

Electronic Submission Format
Bituminous Underground Mine, Coal Preparation Plant and/or
Refuse Disposal Area Permit Application
(5600-PM-BMP0324)

Module 1: Application

Include the following as PDF files with appropriate titles:

- Section A through Section J, the Application Checklist, and all narrative responses
- Act 67 / 68 Notifications
- Notice-of-Intent to Publish

Module 2: General Information

Include the following as PDF files with appropriate titles:

- General Information Checklist
- Professional Certifications
- Public Notice(s)

Module 3: Ownership & Compliance

Include the following as PDF files with appropriate titles:

- Sections 3.1 through 3.6, and all narrative responses

Module 4: Areas Where Mining Is Prohibited or Limited

Include the following as PDF files with appropriate titles:

- Sections 4.1 through 4.7, and all narrative responses
- Cultural Resource Notice Form (0120-PM-PY0003)
- Any correspondence with the Pennsylvania Historical and Museum

Module 5: Property Interests / Right-of-Entry

Include the following as PDF files with appropriate titles:

- Sections 5.1 through 5.5, and all narrative responses
- Consent of Landowners Form "Supplemental C" Form (5600-FM-BMP0010)
- Required copies of lease agreements or other right-of-access documents

Module 6: Environmental Resources Map

Include the following as PDF files with appropriate titles:

- Sections 6.1 through 6.3, and all narrative responses
- The 7½-minute U.S.G.S topographic map (latest edition) delineating the proposed permit area identified as Exhibit 6.1 Map
- The Module 6.2 Environmental Resources Map / Surface Mining Activity Sites
- The Module 6.3 Environmental Resources Map / Underground Permit Area

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 7: Geology Information

Include the following as PDF files with appropriate titles:

- Sections 7.1 through 7.9, and all narrative
- Module 7.1A Geologic Log Drill Holes / Overburden Analysis Data

Note: If the geologic logs were prepared using an electronic format, then also submit the electronic version of the logs.

- Geologic cross sections or fence diagram as required by Module 7.2
- The overburden analysis report as required by Module 7.6
- The overburden analysis data illustrating the applicant's calculations
- Any additional drawings and/or cross-sections (e.g. zone-of-influence maps)

Include the following as an Excel (or equivalent) Spreadsheet
Overburden analysis data

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 8: Hydrology

Include the following as PDF files with appropriate titles:

- Sections 8.1 through 8.16, and all narrative responses
- The Hydrologic Data Map (Module 8.2)
- The Well & Spring Inventory Information (Module 8.3)
- The Stream Inventory Information (Module 8.4)
- General Stream Inventory (Form 8.4A)
- The Adjacent Mine Discharges (Module 8.5)
- Mine Discharge Inventory (Form 8.5A)
- The Lake, Pond, & Dam Information (Module 8.6)
- Dam & Pond Inventory (Form 8.6A)

- The Control Stream Inventory (Module 8.8)
- Relationship between the Control Stream
- Potentially Impacted Streams (Form 8.8A)
- The Stream Delineation & Bioassessment Summary (Form 8.8B)
- The Quantitative Multi-Habitat Bioassessment of Diverse Community (Form 8.8C)
- The Biometric & Total Biological Score Summary (Form 8.8D)
- The Background Sampling Requirements (Module 8.13A)
- Background Sampling Requirements (Module 8.13A)

Note: Sample points may be represented by separate sheets within one PDF file or by separate PDF files. However, whatever approach is chosen must be followed in subsequent revisions.

- The Hydrologic Monitoring Plan (Module 8.15A)
- The Monitoring Program Summary (Form 8.15A)
- All supplemental data and information provided on private water supplies (e.g. pump test data, replacement cost calculations and an expanded narrative regarding the replacement of the supply)
- Each water supply replacement agreement or abandonment waiver

Include the following as an Excel (or equivalent) Spreadsheet
Background Sampling Requirements (Module 8.13A)

Module 9: Operations Map

Include the following as PDF files with appropriate titles:

- Module 9 and all narrative responses
- The Module 9 Operations Map

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 10: Operational Information

Include the following as PDF files with appropriate titles:

- Sections 10.1 through 10.12, and all narrative responses
- When applicable, cross sections and/or maps required with Module 10
- All correspondence and agreements needed to fulfill specific parts of Module 10 (e.g. Modules 10.4 and 10.7)
- If required, Form 5600-PM-MR0026 (MSHA Co-ordination)
- If required, Form 5600-PM-MR0449 (Mining Tank Inventory)

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 11: Erosion and Sedimentation Controls

Include the following as PDF files with appropriate titles:

- Sections 11.1 and 11.2, and all narrative responses
- The Diversion / Collection Channel Data Sheet (Form 11.1A)

Module 12: Treatment Systems

Include the following as PDF files with appropriate titles:

