1959 | George L. Smith Contracting Company* |
| 54 | 1959 | The Georges Creek Lumber Company* |
| 55 | 1959 | Moran Coal Company* |
| 56 | 1959 | North Branch Coal Corporation* |
| 57 | 1959 | George Coal Company** |
| 58 | 1959 | Samuel Compton & Company** |
| 59 | 1959 | Hoover & White* |
| 60 | 1959 | Laurel Creek Company, Inc.** |
| 61 | 1959 | The Eddy Fuel Company** |
| 62 | 1959 | J.R. Thrasher Contracting & Stripping Co.* |
| 63 | 1959 | Pittsburgh Coal Company* |
| 64 | 1959 | Mineral Coal Company, Inc., of West Virginia* |
| 65 | 1959 | Laurel Creek Company, Inc.* |
| 66 | 1959 | The Georges Creek Lumber Company* |
| 67 | 1959 | Chelsie A. Liller* |
| 68 | 1959 | Casey Contracting Company** |
| 69 | 1959 | Pine Mountain Coal Company* |
| 70 | 1959 | Opel and Brenneman* |
| 71 | 1959 | The Georges Creek Lumber Company* |
| 72 | 1959 | P.&J. Coal Company* |
| 73 | 1959 | Casey Contracting Company** |
| 74 | 1959 | Goodwill Fuel Company* |
| 75 | 1959 | D.B.&B. Coal Company* |
| 76 | 1960 | Baughman Contracting Company, Inc.* |
| 77 | 1960 | P&K Coal Company* |
| 78 | 1960 | Morgan Contracting Company* |
| 79 | 1960 | Buffalo Coal Company, Inc.* |
| 80 | 1960 | Buffalo Coal Company, Inc.* |
| 81 | 1960 | Randall Robertson* |
| 82 | 1960 | Hoover & White** |
| 83 | 1960 | James E. George* |
| 84 | 1960 | B.M.W. Coal Company, Inc.* |
| 85 | 1960 | Casey Contracting Company** |
| 86 | 1960 | Beener Coal Company* |
| 87 | 1960 | Moran Coal Company, Inc.* |
| 88 | 1960 | D&K Coal Company* |
| 89 | 1960 | Brenneman Brothers* |

| Permit No. | Year Issued | Permittee |
|------------|-------------|--|
| 90 | 1960 | Mack Coal Company* |
| 91 | 1960 | Clarence Rodamar* |
| 92 | 1960 | James E. George* |
| 93 | 1961 | Casey Contracting Company** |
| 94 | 1961 | Winner Brothers* |
| 95 | 1961 | Moran Coal Company, Inc.* |
| 96 | 1961 | Big Vein Coal Company* |
| 97 | 1961 | Maryland Fuel Company, Inc.* |
| 98 | 1961 | Yantus-Zubek Coal Company* |
| 99 | 1961 | J.R. Thrasher Contracting & Stripping Co.* |
| 100 | 1961 | Trefall Bros., Inc.* |
| 101 | 1961 | Mack Coal 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* |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|-------------------|--------------------|--|
| 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 Dupstadt)* |
| 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 Dupstadt* |
| 179 | 1971 | Somerset Excavating, Inc.* |
| 180 | 1971 | Ayers Coal Company* |
| 181 | 1971 | Delta Mining, Inc.* |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|-------------------|--------------------|---|
| 182 | 1971 | Patriot Mining Company, Inc.* |
| 183 | 1971 | Chief Coal Company* |
| 184 | 1971 | Cobra Mining, Inc. |
| 185 | 1971 | Bessemer Iron & Coal Company* |
| 186 | 1971 | Coal Lick Coal Company* |
| 187 | 1971 | Phillips Big Vein Coal Company* |
| 188 | 1971 | Ace Drilling Coal Company, Inc.* |
| 189 | 1971 | Buffalo Coal Company, Inc.* |
| 190 | 1971 | Buffalo Coal Company, Inc.* |
| 191 | 1971 | Keystone Coal and Development Company (Liability Assumed by Garrett County Roads Department) |
| 192 | 1971 | Ace Drilling Company, Inc.* |
| 193 | 1972 | Wilhelm Coal, Inc.* |
| 194 | 1972 | M.F. 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** |

