

Coal Rules – effective 1/17/2016

Package 2: Permitting rules & rule changes related to permitting rule changes (including highwall mining rule changes).

- 1501:13-1-13 Rule references.
 - 1501:13-3-01 Standards for demonstration of valid existing rights.
 - 1501:13-4-03 Permit applications; requirements for legal, financial, compliance and related information.
 - 1501:13-4-04 Permit application requirements for information on environmental resources.
 - 1501:13-4-05 Permit application requirements for reclamation and operations plans.
 - 1501:13-4-08 Hydrologic map and cross-sections.
 - 1501:13-4-08.1 Application, supplemental and hydrologic maps, and cross-sections, designs and plans for underground workings. *Proposed new rule.*
 - 1501:13-4-09 General map requirements.
 - 1501:13-4-10 Uniform color code and map symbols. *Current rule proposed for rescission.*
 - 1501:13-4-10 *Proposed new rule with the same number and title -- will have updated and new map symbols.*
 - 1501:13-4-11 Maps showing reaffection of permit area.
 - 1501:13-4-12 Requirements for permits for special categories of mining.
 - 1501:13-4-13 Underground mining permit application requirements for information on environmental resources.
 - 1501:13-4-14 Underground mining permit application requirements for reclamation and operations plans.
 - 1501:13-5-01 Review, public participation, and approval or disapproval of permit applications and permit terms and conditions.
 - 1501:13-6-03 Small operator assistance program.
 - 1501:13-9-01 Signs and markers.
 - 1501:13-11-02 Support facilities and utility installations.
- TOTAL 18 rules

Draft Rule 1501:13-1-13, dated 10/2/2013.

This is a summary of the changes made to this rule.

Rule references revised because the paragraph numbering of rule 1501:13-4-04 is proposed for amendment.

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10/2/2013 Rule references changed because of changes to the provisions of 1501:13-4-04.

1501:13-1-13 Rule references

When a specific paragraph is referenced in these rules, all paragraphs subordinate to that specific paragraph shall be incorporated by that reference. For example, a reference to paragraph ~~(J)~~(B) of rule 1501:13-4-04 of the Administrative Code shall include paragraphs ~~(J)~~(B)(1) to ~~(J)(36)~~(B)(3) of that rule, and a reference to paragraph ~~(K)~~(C)(1) of rule 1501:13-4-04 of the Administrative Code shall include paragraphs ~~(K)~~(C)(1)(a) to ~~(K)(1)(e)~~(C)(1)(c) of that rule.

Draft Rule 1501:13-3-01, dated 7/2/2014.

This is a summary of the changes made to this rule.

(A)(2)(b)(iv). Revised the references to the life-of-mine map because these requirements are being moved to rules 1501:13-4-08 and 1501:13-4-08.1.

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7/2/2014 Rule references in (A)(2)(b)(iv) changed because provisions related to the life-of-mine map are now in 1501:13-4-08 and 1501:13-4-08.1.

1501:13-3-01 Standards for demonstration of valid existing rights.

- (A) Except as provided in paragraph (B) of this rule, a person claiming valid existing rights must demonstrate both of the following:
- (1) A property rights demonstration showing that, at the time the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code, a legally binding conveyance, lease, deed, contract, or other document vests that person, or a predecessor in interest, with the right to conduct the type of coal mining operations intended; and
 - (2) Compliance with one of the following standards:
 - (a) Good faith/all permits standard. All permits and other authorizations required to conduct coal mining operations had been obtained, or a good faith effort to obtain all necessary permits and authorizations had been made, before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code. At a minimum, an application must have been submitted for any permit required under Chapter 1513. of the Revised Code; or
 - (b) Needed for and adjacent standard. The land is needed for and immediately adjacent to a coal mining operation for which all permits and other authorizations required to conduct coal mining operations had been obtained, or a good faith attempt to obtain all permits and authorizations had been made, before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code. To meet this standard, the person claiming valid existing rights shall demonstrate that prohibiting expansion of the operation onto that land would unfairly impact the viability of the operation as originally planned before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code. Except for operations in existence before August 3, 1977, or for which a good faith effort to obtain all necessary permits had been made before August 3, 1977, this standard does not apply to lands already under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code when the chief approved the permit for the original operation or when the good faith effort to obtain all necessary permits for the original operation was made. In evaluating whether a person meets this standard, the chief may consider factors such as:
 - (i) The extent to which coal supply contracts or other legal and business commitments that predate the time the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code depend upon use of that land for coal mining operations;
 - (ii) The extent to which plans used to obtain financing for the operation before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code rely upon use of that land for coal mining operations;
 - (iii) The extent to which investments in the operation before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code rely upon use of that land for coal mining operations; and
 - (iv) Whether the land lies within the area identified on the life-of-mine map submitted under paragraph ~~(J)(A)~~(29) of rule ~~1501:13-4-04~~1501:13-4-08 or paragraph ~~(J)(29)(A)(22)~~ of rule ~~1501:13-4-13~~1501:13-4-08.1 of the Administrative Code before the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the

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Administrative Code.

