

Checklist



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF MINING PROGRAMS

E-TEMPLATE MAP STANDARDS CHECKLIST

All Maps (except the Location (UGSG) map)

The following standards apply to all maps submitted (except the Location (USGS map) including supplemental maps other than required maps:

- Include the permit area and the area within 1000 feet of the permit area.
- Map is clear, accurate, easily read and on a scale of no smaller than 1 inch = 400 feet. Maps on the scale of 1 inch = 200 feet for permit areas of 100 acres or less and 1 inch = 400 feet for permit areas larger than 100 acres are preferred. Use the same scale for all maps unless otherwise appropriate.
- Identify the map with the association section title "Environmental Resources", "Operations", "Reclamation", "Bonding", etc.
- All structures depicted to scale where practical.
- Each map bears the seal or facsimile imprint of a registered professional engineer or registered professional land surveyor.
- Show barrier areas (within the permit area and any barriers adjacent to the permit area which extend into the permit area) for the features as established by § 86.102 regulations (e.g., 300 feet to occupied dwelling). Barriers must be shown until the documents required for a variance are submitted (as authorized under § 86.102). Variance areas need not be specifically delineated.
- Show latitude and longitude coordinates at or near the four corners of the map. The coordinates must be no less accurate than the accuracy of a USGS topographic map. The method of determination and estimated accuracy must be indicated on the map. An orthogonal grid system is recommended, but is optional. The grid system can be an arbitrary coordinate system or tied into a true geographic system (i.e., latitude/longitude, UTM or State Plane).
- Show all the following information within the permit area and for a distance of up to 1,000 feet from the permit area:
 - topographic contours (contour intervals of 20 feet or less)
 - proposed permit area
 - property lines
 - all surface water bodies such as streams, lakes, ponds, springs, wetlands (include barrier areas and names of streams and lakes) Use a unique label for each unnamed tributary
 - all buildings
 - all man-made features such as roads, culverts, utilities including utility lines and right-of-ways or easements, and other surface and subsurface man-made features
 - oil and gas wells including transmission/collection lines in and within 125 feet of proposed permit area
 - existing or previously surface-mined areas, and existing areas of refuse, spoil, waste, and coal processing waste disposal. Show permit boundaries of active mines.

Environmental Resources Map

Additional items to be shown:

- areal extent of abandoned underground mines and areal extent and permit boundary of active underground mines (include elevations and extent of all mine pools and elevation of underground mine entries). (Show full extent of underground mines that extend within 1000 feet of the permit area on the Location (UGSS) map, if outside limits of this map.
- slope measurements of area to be mined
- test hole locations (include actual surface elevation, bottom of coal elevation and elevations of any water encountered.
- existing vegetated riparian areas.
- structure contours on lowest coal seam to be mined. Differentiate between directly determined and inferred contours. Provide strike and dip for higher coal seams.
- geologic faults. Indicate offset direction and amount of dip (if known).
- all coal crop lines (if inferred, or approximate note as such).
- direction(s) of groundwater flow (local and regional)
- location of joint measurements. Show on the Location (USGS) map if outside 1,000 feet of this map.
- solid waste disposal areas show permit boundaries of active disposal areas.
- all private and noncommunity public water supplies (include type, elevation of all springs, matched to Hydrology information).
- all community public water supplies within 1/2 mile of the permit area and those with Wellhead Protection Zone extending to the permit area. Show on Location (USGS) map, if outside limits of this map.
- background and proposed monitoring points including proposed NPDES discharge points (match to Hydrology information and NPDES permit application.)
- areas designated as unsuitable for all or certain types of mining
- known archaeological sites
- public or private cemeteries or Indian burial grounds
- public parks
- cultural or historical resources listed on or eligible for listing on the National Register of Historic Places

Operations Map

Additional Items to be shown:

- areal extent of active and abandoned underground mines if mining above or through
- mine discharges and constructed or natural drains. Show barrier and encroachment areas.
- names of the owners and present occupants of all buildings, and the current use).
- Monitoring points (labeled)
- Wells, exploration holes and boreholes
- initial area to be bonded
- all coal crop lines and final highwall limit for each coal seam to be mined
- phases of mining (indicate sequence and show the first mine cut and the direction of mining for each phase)
- surface water diversions
- erosion and sedimentation control facilities, including location and size of existing structures, road culverts and drainage ways
- sedimentation ponds/dams and impoundments (to scale)
- spoil storage areas
- topsoil storage areas
- prime farmland and storage areas
- haul roads and access roads (outside of area being mined)
- coal refuse and acid and toxic-forming material disposal areas
- alkaline addition areas
- coal processing facilities and stockpile areas
- area proposed to be auger mined and direction of auger mining
- areas proposed for beneficial use of coal ash or other beneficially used materials
- air pollution control facilities
- water treatment facilities (depicted to scale)
- explosives storage areas
- excess spoil areas
- steep slope areas (slopes greater than 20° within the proposed permit area)
- aboveground stationary storage tanks and underground storage tanks containing fuel or chemicals (within the proposed permit area)
- solid waste disposal areas
- areas designated as unsuitable for all or certain types of mining
- public or private cemeteries or Indian burial grounds (include barrier areas)

Reclamation Map

Additional Items to be shown:

- land uses - existing and proposed postmining
- postmining topographic contours (contour intervals of 20 feet or less)
- vegetative cover types to be established (key to seed mixture number, woody plant mixture number and cropping group number the Revegetation section.
- reconstructed prime farmland soils and areas of negatively declared prime farmland soils
- haul roads and access roads which will remain as part of postmining land use
- erosion and sedimentation control facilities which will remain as part of postmining land use
- sedimentation ponds/dams or impoundments which will remain as part of postmining land use
- areas to be restored to approximate original contour (AOC) and outline all final slopes greater than 20° (If restored to other than AOC, show final contour lines at intervals of 20 feet or less or include sufficient cross sections to adequately reflect final surface configurations)
- drainage pattern
- features for protection or enhancement of fish and wildlife
- reclaimed excess spoil areas
- areas reclaimed with sewage sludge, coal ash or waste general permit materials