- Sections 12.1 through 12.7, and all narrative responses
- The Individual National Pollutant Discharge Elimination System (NPDES) (entire permit application and narrative responses)
- Water quality data submitted to support the effluent characterization requirements

Include the following as an Excel (or equivalent) Spreadsheet

Water quality data submitted to support the effluent characterization requirements

Module 13: Impoundments

Include the following as PDF files with appropriate titles:

- Sections 13.1 through 13.5, and all narrative responses
- The Impoundment Cross-Section (Exhibit 13.1)
- The Impoundment Design and Certification (Form 13.2A)
- The Pond Certification Sheets, pond drawings / cross sections must be submitted as an individual PDF file separate from the narrative

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 14: Liners and Caps

Include the following as PDF files with appropriate titles:

- Sections 14.1 through 14.6, and all narrative responses
- The Liner and Cap Certification (Form 14.4A)

Module 15: Streams / Wetlands

Include the following as PDF files with appropriate titles:

- Sections 15.1 through 15.8, and all narrative responses
- The Wetland Inventory Summary (Form 15.3A)
- Supplemental drawings, plans, and cross sections
- If required, Form 15A (Request for Federal Clean Water Act (CWA) Section 401 Certification for Mining / Coal Refuse Disposal Activities)

- All additional supporting correspondence (e.g. the Army Corps or PA Fish and Boat Commission)

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 16: Air Quality and Noise Control

Include the following as PDF files with appropriate titles:

- Sections 16.1 through 6.3, and all narrative responses
- When applicable, the Bureau of Air Quality's General Plan Approval / General Permit -12 (BAQ-GPA / GP-12)
- The GP-12 Operations Map

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 17: Soils / Prime Farmland

Include the following as PDF files with appropriate titles:

- Sections 17.1 through 17.5, and all narrative responses
- The Module 17.1 Soils Map
- All Correspondence to or from the Natural Resources Conservation Service (NRCS)

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 18: Land Use / Reclamation

Include the following as PDF files with appropriate titles:

- Sections 18.1 through 18.6, and all narrative responses
- The Land Use and Reclamation Map (Module 18.1)
- Cross-Sections (Module 18.2 / Exhibit 18.2)
- If a land use change is proposed, then the landowner request letter and the written comments of the government agency or planning commission with statutory responsibility for land use policies and plans

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 19: Reclamation Schedule and Cost Information

Include the following as PDF files with appropriate titles:

- Sections 19.1 through 19.6, and all narrative responses

Module 20: Coal Refuse / Coal Ash – Sources and Properties

Include the following as PDF files with appropriate titles:

- Sections 20.1 through 20.5, and all narrative responses

Module 21: Coal Refuse Construction Plans

Include the following as PDF files with appropriate titles:

- Sections 21.1 through 21.8, and all narrative responses
- The Design Cross Sections (Module 21.1)
- The Pile Construction Characteristics (Module 21.2)
- The Underdrains, Spring Collectors, & Leachate Collectors (Module 21.3)
- The Keyway Cuts, Rock Toe Buttresses, Other Stabilization Structures (Module 21.4)
- Module 21.7 - The Stability Analysis

Module 22: Subsidence Control and Underground Mine Maps

Include the following as PDF files with appropriate titles:

- Sections 22.1 through 22.10, and all narrative responses
- Module 22.3 - Index Map
- Module 22.4 - Subsidence Control Plan Map
- Module 22.6 - Six-month Projection Maps
- Module 22.7 - Structure Inventory
- Module 22.8 – Property Assessment Data

Include the following as an Excel (or equivalent) Spreadsheet

Module 22.7 - Structure Inventory

Module 22.8 – Property Assessment Data

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 23: Mine Openings

Include the following as PDF files with appropriate titles:

- Sections 21.1 through 21.8, and all narrative responses
- Designs and Drawings
- Form 23.1A Mine Openings

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 24: Special Protection Waters

Include the following as PDF files with appropriate titles:

- If mining is proposed on a Special Protection Watershed, complete Form 5600-PM-MR0007 "Anti-Degradation Supplement for Mining Permits"
- If a Social or Economic Justification (SEJ) is being requested, Form 5600-PM-MR0028 "Social or Economic Justification (SEJ) and Water Use Demonstration (for projects in high quality [HQ] waters only)" must be completed.
- If the SEJ includes mineral analyses that are considered confidential the analyses must be submitted

Module 25: Coal Ash Beneficial Use

Include the following as PDF files with appropriate titles:

- Sections 25.1 through 25.7, and narrative responses
- Monitoring well construction data and well logs required by Module 25.5c / Water Monitoring
- Form 5600-PM-MR0014 / Coal Ash Water Quality Monitoring Report
- All maps and plans required by Module 25.6 / Maps and Plans
- The Landowner Consent for the beneficial use of ash