- (B) A person who claims valid existing rights to use or construct a road across the surface of lands protected by division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code shall demonstrate that one or more of the following circumstances exist if the road is included within the definition of coal mining operation of rule 1501:13-1-02 of the Administrative Code:
- (1) The road existed when the land upon which it is located came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code, and the person has a legal right to use the road for coal mining operations;
 - (2) A properly recorded right of way or easement for a road in that location existed when the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code, and, under the document creating the right of way or easement, and under subsequent conveyances, the person has legal right to use or construct a road across the right of way or easement for coal mining operations;
 - (3) A valid permit for use or construction of a road in that location for coal mining operations existed when the land came under the protection of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code; or
 - (4) Valid existing rights exist under paragraph (A) of this rule.
- (C) Possession of valid existing rights under this rule only confers an exception from the prohibitions of division (D) of section 1513.073 of the Revised Code or rule 1501:13-3-03 of the Administrative Code. A person seeking to exercise valid existing rights shall comply with all other pertinent requirements of Chapter 1513. of the Revised Code and these rules.

Draft Rule 1501:13-4-03, dated 11/06/2014.

This is a summary of the changes made to this rule.

(B)(11), (C)(5), (D)(1) and (F)(3). Small grammatical changes.

(D)(2). Additions due to HB 163 (effective 9/30/2011): the provision requiring information about lands within the permit area where the private mineral estate to be mined has been severed from the private surface estate will be revised to limit this information to lands where surface disturbance will result from the applicant's proposed use of a surface mining method.

(D)(2)(a) to (c). "surface disturbance" qualifications added to all these paragraphs due to HB 163 (effective 9/30/2011).

(D)(3). "title" changed to "rights" to mirror the language of ORC section 1513.07
(E)(2)(e)(iii).

(E)(3) and (4). "measured horizontally" added due to HB 163 (effective 9/30/2011).

(H). Provisions reorganized and a comma removed to clarify the requirements for newspaper advertisement.

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Dated 11/06/2014

1501:13-4-03 Permit applications; requirements for legal, financial, compliance and related information.

(A) Definition.

- (1) For the purposes of this rule, a person "owned or controlled" or "owns or controls" a coal mining operation if, at any time:
 - (a) The person is the permittee of a coal mining operation;
 - (b) Based on instruments of legal or equitable ownership or voting securities, the person owns of record in excess of fifty per cent of an entity which conducts coal mining operations; or
 - (c) The person has any relationship which gives that person authority directly or indirectly to determine the manner in which an applicant, an operator, or other entity conducts coal mining operations.
- (2) It will be presumed that a person "owns or controls" or "owned or controlled" a coal mining operation, unless it can be demonstrated that the person does not or did not in fact have the authority directly or indirectly to determine the manner in which the relevant coal mining operation is or was conducted if, at any time:
 - (a) The person is an officer or a director of an entity which conducts coal mining operations;
 - (b) The person is the operator of the coal mining operation;
 - (c) The person has the ability to commit the financial or real property assets or working resources of an entity which conducts coal mining operations;
 - (d) The person is a general partner in a partnership which conducts coal mining operations;
 - (e) Based on the instruments of legal or equitable ownership or the voting securities of a corporate entity which conducts coal mining operations, the person owns of record ten through fifty per cent of the entity; or
 - (f) The person owns or controls coal to be mined by another person under a lease, sublease or other contract; and
 - (i) Has the right to receive such coal after mining; or
 - (ii) Has the authority to determine the manner in which another person conducts that coal mining operation.

(B) Identification of interests.

- (1) Each application shall contain the names, addresses, and telephone numbers, and either the employer identification numbers or the last four digits of the social security numbers of:
 - (a) The permit applicant;

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- (b) The operator, if the operator is a person different from the applicant;
 - (c) The resident agent of the applicant who will accept service of process; and
 - (d) The person who will pay the abandoned mine land reclamation fee.
- (2) For a coal mining operation other than an underground mining operation, each application shall also contain the names and addresses of:
- (a) Every legal or equitable owner of record of the property to be mined;
 - (b) The holders of record of any leasehold interest in the property to be mined; and
 - (c) Any purchaser of record under a real estate contract of the property to be mined.
- (3) For an underground mining operation each application shall also contain the names and addresses of:
- (a) Every legal or equitable owner of record of the areas to be affected by surface operations and facilities and every legal or equitable owner of record of the property to be mined;
 - (b) The holders of record of any leasehold interest in areas to be affected by surface operations or facilities and the holders of record of any leasehold interest in the coal to be mined; and
 - (c) Any purchaser of record under a real estate contract of areas to be affected by surface operations and facilities and any purchaser of record under a real estate contract of the coal to be mined.
- (4) Each application shall contain a statement of whether the applicant is a corporation, partnership, single proprietorship, association or other business entity.
- (5) For each person who owns or controls or owned or controlled the applicant according to paragraph (A) of this rule, the application shall contain the following information:
- (a) The person's name and address, and either the last four digits of his or her social security number or his or her employer identification number;
 - (b) The person's ownership or control relationship to the applicant, including percentage of ownership and location in organizational structure;
 - (c) The title of the person's position, the date that the position was assumed, and when this information is submitted under paragraph (I) of rule 1501:13-4-06 or paragraph (G)(5) of rule 1501:13-5-01 of the Administrative Code and the person is no longer employed in that position, the date of departure from the position;
 - (d) Each additional name and identifying number, including employer identification number or the last four digits of the social security number, and federal or state permit number and corresponding MSHA number, under which the person owns or controls, or previously owned or controlled, a coal mining and reclamation operation in the United States within the five-year period preceding the date of submission of the application; and