| Permit No. | Year Issued | Permittee |
|------------|-------------|----------------------------------|
| 227 | 1974 | Winner Bros. Coal Company, Inc.* |
| 228 | 1974 | Bittinger Coal Company* |
| 229 | 1974 | Charles M. Filsinger* |
| 230 | 1974 | G&H Coal Company, Inc.* |
| 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 | Bumham 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 | Brashear Coal Company* |
| 265 | 1975 | Bittinger Coal Company* |
| 266 | 1975 | Delta Mining, Inc.* |
| 267 | 1975 | Bittinger Coal Company* |
| 268 | 1975 | Clyde Marsh Coal Company* |
| 269 | 1975 | Hungry Hollow Coal Company* |
| 270 | 1975 | Clise Coal Company* |
| 271 | 1975 | A&R Coal Company* |
| 272 | 1975 | Action Mining, Inc.* |

| Permit No. | Year Issued | Permittee |
|------------|-------------|----------------------------------|
| 273 | 1975 | Win-More Mining & Construction |
| 274 | 1975 | Evans Coal Company* |
| 275 | 1975 | Buffalo Coal Company, Inc.* |
| 276 | 1975 | Buffalo Coal Company, Inc.* |
| 277 | 1975 | Allegheny Mining Corporation* |
| 278 | 1976 | Inter-State Lumber Company* |
| 279 | 1976 | Buffalo Coal Company, Inc.* |
| 280 | 1976 | Delta Mining, Inc.* |
| 281 | 1976 | Rondell Company* |
| 282 | 1976 | Phillips Coal, Inc.* |
| 283 | 1976 | G&H Coal Company, Inc.* |
| 284 | 1976 | Tower Resources, Inc.* |
| 285 | 1976 | Clinton Coal Company** |
| 286 | 1976 | Winner Bros. Coal Company, Inc.* |
| 287 | 1976 | T.L. Moran, Inc.* |
| 288 | 1976 | Delta Mining, Inc.* |
| 289 | 1976 | Pine Mt. Coal Company* |
| 290 | 1976 | Delta Mining, Inc.* |
| 291 | 1976 | George Nolan** |
| 292 | 1976 | Alexander Coal Co.* |
| 293 | 1976 | Pine Mt. Coal Company* |
| 294 | 1976 | Arlen Miller*** |
| 295 | 1976 | Action Mining, Inc.* |
| 296 | 1976 | Bessemer Iron & Coal Company** |
| 297 | 1977 | Oakland Coal Company |
| 298 | 1977 | Bittinger Coal Company* |
| 299 | 1977 | Inter-State Lumber, Inc.* |
| 300 | 1977 | Garbart Coal Company* |
| 301 | 1977 | Pine Mt. Coal Company* |
| 302 | 1977 | L.C. Coal Company, Inc.* |
| 303 | 1977 | Ginniman Brothers Coal Company** |
| 304 | 1977 | Buffalo Coal Company, Inc.* |
| 305 | 1977 | Wood Products, Inc.* |
| 306 | 1977 | Bridgeview Coal Company* |
| 307 | 1977 | T.L. Moran, Inc.* |
| 308 | 1977 | Best Coal Stripping, Inc.** |
| 309 | 1977 | Delta Mining, Inc.* |
| 310 | 1977 | Oakland Coal Company* |
| 311 | 1977 | Primrose Coal Company* |
| 312 | 1977 | R.A.K. Coal Company, Inc.** |
| 313 | 1977 | G&S Coal Company* |
| 314 | 1977 | Wilhelm Coal, Inc.** |
| 315 | 1977 | Clise Coal Company |
| 316 | 1977 | Brawal Mining, Inc.* |
| 317 | 1977 | John R. Livingston** |
| 318 | 1977 | Winner Bros. Coal Company, Inc. |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|-------------------|--------------------|-------------------------------------|
| 319 | 1977 | John Duckworth Coal Company* |
| 320 | 1977 | Kelley Enterprises* |
| 321 | 1978 | Delta Mining, Inc.* |
| 322 | 1978 | Bridgeview Coal Company* |
| 323 | 1978 | Ayers Coal Company* |
| 324 | 1978 | John Duckworth Coal Company* |
| 325 | 1978 | G&S Coal Company, Inc.* |
| 326 | 1978 | Buffalo Coal Company, Inc. |
| 327 | 1978 | Buffalo Coal Company, Inc.* |
| 328 | 1978 | Buffalo Coal Company, Inc. |
| 329 | 1978 | Winner Bros. Coal Company, Inc.* |
| 330 | 1978 | Inter-State Lumber Company* |
| 331 | 1978 | R.A.K. Coal Company*** |
| 332 | 1978 | Seneca Mining Company* |
| 333 | 1978 | Westvaco Corporation* |
| 334 | 1978 | Buffalo Coal Company, Inc.* |
| 335 | 1978 | Inter-State Lumber Company** |
| 336 | 1978 | Inter-State Lumber Company* |
| 337 | 1978 | Kirby Energy, Inc.* |
| 338 | 1978 | Barton Mining Company, Inc. |
| 339 | 1978 | Wilhelm Coal, Inc.* |
| 340 | 1978 | Fetterolf Mining, Inc.* |
| 341 | 1979 | 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.** |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|-------------------|--------------------|--|
| 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 | United Energy Coal, Inc. |
| 408 | 1986 | Tri Star Mining, Inc.* |
| 409 | 1986 | Buffalo Coal Company, Inc.* |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|-------------------|--------------------|--------------------------------|
| 410 | 1987 | J. Walter Wassell* |
| 411 | 1987 | Jenkins Development Company |
| 412 | 1987 | John Duckworth Coal Company** |
| 413 | 1988 | Buffalo Coal Company, Inc.* |
| 414 | 1989 | United Energy Coal, Inc. |
| 415 | 1989 | Pine Mt. Coal Company* |
| 416 | 1989 | Action Mining, Inc.* |
| 417 | 1989 | Tri Star Mining, Inc.* |
| 418 | 1991 | Tri Star Mining, Inc.* |
| 419 | 1991 | Tri Star Mining, Inc. |
| 420 | 1991 | Pine Mt. Coal Company |
| 421 | 1992 | G&S Coal Company, Inc. |
| 422 | 1992 | Buffalo Coal Company, Inc. |
| 423 | 1992 | United Energy Coal, Inc. |
| 424 | 1995 | Pine Mt. Coal Company |
| 425 | 1995 | Tri Star Mining, Inc. |
| 426 | 1996 | Tri Star Mining, Inc.* |
| 427 | 1996 | Barton Mining Company, Inc |
| 428 | 1997 | Mettiki Coal, LLC |
| 429 | 1997 | Tri Star Mining, Inc. |
| 430 | 1998 | G&S Coal Company, Inc. |
| 431 | 1998 | Patriot Mining Company, Inc. |
| 432 | 1999 | Barton Mining Company, Inc. |
| 433 | 1999 | Win-More Mining & Construction |
| 434 | 1999 | Tri Star Mining, Inc. |
| 435 | 2000 | G&S Coal Company, Inc. |
| 436 | 2000 | Cobra Mining, Inc. |
| 437 | 2001 | Cobra Mining, Inc. |
| 438 | 2001 | Mountaineer Mining Corp. |
| 439 | 2001 | United Energy Coal, Inc. |
| 440 | 2001 | G&S Coal Company, Inc. |
| 441 | 2002 | Millennium Resources, LLC |
| 442 | 2002 | Buffalo Coal Company, Inc. |
| 443 | 2002 | Vindex Energy Corporation |

