



Ohio Administrative Code

Rule 1501:13-4-08.1 Application, supplemental and hydrologic maps, and cross-sections, designs and plans for underground workings.

Effective: January 17, 2016

This rule applies only to underground workings.

(A) Application map. The permit application shall include an application map prepared by or under the direction of and certified by a surveyor or jointly by an engineer and a surveyor, to the extent such certification is required by state law, showing:

- (1) All boundaries of land and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the proposed shadow area; noting the boundaries of land within the proposed shadow area upon which the applicant has the legal right to enter and begin coal mining operations and which areas the applicant does not yet have this right;
- (2) The location of all buildings on and within one thousand feet of the proposed shadow area for full coal recovery mining operations and on and within three hundred feet of the proposed shadow area for room and pillar mining operations, with identification of the current use of the buildings using the map symbols set forth in rule 1501:13-4-10 of the Administrative Code;
- (3) The location of surface and subsurface man-made features within, passing through, or passing over the proposed shadow and adjacent areas;
- (4) The locations of water supply intakes for current users of surface water flowing into, out of, and within a hydrologic area defined by the chief, those surface waters which will receive discharges from the proposed shadow area and the location of any discharges to any surface body of water on or adjacent to the proposed shadow area;
- (5) Each public road located within the proposed shadow and adjacent areas;
- (6) The boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing on the "National Register of Historic Places," as referenced in paragraph (A)(2)(a)



of rule 1501:13-4-13 of the Administrative Code, and known archeological sites within the proposed shadow and adjacent areas;

(7) Each cemetery that is located within the proposed shadow and adjacent areas;

(8) Any land within the proposed shadow area or adjacent area which is within the boundaries of any units of the national system of trails or the wild and scenic rivers system, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq., or study rivers or study river corridors as established in any guidelines pursuant to that act;

(9) The boundaries and names of counties, municipal corporations, townships, section and lot lines located in and within five hundred feet of the proposed shadow area;

(10) The names, locations, and directions of flow of all perennial and intermittent streams located in and within five hundred feet of the proposed shadow area;

(11) The name of the drainage basin in which the proposed shadow area is located as listed in the "Gazetteer of Ohio Streams," published by the Ohio department of natural resources;

(12) Elevations and locations of test borings and core samplings;

(13) Elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application;

(14) All coal contour lines and the strike and dip of the coal to be mined in the proposed shadow area;

(15) Location and extent of known workings of active, inactive or abandoned underground mines, including mine openings to the surface, within the proposed shadow and adjacent areas;

(16) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed shadow and adjacent areas;



- (17) Location and extent of existing or previously surface-mined areas within the proposed shadow and adjacent areas;
 - (18) Location and extent of existing areas of waste, refuse, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed shadow and adjacent areas;
 - (19) Location of gas and oil wells in and within twenty-five feet of the proposed shadow area and the location of producing gas and oil wells in and within three hundred feet of the proposed shadow area;
 - (20) Location of water wells in the proposed shadow and adjacent areas;
 - (21) The location and start and end points of all submitted cross sections within the proposed shadow area;
 - (22) The boundaries of all areas proposed to be affected over the estimated total life of the proposed mining operation, with a description of size, sequence, and timing of the mining of sub-areas for which it is anticipated that additional permits will be sought;
 - (23) Buildings, utility corridors within the proposed shadow and adjacent areas;
 - (24) The location of each water monitoring point within the proposed shadow and adjacent areas;
 - (25) The location of each subsidence monitoring point within the proposed shadow area; and
 - (26) Other relevant information required by the chief.
- (B) Supplementary maps and cross sections, designs and plans. When necessary under these rules, the application shall include:
- (1) Supplementary maps and cross sections, prepared by or under the direction of and certified by an engineer or jointly by an engineer and a surveyor to the extent such joint certification is required by state law, showing the nature, depth, and thickness of the coal seams to be mined, each stratum of the



overburden, and the stratum immediately below the lowest coal seam to be mined; and

(2) Other relevant supplementary maps, cross sections, designs and plans required by the chief.