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- (e) The application number or other identifier of, and the regulatory authority for, any other pending coal mining operation permit application filed by the person in any state in the United States.
 - (6) If any owner, holder, purchaser, or operator identified under paragraphs (B)(1) to (B)(3) of this rule is a business entity other than a single proprietorship, the application shall contain the names and street addresses of their respective principals, officers, and resident agents.
 - (7) For any coal mining operation owned or controlled by either the applicant or by any person who owns or controls the applicant under the definition of "owned or controlled" and "owns or controls" in paragraph (A) of this rule, the application shall include the operation's:
 - (a) Name, address, identifying numbers, including employer identification number, federal or state permit number and corresponding MSHA number, and the regulatory authority; and
 - (b) Ownership or control relationship to the applicant, including percentage of ownership and location in organizational structure.
 - (8) Each application shall contain the names and addresses of the owners of record of all surface and subsurface areas contiguous to any part of the proposed permit area.
 - (9) Each application shall contain the name of the proposed mine and the MSHA identification numbers for all mine-associated structures that require MSHA approval.
 - (10) Each application shall contain a statement of all lands, interests in lands, options, or pending bids on interests held or made by the applicant for lands which are contiguous to the area to be covered by the permit. If requested by the applicant, any information required by this paragraph which is not on public file pursuant to Ohio law shall be held in confidence by the chief as provided under rule 1501:13-1-10 of the Administrative Code.
 - (11) After ~~an~~the applicant is notified that his or her application is approved, but before the permit is issued, the applicant shall, as applicable, update, correct, or indicate that no change has occurred in the information previously submitted under paragraphs (B)(1), (B)(4), (B)(5), (B)(7), and (J) of this rule.
 - (12) The applicant shall submit the information required by paragraphs (B) and (C) of this rule on a form prescribed by the chief.
- (C) Violation information. Each application shall contain:
- (1) A statement of whether the applicant or operator, or any subsidiary, affiliate, or persons controlled by or under common control with the applicant or operator has:
 - (a) Had a federal or state coal mining permit suspended or revoked during the five-year period preceding the date of submission of the application; or
 - (b) Forfeited a mining bond, performance security, or similar security deposited in lieu of bond.

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- (2) If any such suspension, revocation, or forfeiture has occurred, a statement of the facts involved, including:
 - (a) Identification number of the permit;
 - (b) Date of suspension, revocation, or forfeiture, and, when applicable, the amount of bond, performance security, or similar security forfeited;
 - (c) Identification of the regulatory authority that suspended or revoked the permit or forfeited the bond, performance security, or similar security, and the stated reasons for that action;
 - (d) The current status of the permit, or of the bond, performance security, or similar security involved;
 - (e) The date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation or forfeiture; and
 - (f) The current status of these proceedings.
- (3) The applicant shall submit a listing of:
 - (a) Each violation notice received by the applicant or operator in connection with any coal mining and reclamation operation during the three-year period preceding the date of submission of the application for violations of Chapter 1513. of the Revised Code or these rules, or of any law, rule, or regulation of the United States, or of any state law, rule, or regulation enacted pursuant to federal law, rule, or regulation, pertaining to air or water environmental protection; and
 - (b) All unabated federal or state cessation orders and unabated or uncorrected air and water quality violation notices received prior to the date of submission of the application incurred in connection with any coal mining and reclamation operation owned or controlled by either the applicant or the operator or by any person who owns or controls the applicant.
- (4) For each violation notice or cessation order reported under paragraph (C)(3)(a) or (C)(3)(b) of this rule, the application shall also contain, when applicable:
 - (a) Any identifying numbers for the operation, including the federal or state permit number and associated MSHA number, the date of issuance and identification number of the violation notice or cessation order, the name of the person to whom the violation notice or cessation order was issued, and the name of the issuing regulatory authority, department, or agency;
 - (b) A brief description of the violation alleged in the notice or cessation order;
 - (c) The date, location, and type of any administrative or judicial proceedings initiated concerning the violation or cessation order, including, but not limited to, proceedings initiated by the applicant to obtain administrative or judicial review of the violations;
 - (d) The current status of the proceedings and of the violation notice or cessation order;
 - (e) If the abatement period for a violation in a notice of violation issued under

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paragraph (B) of rule 1501:13-14-02 of the Administrative Code, or for a cessation order issued under paragraph (A) of rule 1501:13-14-02 of the Administrative Code, or its equivalent for the federal or another state regulatory program, has not expired, certification that the violation or cessation order is being abated or corrected to the satisfaction of the agency with jurisdiction over the violation; and

- (f) For all violations, including cessation orders, not covered under paragraph (C)(4)(e) of this rule, the actions taken to abate or correct the violation or cessation order.
- (5) After ~~an~~the applicant is notified that his or her application is approved, but before the permit is issued, the applicant shall, as applicable, update, correct, or indicate that no change has occurred in the information previously submitted under paragraph (C) of this rule.
- (D) Right of entry and operation information.
- (1) Each application shall contain a description of the documents upon which the applicant bases ~~it~~his or her legal right to enter and begin coal mining in the permit area, for surface mining operations, or in the permit and shadow areas, for underground mining operations, and whether that right is the subject of pending litigation. The description shall identify those documents by type and date of execution, identify the specific lands to which the document pertains, and explain the legal rights claimed by the applicant.
- (2) Where the private mineral estate to be mined has been severed from the private surface estate and surface disturbance will result from the applicant's proposed use of a surface mining ~~will be the method of mining~~, the application shall also provide for lands within the permit area:
- (a) A copy of the written consent of the surface owner to the surface disturbance that will result from the extraction of coal by the applicant's proposed surface mining ~~methods~~method;
- (b) A copy of the document of conveyance that expressly grants or reserves the right to extract the coal by surface mining methods that cause surface disturbance; or
- (c) If the conveyance does not expressly grant the right to extract the coal by surface mining methods that cause disturbance, documentation that under state law, the applicant has the legal authority to extract the coal by those methods.
- (3) Nothing in this rule shall be construed to afford the chief the authority to adjudicate property ~~title~~rights disputes.
- (E) Relationship to areas designated unsuitable for mining.

