Electronic Submission Format Guide Bituminous Coal Surface Mine Permit Application (5600-PM-BMP0311)

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: NPDES Information

Include the following as PDF files with appropriate titles:

The module and the narrative responses
Note: this is only the information module, not the NPDES application

Module 3: Ownership & Compliance

Include the following as PDF files with appropriate titles:

• Section 3.1 through Section 3.5 and all narrative responses

Module 4: Areas Where Mining Is Prohibited or Limited

Include the following as PDF files with appropriate titles:

- Section 4.1 and Section 4.2, and all narrative responses
- The 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:

- Section 5.1 through Section 5.4 and all narrative responses
- Consent of Landowners Form "Supplemental C" Form (5600-FM-BMP0010)
- Module 5.4: Dwelling barrier waivers
- 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:

• Section 6.1 and Section 6.2 and all narrative responses

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- 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

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:

- Section 7.1 through Section 7.6 and all narrative responses
- Module 7.1B 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.
- All geologic cross sections or fence diagram as required by Module7.1(b)
- The overburden analysis report as required by Module 7.4(b) should be submitted as an individual PDF file
- The overburden analysis data illustrating the applicant's calculations should be submitted as an individual PDF file
- 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:

- Section 8.1 and Section 8.7 and all narrative
- The narrative responses in Sections 8.3 through 8.7 of Module should be submitted as an individual PDF files
- The Background or Monitoring Report (Module 8.1(A) 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 Private Water Supply Information (Module 8.2(A) (5))
- The Specific Capacity Data (Module 8.6(A))

- 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

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

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:

- Section 10.1 through Section 10.19 and all narrative responses
- When applicable, cross sections and/or maps required with Section's 10.8, 10.9, and 10.19
- All correspondence and agreements needed to fulfill specific parts of Module 10. (e.g. Modules 10.10, 10.11 and 10.14)
- 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: Coal Refuse Disposal

Include the following as PDF files with appropriate titles:

- Section 11.1 through Section 11.5 and all narrative responses
- Cross-section required by Module 11.4 / Cross-Sections

AutoCAD option:

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

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Module 12: Erosion and Sedimentation Controls

Include the following as PDF files with appropriate titles:

- Section 12.1 through Section 12.3 and all narrative responses
- The Module 12.1 Diversion / Collection Ditch Data Sheet
- Cross-sections required by Section 12.3b

Include the following as an Excel (or equivalent) Spreadsheet Module 12.1 Diversion / Collection Ditch Data Sheet

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

Module 13: Treatment Facilities / Sedimentation Ponds

Include the following as PDF files with appropriate titles:

- Section 13.1 through Section 13.5 and all narrative responses
- All Pond Certification Sheets, pond drawings, and cross sections

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

Module 14: Streams / Wetlands

Include the following as PDF files with appropriate titles:

- Section 14.1 through Section 14.6 and all narrative responses
- Supplemental drawings, plans, and cross sections
- If required, Form 14A (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 15: Excess Spoil

Include the following as PDF files with appropriate titles:

- Section 15.1 through Section 15.6 and all narrative responses
- Supplemental plans and cross sections required by Module 15.6

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

Module 16: Bituminous Coal Blast Plan

Include the following as PDF files with appropriate titles:

- The Bituminous Coal Blast Plan Module 16 Checklist
- Section 16.1 through Section 16.15 and all narrative responses
- Each map required by Module 16.15 Map

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

Module 17: Air Pollution and Noise Control Plan

Include the following as PDF files with appropriate titles:

• Section 17.1 through Section 17.3 and all narrative responses

Module 18: Land Use and Reclamation Map

Include the following as PDF files with appropriate titles:

- The application module checklist should be submitted
- The Module 18 / Land Use and Reclamation Map

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

Module 19: Land Use / Vegetation / Fish and Wildlife / Prime Farmland

Include the following as PDF files with appropriate titles:

- Section 19.1 through Section 19.4 and all narrative responses
- Section 19.4 narrative answers should be submitted as an individual PDF file
- Module 19.3 / Fish and Wildlife (Protection / Enhancement Plan)
- The Pennsylvania Natural Diversity Inventory (PNDI) search
- All correspondence between the applicant and resource agencies

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- If required, the Indiana Bat Protection and Enhancement Plan
- The USDA Soil Survey Map required by Section 19.4 / Prime Farmland Soils

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

Module 20: Post-mining Land Use

Include the following as PDF files with appropriate titles:

- Sections 20.1 through 20.3 and all narrative responses
- If a land use change is proposed, the landowner request letter and the written comments of the government agency or planning commission with statutory responsibility for land use policies and plans

Module 21: Topsoil / Subsoil

Include the following as PDF files with appropriate titles:

• Sections 21.1 through 21.3 and all narrative responses

Module 22: Prime Farmland Reconstruction

Include the following as PDF files with appropriate titles:

• Sections 22.1 through 22.5 and narrative responses

Module 23: Revegetation

Include the following as PDF files with appropriate titles:

• Sections 23.1 through 23.7 and all narrative responses

Module 24: Special Protection Waters

Include the following as PDF files with appropriate titles:

- If mining is proposed on a Special Protection Watershed, Form 5600-PM-MR0007 "Anti-Degradation Supplement for Mining Permits" must be completed.
- 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 mineral analyses must be included

Module 25: Coal Ash Beneficial Use

Include the following as PDF files with appropriate titles:

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

Include the following as an Excel (or equivalent) Spreadsheet Water Monitoring / Module 25.5d (Coal ash monitoring data)

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

Module 26: Remining of Areas with Pre-existing Pollutional 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
- Module 26.5(C) / Baseline Pollution Load Summary

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

Additional Notes:

Bonding - Application for Authorization to Conduct Bituminous Surface 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.

<u>Miscellaneous</u>

- 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.