(C) Hydrologic map. Each application for a permit shall include a hydrologic map which, in addition to the applicable requirements of rules 1501:13-4-09 and 1501:13-4-10 of the Administrative Code, shall be at a scale of not more than five hundred feet to the inch. The hydrologic map shall be certified by a surveyor and, if required pursuant to paragraph (C) of rule 1501:13-4-09 of the Administrative Code, by an engineer. Except as provided in paragraph (D) of this rule, all hydrologic maps shall show the following:

(1) The proposed permit and shadow areas and the area within one thousand feet of the proposed shadow area for full coal recovery mining operations and within three hundred feet of the proposed shadow area for room and pillar mining operations;

(2) A line identifying the area within one thousand feet of the proposed shadow area a for full coal recovery mining operations and within three hundred feet of the proposed shadow area for room and pillar mining operations;

(3) All occupied buildings on or within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations;

(4) All perennial and intermittent streams on or within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations;

(5) The location of the coal outcrop on the proposed permit area and the name and number of each coal seam to be mined;

(6) The location of each cross-section drawn to show hydrogeologic information as required under paragraph (F) of this rule;



(7) The location and type of water supply used by the occupant of each building described in paragraph (C)(3) of this rule for the purpose of domestic, agricultural, or industrial use;

(8) All springs on or within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations;

(9) All seepage zones on and within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations;

(10) The location of sampling stations on each stream identified in paragraph (C)(4) of this rule at points just above and below the proposed permit area and the location and elevation of other sampling stations used to gather data on water quality and quantity in the preparation of the permit application;

(11) Location and extent of known workings of active, inactive or abandoned underground mines, including mine openings to the surface, within the proposed shadow and adjacent areas;

(12) The location of monitoring stations, other than sediment pond outlets, to be monitored during the life of the permit;

(13) All existing water wells on or within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations; and

(14) Any well, well field, reservoir, river, or other water source used for a public water supply on or within one thousand feet of the proposed shadow area for full coal recovery mining operations and on or within three hundred feet of the proposed shadow area for room and pillar mining operations.

(1) For the items listed in paragraphs (C)(3), (C)(4), and (C)(7) to (C)(14) of this rule, the chief may require additional information outside the thousand-foot limit of the shadow area for full coal recovery mining operations or outside the three-hundred-foot limit of the proposed shadow area for



room and pillar mining operations to be shown on the hydrologic map if such identification is necessary based on site-specific conditions.

(2) The items listed in paragraphs (C)(3), (C)(7), (C)(8), (C)(9), (C)(10), (C)(11), and (C)(13) of this rule need not be shown on the hydrologic map when:

(a) They are located beyond an intermittent or perennial stream located within one thousand feet of the proposed permit area; and

(b) The lowest coal seam to be mined is at a higher elevation than such intermittent or perennial stream.

(E) The map symbols used to identify the items described in paragraphs (C)(8) to (C)(14) of this rule shall be highlighted in red on all hydrologic maps.

(F) Hydrologic cross-section. Each application for a permit shall include one or more cross-sections prepared by, or under the direction of, an engineer or a professional geologist showing:

(1) The location and extent of subsurface water, if encountered, within the proposed shadow or adjacent areas;

(2) All wells, boreholes, piezometers, springs, or other features used to determine the configuration of the water table or potentiometric surface of each aquifer where such wells, boreholes, piezometers, springs, or other items fall on or reasonably close to the line of the cross-section;

(3) Within the proposed shadow and adjacent areas, all aquifers and the water table or potentiometric surface of each aquifer above the lowest coal seam to be mined and within the lowest coal seam to be mined if that seam is a water bearing stratum, and each potentially affected water bearing stratum below the lowest coal seam to be mined; and

(4) All coal seams to be mined.

(G) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the



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