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- (1) Each application shall contain a statement of available information on whether the proposed permit area is within an area designated unsuitable for coal mining operations under rule 1501:13-3-07 of the Administrative Code or under study for designation in an administrative proceeding under such rule.
 - (2) If an applicant claims the exemption provided in paragraph (B)(3) of rule 1501:13-3-05 of the Administrative Code, the application shall contain information supporting the applicant's assertion that it made substantial legal and financial commitments before January 4, 1977, concerning the proposed coal mining operations.
 - (3) If an applicant proposes to conduct coal mining operations within three hundred feet, measured horizontally, of an occupied dwelling, the application shall contain the waiver of the owner of the dwelling as required in paragraph (D) of rule 1501:13-3-04 of the Administrative Code.
 - (4) If an applicant proposes to conduct coal mining operations within one hundred feet, measured horizontally, of a public road, the application shall contain the road permit as required under paragraph (C) of rule 1501:13-3-04 of the Administrative Code.
- (F) Permit term information.
- (1) Each application shall state the anticipated or actual starting and termination date of each phase of the coal mining and the anticipated number of acres of land to be affected during the first year of mining and over the total life of the permit.
 - (2) Each application to conduct an underground mining operation shall also state the horizontal extent of proposed underground mine workings over the total life of the permit.
 - (3) If ~~the~~an applicant proposes a permit term in excess of five years, the application shall:
 - (a) Be complete and accurate covering the specified longer term; and
 - (b) Show that the proposed longer term is reasonably needed to allow the applicant to obtain financing for equipment and for the opening of the operation with the need confirmed, in writing, by the applicant's proposed source of financing.
- (G) Identification of location of public office for filing of application. Each application shall identify, by name and address, the public office where the applicant will simultaneously file a copy of the application for public inspection as required by these rules.
- (H) Newspaper advertisement and proof of publication. A copy of the newspaper advertisement of the application for a permit or renewal of a permit, or for revision of a permit, if notice is required under paragraph (E) of rule 1501:13-4-06 of the Administrative Code, ~~or renewal of a permit~~ shall be filed with the chief and made a part of the complete application. A proof of publication shall be filed with the chief prior to approval of the permit application.
- (I) Facilities or structures used in common.

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The plans of a facility or structure that is to be shared by two or more separately permitted mining operations may be included in one permit application and referenced in the other applications. In accordance with Chapter 1501:13-7 of the Administrative Code, each permittee shall provide performance security for the facility or structure unless the permittees sharing it agree to another arrangement for assuming their respective responsibilities. If such agreement is reached, then the application shall include a copy of the agreement between or among the parties setting forth the respective performance security responsibilities of each party for the facility or structure. The agreement shall demonstrate to the satisfaction of the chief that all responsibilities under this chapter for the facility or structure will be met.

(J) Central file for identity information.

- (1) The chief shall allow an applicant or permittee to meet the information submittal requirements of paragraph (B) of this rule, paragraph (I) of rule 1501:13-4-06, and paragraph (G)(5) of rule 1501:13-5-01 of the Administrative Code, by submitting the required information to the chief, on a form provided by the chief, with an indication that the information in the form applies to all permits held by the applicant or permittee. The applicant or permittee shall swear or affirm, under oath and in writing, that all information provided pursuant to paragraph (J) of this rule is accurate and complete.
- (2) The chief shall establish a central file to house the information submitted pursuant to paragraph (J) of this rule, rather than placing duplicate information in each application file for a permittee. The chief shall make the information in this central file available to the public upon request.
- (3) Permittees shall update information in this central file according to the following:
 - (a) If the information already submitted to the chief under paragraph (B) of this rule, paragraph (I) of rule 1501:13-4-06 and paragraph (G)(5) of rule 1501:13-5-01 of the Administrative Code is accurate and complete, the permittee shall certify to the chief, on a form provided by the chief, by swearing or affirming, under oath and in writing, that the information is accurate, complete, and up to date; or
 - (b) If part of the information already submitted to the chief under paragraph (B) of this rule, paragraph (I) of rule 1501:13-4-06 and paragraph (G)(5) of rule 1501:13-5-01 of the Administrative Code is missing or incorrect, the permittee shall submit to the chief, on a form provided by the chief, the necessary information or corrections and swear or affirm, under oath and in writing, that the information is accurate and complete.

Draft Rule 1501:13-4-04, dated 4/28/2015.

This is a summary of the changes made to this rule.

(C)(2)(a)(i). Paragraph reference changed to refer to rule 1501:13-4-08 due to the revisions in paragraphs (J) and (K), as explained below.

(D)(5) and (E)(3). References to new paragraphs (D)(6) and (D)(7) added.

(D)(6). New paragraph and sub-paragraphs regarding seasonal variations which provide a standard method for collecting and submitting water samples to identify seasonal variations in water quality and quantity. The provisions include a chart showing the flow periods and their duration.