Include the following as an Excel (or equivalent) Spreadsheet

Form 5600-PM-MR0014 / Coal Ash Water Quality Monitoring Report

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 26: Remining of Areas with Pre-existing Pollutational Discharges

Include the following as PDF files with appropriate titles:

- Sections 26.1 through 26.10, and all narrative responses
- The Module 26.4 / Remining Map
- Module 26.5(B) / Baseline Pollution Load (Subchapter F calculations)
- Module 26.5(C) / Baseline Pollution Load Summary (Subchapter F calculations)

Include the following as an Excel (or equivalent) Spreadsheet

Module 26.5(B) / Baseline Pollution Load (Subchapter F calculations)

Module 26.5(C) / Baseline Pollution Load Summary (Subchapter F calculations)

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 27: Beneficial Use as a Soil Additive / Substitute

Include the following as PDF files with appropriate titles:

- Sections 27.1 through 27.7, and narrative responses
- Form 3800-FM-WSFR0342 - Contractual Consent of Landowner

Module 28: Underground Bituminous Coal Surface Blasting Plan

Include the following as PDF files with appropriate titles:

- Sections 28.1 through 28.14, and all narrative responses
- The Module 28.13 / Map

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 29: Disposal of Excess Spoil

Include the following as PDF files with appropriate titles:

- Sections 29.1 through 29.7, and all narrative responses

Module 30: Underground Disposal / Backstowing

Include the following as PDF files with appropriate titles:

- Sections 30.1 through 30.11, and all narrative responses
- Maps and Drawings (Module 30.3)

AutoCAD Option: See the Additional Notes for all AutoCAD and Georeferencing requirements.

Module 31: In Situ Processing

Include the following as PDF files with appropriate titles:

- Sections 31.1 through 31.7, and all narrative

Module 32: Stability of On-site Materials

Include the following as PDF files with appropriate titles:

- Sections 32.1 through 32.4, and all narrative responses

Additional Notes:

Bonding - Application for Authorization to Conduct Bituminous Underground Coal Mining Activities

- The completed application form
- Bond calculations
- If the application is a modification to an existing permit, each Supplemental C's, dwelling barrier waivers, and / or variance / distance limitation documents, which were not approved as part of the original permit application
- If the application is a modification to an existing permit, a revised Module 9 / Operations Map, showing the updated bonding information

NPDES: Application for Individual NPDES Permit Associated With Mining Activities

- The entire NPDES application should be submitted as an individual PDF file.
- Any water quality data submitted to support the effluent characterization requirements should be submitted in two formats:
 - A PDF file, and
 - An Excel spreadsheet that allows the Department work with the raw data

AutoCAD Option

Submitting the required material as AutoCAD files may expedite the Department's review and analyzing the applicant's application.

Georeferencing Map Standards

- A digital image copy of the certified map should be submitted in an uncompressed Tagged Image File Format (TIFF) (.tif).
 - The resolution of the image should be a minimum of 400 dots per inch (dpi). A higher dpi should be used if 400 dpi does not clearly reproduce a legible image.
 - The color depth of the image should be 24-bit 3-band RGB color.
- The map should be drawn in a well-known acceptable coordinate system that is indicated in the map legend.
 - The geographic horizontal datum should be the North American Datum of 1983 (NAD83).
 - The projected coordinate system can be one of the following:
 - State Plane Pennsylvania North (U.S. Feet), NAD83 (EPSG WKID: 2271)
 - State Plane Pennsylvania South (U.S. Feet), NAD83 (EPSG WKID: 2272)
 - UTM Zone 17 North, NAD83 (EPSG WKID:26917)
 - UTM Zone 18 North, NAD83 (EPSG WKID:26918)

- The map should have at least four coordinate pair points drawn and identified in the indicated coordinate system.
 - The coordinate points drawn on the map should be within an accuracy tolerance of 3 feet to the mine workings drawn on the map.
- The digital mine map image file should be georeferenced in a Geographic Information System (GIS) software in the indicated coordinate system.
 - The digital mine map image file should be accompanied by an ESRI TIFF auxiliary xml file (.tif.aux.xml) *and / or* a TIFF world file (.tfw).
 - The xml file should contain the four projected coordinate points matched to their respective digital image file's x / y points, with a georeferencing Transformation setting of "1st Order Polynomial (Affine)" (accomplished through ESRI's ArcMap software).
 - The world file should position the map in a GIS software where the drawn coordinate points on the digital map image are within 3 feet of their respective projected coordinate points.

Miscellaneous

- Depending upon the type of data or supplemental documents being submitted, the information should be submitted in a PDF or Excel spreadsheet format. (e.g. the cover letter sent with the application; the proof-of-publication, when it is received; other notifications and correspondence that would normally be part of the file record).
- When submitting revisions, resubmit the entire Module with revisions and the supporting data, if the Module was not revised, do not resubmit the Module.