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 | Anker West Virginia Mining Co., Inc. |
| DM 109 | 1991 | Patriot Mining Company, Inc. |
| DM 110 | 1992 | Masteller Coal Company |
| DM 111 | 2000 | George Creek, Inc. |

| <u>Permit No.</u> | <u>Year Issued</u> | <u>Permittee</u> |
|------------------------------|--------------------|------------------------------|
| <u>TIPPLES AND GOB PILES</u> | | |
| SC-83-101 | 1983 | Buffalo Coal Company* |
| SC-83-102 | 1983 | Buffalo Coal Company* |
| SC-83-103 | 1983 | Buffalo Coal Company* |
| SC-83-104 | 1983 | Buffalo Coal Company |
| SC-83-105 | 1983 | Buffalo Coal Company* |
| SC-83-106 | | Permit Not Issued |
| SC-83-107 | 1983 | Delta Coal Sales, Inc.** |
| SC-83-108 | 1984 | Delta Coal Sales, Inc.* |
| SC-83-109 | | Permit Not Issued |
| SC-83-110 | 1983 | United Energy Coal, Inc. |
| SC-83-111 | 1983 | Westvaco Corporation* |
| SC-83-112 | 1983 | United Energy Coal, Inc.* |
| SC-83-113 | | Permit Not Issued |
| SC-83-114 | 1984 | Ever, Inc.* |
| SC-83-115 | | Permit Not Issued |
| SC-87-116 | 1987 | John Duckworth Coal Company |
| SC-87-117 | 1987 | Tri Star Mining, Inc. |
| SC-87-118 | 1987 | Patriot Mining Company, Inc. |

* Operation Completed and Bond Released

** Forfeiture of Bond

*** Not Activated