These new paragraphs contain the requirements of the Division's Permitting & Hydrology Policy/Procedure Directive 2000-2 (also known as PPD 2000-2). The Division is proposing to put these requirements into rule due to a 2007 court decision, *Buckeye Forest Council, Inc. v. Div. of Mineral Res. Mgmt.*, 172 Ohio App.3d 440. In this decision, the court stated that, since PPD 2000-2 uniformly applies to all mining permit application statewide, it qualifies as a rule and its requirements should therefore be adopted by the Division through rule-making.

(D)(7). New paragraph regarding seasonal variations that states: Water quality and quantity data collected and described other than as required by paragraph (D)(6) of this rule may be submitted to identify seasonal variations in ground water and surface water, provided the chief determines that the alternative data are sufficient to identify seasonal variations needed for the hydrologic assessments required by Chapter 1513. of the Revised Code and the rules adopted thereunder.

(J) and (K). The mapping provisions of this rule are proposed to be moved to rule 1501:13-4-08, which will apply to coal mining operations including underground mining surface operations. The mapping requirements for underground workings will be in rule 1501:13-4-08.1.

(L), (M). These paragraphs re-numbered (J) and (K) due to the revisions in paragraphs (J) and (K), as explained above.

(L)(3), and (L)(4)(a) and (b). Paragraph references changed due to the revisions in paragraphs (J) and (K), as explained above.

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Dated 4/28/2015

1501:13-4-04 Permit application requirements for information on environmental resources.

(A) General requirements.

(1) This rule shall apply only to coal mining operations other than underground mining operations.

(2)

(a) Each application shall describe and identify the nature of cultural, historic and archeological resources listed or eligible for listing on the "National Register of Historic Places," administered by the national parks service, U.S. department of the interior, and known archeological sites within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, information from the state historic preservation officer and from local archeological, historical, and cultural preservation agencies. The website for the "National Register of Historic Places" for Ohio sites is <http://www.nationalregisterofhistoricplaces.com/oh/state.html>.

(b) The chief may require the applicant to identify and evaluate important historic and archeological resources that may be eligible for listing on the "National Register of Historic Places," as referenced in paragraph (A)(2)(a) of this rule, through:

(i) Collection of additional information;

(ii) Conduct of field investigations; or

(iii) Other appropriate analyses.

(3) Each application shall describe and identify the lands subject to coal mining operations over the estimated life of those operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought.

(B) Description of hydrology and geology; general requirements.

Each application shall contain a description of surface and ground water within the general area, and any water which will flow into or receive discharges of water from the permit area. The description shall be prepared in the manner required by paragraphs (B) to (G) of this rule, and conform to the following:

(1) Information on hydrology, water quality and quantity, and geology related to hydrology of areas outside the proposed permit area and within the general area shall be provided by the chief, to the extent that this data is available from an appropriate federal or state agency.

(2) If this information is not available from those agencies, the applicant may gather and submit this information to the chief as part of the permit application.

(3) The permit shall not be approved by the chief until this information is made available in the application.

(C) Geology description.

(1) Each application shall include geologic information in sufficient detail to assist in determining:

(a) The probable hydrologic consequences of the operation upon the quality and quantity of surface and ground water in the permit and adjacent areas, including the extent to which surface and groundwater monitoring is necessary.

(b) All potentially acid- or toxic-forming strata down to and including the stratum immediately below the lowest coal seam to be mined; and

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(c) Whether reclamation as required by these rules can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

(2)

(a) The description shall include a general statement of the geology within the proposed permit area and adjacent areas down to and including the deeper of either the first stratum below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely affected by mining. It shall also include the areal and structural geology of the permit and adjacent areas, and the other parameters which influence the required reclamation, and shall show how the areal and structural geology may affect the occurrence, availability, movement, quantity, and quality of potentially affected surface and ground waters. It shall be based on:

(i) The cross sections, maps and plans required by paragraph ~~(K)~~(B) of ~~this~~ rule 1501:13-4-08 of the Administrative Code;

(ii) The information obtained under paragraph (C)(3) of this rule; and

(iii) Geologic literature and practices.

(b) Each application for a permit shall contain the results of tests conducted on the area of land to be mined. Unless the chief first approves a fewer number of test holes, such tests shall consist of test holes made by the boring or drilling method and be conducted at the rate of one test hole for each twenty-five acres of land or fraction thereof, which is underlain by coal on the area of land to be mined. At least one test hole shall be located on the highest elevation in the area of land to be mined. Holes shall be located as far apart as the size and shape of the area of land to be mined will allow. Such holes shall be drilled to the bottom of the material underlying the lowest coal seam to be mined and shall be staked or otherwise marked at the time of filing the application for a permit so as to be clearly visible at the approximate location, and shall be numbered. Such stakes or other markers shall be maintained until the permit to conduct a coal mining operation is granted or denied.

(3) Test borings or core samples.

(a) Test borings or core samples from the proposed permit area shall be collected and analyzed down to and including the stratum immediately below the lowest coal seam to be mined. Individual drilling reports shall be furnished for each test boring or core sampling and shall contain the following information on forms prescribed by the chief:

(i) Location of subsurface water, if encountered;

(ii) Lithologic characteristics including physical properties and thickness of each stratum and each coal seam;

(iii) Chemical analyses to include pH, neutralization potential, potential acidity, total or pyritic sulfur, and calcium carbonate deficiency of each stratum;

(iv) Analyses of the coal seam for acid-forming or toxic-forming materials, including, but not limited to, an analysis of the total sulfur and the sulfur present in pyrite and marcasite;

(v) Identification of the test hole by the number assigned in paragraph (C)(2)(b) of this rule; and

(vi) Identification of all coal seams by name and number.

(b) To verify the results of the applicant's tests, the chief may, prior to approval of the application, require the applicant to drill additional test holes and provide the information required in paragraph (C)(3)(a)

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of this rule.

(c) If more precise information than can be provided by drilling techniques is warranted by potentially adverse site conditions, the chief may require that the test hole information required in paragraph (C)(3) of this rule be obtained by core drilling.

(4) Prior to submission of an application, an applicant may request that the requirements of paragraphs (C)(2)(b) and (C)(3)(a) of this rule be waived by the chief. The waiver may be granted only if the chief makes a written determination that the statement required is unnecessary because other equivalent information is accessible to him or her in a satisfactory form. If the chief grants a waiver the waiver shall be submitted with the permit application.

(D) Ground water information.

(1) The application shall contain a description of the ground water hydrology for the proposed permit and adjacent areas, including, at a minimum:

(a) The depth below the surface and the horizontal extent of the water table and aquifers;

(b) The lithology and thickness of the aquifers;

(c) Known uses of the water in the aquifers and water table;

(d) The quality of subsurface water, if encountered;

(e) The depth to the water in the coal seam if the seam is a water-bearing stratum, and each water-bearing stratum above and potentially affected water-bearing stratum below the coal seam; and

(f) The approximate rate of discharge or usage of the water.

(2) The application shall contain a water supply inventory to include, at a minimum:

(a) A list of existing water wells on the proposed permit and adjacent areas to describe the quality and quantity of the ground water to include:

(i) Identification number of the well;

(ii) Surface elevation of the well;

(iii) Depth of the well in feet below the land surface;

(iv) Static water level of the well in feet below the land surface;

(v) The lithology of the aquifer in which each well is developed; and

(vi) Name of owner of the well;

(b) A list of existing springs on the proposed permit and adjacent areas to include:

(i) Identification number of the spring;

(ii) Name of owner of any spring that is developed for use as a water supply;

(iii) The surface elevation of the spring; and

(iv) The aquifer each spring flows from; and

(c) A list of the location and type of any public water supply sources on the permit and adjacent areas.

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- (3) Where information required in the water supply inventory of paragraph (D)(2) of this rule is unobtainable, a statement to that effect shall be made, giving the reasons therefor.
- (4) The application shall contain the results of water quality analyses and measurements of static water level or discharge, conducted on at least ten (or all if less than ten) of the wells and springs on the permit and adjacent areas or twenty-five per cent of such wells and springs, whichever number is greater.
- (a) Wells and springs chosen for analysis and measurement shall, as a group, represent all known aquifers present in the permit and adjacent areas and shall, wherever possible, be those nearest to or on the permit area.
 - (b) Sampling for water quality analysis shall be conducted at a minimum one time prior to submission of an application for a permit.
 - (c) The measurement of static water level or discharge shall be conducted for each well and spring identified in paragraph (D)(4) of this rule at a minimum one time prior to submission of an application for a permit.
 - (d) Water samples collected at the sites prescribed in paragraph (D)(4) of this rule shall be analyzed for the following parameters according to the methodology specified in 40 C.F.R. parts 136 and 434:
 - (i) pH in standard units;
 - (ii) Total acidity in milligrams per liter of CaCO_3 ;
 - (iii) Total alkalinity in milligrams per liter of CaCO_3 ;
 - (iv) Total manganese in milligrams per liter;
 - (v) Total iron in milligrams per liter;
 - (vi) Total hardness in milligrams per liter of CaCO_3 ;
 - (vii) Total dissolved solids or specific conductance corrected to twenty-five degrees centigrade;
 - (viii) Total aluminum in milligrams per liter;
 - (ix) Total sulfates in milligrams per liter; and
 - (x) Other such information as the chief determines relevant.
 - (e) The results of water quality analyses and measurements prescribed in paragraph (D) of this rule shall be reported on a form to be provided by the chief.
- (5) Water quality and quantity data sufficient to identify seasonal variations pursuant to paragraph (D)(6) or (D)(7) of this rule shall be submitted with an application for a permit.
- (6) Identifying seasonal variations for ground water and surface water. For each application, the applicant shall submit three water samples from each required sampling site designated pursuant to paragraphs (D)(4) and (E)(1) of this rule. One sample shall be from the low flow period, one sample from the high flow period, and one sample from either of the intermediate flow periods, as established in the following table:

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Flow Periods and Duration of Flow Periods

<u>Low Flow</u>	<u>August 16 to October 31</u>
<u>Transition Flow</u>	<u>November 1 to November 15</u>
<u>Intermediate Flow</u>	<u>November 16 to January 31</u>
<u>Transition Flow</u>	<u>February 1 to February 14</u>
<u>High Flow</u>	<u>February 15 to April 30</u>
<u>Transition Flow</u>	<u>May 1 to May 15</u>
<u>Intermediate Flow</u>	<u>May 16 to July 31</u>
<u>Transition Flow</u>	<u>August 1 to August 15</u>

(a) For samples submitted to meet the seasonal variations requirements, the period between consecutive samples shall be at least thirty days, but not more than eighteen months, and no sample shall be collected more than thirty-six months before the date of submission of the application to the chief. A sample that exceeds the eighteen month or thirty-six month time limit of this paragraph may be acceptable if the applicant submits the following information with the sample:

(i) The date and sampling site of the sample; and

(ii) A description of all land disturbance activities that existed at the time of the sample date or that have occurred since the sample date within the local watershed that could affect the quality and quantity of the surface water or ground water. The description shall include, but is not limited to, land disturbances such as mining operations, highway construction, cut and fill operations, building construction, and dam construction or demolition.

(iii) A sample that exceeds the eighteen month or thirty-six month time limit is acceptable only if the chief determines that it is still representative of the quality and quantity of the surface water or ground water at the time of submission of the application.

(b) The applicant is not required to collect samples from consecutive flow periods.

(c) The applicant may record a low flow sample as "no flow" if the applicant documents that the applicant made at least two attempts, at least thirty days apart, to collect a flow at that site during the low flow period.

(d) Transition flow periods. A sample obtained during a transition flow period may be used for either the preceding or succeeding flow period if the following conditions are met:

(i) The applicant submits documentation showing that the sample from the transition period accurately reflects the flow period for which the sample is submitted and the chief agrees with this assessment;

(ii) The sample obtained during a transition period is not used for both the preceding and succeeding flow periods;

(iii) At least one of the three required samples is obtained during a flow period other than a transition period; and

(iv) The applicant submits precipitation data for the local watershed for the thirty days prior to the sample date.

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(e) Substitute sampling site for one sample. The applicant may request, in writing, that a sample obtained from a site other than a designated sampling site be substituted for one of the three designated site samples. A sample from a substitute site shall not be used as the earliest of the three samples from a designated sampling site. The chief shall review this request and determine whether the substitute sampling site and the data collected from the site are acceptable. In making the request, the applicant shall:

(i) Describe how the substitute sampling site adequately represents the original sampling site;

(ii) Demonstrate that the substitute sampling site is located in the same aquifer as the original sampling site;

(iii) Demonstrate that the geology of the groundwater recharge area of the substitute site, as well as the surface disturbance of the recharge area of the substitute site, are similar to that of the original site;

(iv) Demonstrate that the substitute sampling site represents and performs the same function as the original site;

(v) Demonstrate that the analysis of the water quality and quantity data from the substitute site accurately represents the quality and quantity of the water at the original site and explain any anomalies in water quality or quantity at the substitute site;

(vi) Demonstrate that the flow obtained at the substitute site was obtained during the flow period missed at the original site;

(vii) Include precipitation data for the thirty days prior to the sample date at the substitute site;

(viii) Provide a description of the location of the substitute sampling site relative to the original sampling location. The description shall include bearing and distance measurements from the original sampling location to the substitute sampling location; and

(ix) Submit additional information if required by the chief to support the use of a substitute sample.

(f) The applicant may submit additional samples and other data related to seasonal variations beyond that submitted to meet the minimum requirements of paragraph (D)(6).

(7) Water quality and quantity data collected and described other than as required by paragraph (D)(6) of this rule may be submitted to identify seasonal variations in ground water and surface water, provided the chief determines that the alternative data are sufficient to identify seasonal variations needed for the hydrologic assessments required by Chapter 1513. of the Revised Code and the rules adopted thereunder.

(E) Surface-water information.

(1) Within the proposed permit and adjacent areas, all surface-water bodies such as streams, lakes and impoundments and all discharges from the permit area into surface-water bodies shall be described and sampled for analysis under paragraph (E) of this rule. The description shall include the name of any watershed that will receive water discharges, the name, ownership and location of all surface-water bodies and the known uses of the water in these water bodies.

(2) Water samples collected under paragraph (E) of this rule shall be analyzed according to the methodology specified in 40 C.F.R. parts 136 and 434. Surface water information shall include the following water quality data to identify the characteristics of surface waters within the proposed permit and adjacent areas:

(a) Total suspended solids in milligrams per liter;

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- (b) Total acidity in milligrams per liter of CaCO₃;
 - (c) Total alkalinity in milligrams per liter of CaCO₃;
 - (d) pH in standard units;
 - (e) Total iron in milligrams per liter;
 - (f) Total manganese in milligrams per liter;
 - (g) Total dissolved solids or specific conductance corrected to twenty-five degrees centigrade;
 - (h) Total aluminum in milligrams per liter;
 - (i) Total sulfates in milligrams per liter; and
 - (j) Other such information as the chief determines relevant.
- (3) Water quality and quantity data sufficient to identify seasonal variations pursuant to paragraph (D)(6) or (D)(7) of this rule shall be submitted with an application for a permit.
- (4) The results of water quality analyses and measurements prescribed in paragraph (E) of this rule shall be reported on a form to be provided by the chief.
- (F) Alternative water supply information. The application shall identify the extent to which the proposed coal mining operations may proximately result in contamination, diminution, or interruption of an underground or surface source of water that is for domestic, agricultural, industrial, or other legitimate use. If contamination, diminution, or interruption may result, then the description shall contain information on water availability and alternative sources of water, including the suitability of alternative water sources for existing premining uses and approved post-mining land uses.
- (G) Supplemental information. If the determination of the probable hydrologic consequences required by paragraph (E)(2) of rule 1501:13-4-05 of the Administrative Code indicates that adverse impacts on or off the proposed permit area may occur to the hydrologic balance, or that acid-forming or toxic-forming material is present that may result in the contamination of ground-water or surface-water supplies, then information supplemental to that required under paragraphs (D) and (E) of this rule shall be provided to evaluate such probable hydrologic consequences and to plan remedial and reclamation activities. Such supplemental information may be based upon drilling, aquifer tests, hydrogeologic analysis of the water-bearing strata, flood flows, or analyses of other water quality or quantity characteristics.
- (H) Climatological information.
- (1) When required by the chief, the application shall contain a statement of the climatological factors that are representative of the proposed permit area, including:
 - (a) The average seasonal precipitation;
 - (b) The average direction and velocity of prevailing winds; and
 - (c) Seasonal temperature ranges.
 - (2) The chief may request such additional data as deemed necessary to ensure compliance with the requirements of these rules.

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(I) Land-use information.

- (1) The application shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:
 - (a) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within five years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described.
 - (b) A narrative of the land capability and productivity, which analyzes the land use described under paragraph (I)(1)(a) of this rule in conjunction with other environmental resources information required under these rules. The narrative shall provide analyses of:
 - (i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover and the hydrology of the proposed permit area; and
 - (ii) The productivity of the proposed permit area before mining, including appropriate classification as prime farmlands, as well as the average yield of food, fiber, forage, or wood products from the land obtained under high level of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the United States department of agriculture, state agricultural universities, or appropriate state natural resources or agricultural agencies.
- (2) The application shall state whether the proposed permit area has been previously mined, and if so, the following information, if available:
 - (a) The type of mining method used;
 - (b) The coal seams or other mineral strata mined;
 - (c) The extent of coal or other minerals removed;
 - (d) The approximate dates of past mining; and
 - (e) The uses of the land preceding mining.
- (3) The application shall contain a description of the existing land uses and land use classifications under local law, if any, of the proposed permit and adjacent areas.

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

- ~~(1) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the permit area; noting the boundaries of land within the proposed permit 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 permit area, 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 permit area;~~
- ~~(4) The locations of water supply intakes for current users of surface water flowing into, out of, and within a~~

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~~hydrologic area defined by the chief, those surface waters which will receive discharges from affected areas in the proposed permit area and the location of any discharges to any surface body of water on or adjacent to the land to be affected;~~

- ~~(5) Each public road located in or within one hundred feet of the proposed permit area;~~
- ~~(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 this rule, and known archeological sites within the proposed permit and adjacent area;~~
- ~~(7) Each cemetery that is located in or within one hundred feet of the proposed permit area;~~
- ~~(8) Any land within the proposed permit 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 within the permit area and within five hundred feet of the permit area;~~
- ~~(10) The names, locations, and directions of flow of all perennial and intermittent streams within the permit area and within five hundred feet of the permit area;~~
- ~~(11) The name of the drainage basin in which the permit area is located as listed in the "Gazetteer of Ohio Streams," published by the Ohio department of natural resources;~~
- ~~(12) That part of the permit area that is prime farmland;~~
- ~~(13) The areas of land to be permitted on which steep slope mining, mountaintop removal, and augering will be performed;~~
- ~~(14) The drainage control system to include the location of:
 - ~~(a) Each sediment pond and the pond identification number;~~
 - ~~(b) Any diversions; and~~
 - ~~(c) Any treatment facilities;~~~~
- ~~(15) All haul roads and access roads proposed to be constructed in conjunction with the operations, and all existing haul roads and access roads to be used in conjunction with the operation;~~
- ~~(16) The location of the proposed final highwall for each coal seam to be mined;~~
- ~~(17) The point at which mining operations will begin and the point at which mining operations will end on the permit area;~~
- ~~(18) Elevations and locations of test borings and core samplings;~~
- ~~(19) 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;~~
- ~~(20) All coal crop lines and the strike and dip of the coal to be mined in the proposed permit area;~~
- ~~(21) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;~~
- ~~(22) Location and extent of subsurface water, if encountered, within the proposed permit or adjacent areas;~~

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- ~~(23) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;~~
 - ~~(24) Location and extent of existing or previously surface-mined areas within the proposed permit area;~~
 - ~~(25) Location and extent of existing areas of spoil, waste, and refuse, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;~~
 - ~~(26) Location of gas and oil wells within the proposed permit area and water wells in the permit area and within one thousand feet of the permit area;~~
 - ~~(27) The location and start and end points of all submitted cross sections;~~
 - ~~(28) Sufficient slope measurements, in degrees, to adequately represent the existing land surface configuration of the proposed permit area;~~
 - ~~(29) 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;~~
 - ~~(30) Buildings, utility corridors;~~
 - ~~(31) Each coal storage, cleaning and loading area;~~
 - ~~(32) Each topsoil, spoil, coal waste, and noncoal waste storage area;~~
 - ~~(33) Each air pollution collection and control facility;~~
 - ~~(34) Each facility to be used to protect and enhance fish and wildlife and related environmental values;~~
 - ~~(35) Each explosive storage and handling facility; and~~
 - ~~(36) Other relevant information required by the chief.~~
- ~~(K) Supplementary maps, cross sections, designs and plans. When necessary under these rules, the application shall include:~~
- ~~(1) Designs and plans prepared and certified by an engineer for the following:
 - ~~(a) Sedimentation ponds, impoundments, coal mine waste banks, and coal mine waste dams;~~
 - ~~(b) Spoil disposal facilities;~~
 - ~~(c) The sealing or managing of any mine openings within the proposed permit area;~~
 - ~~(d) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and~~
 - ~~(e) Road stream crossings, bridges, culverts, drainages, ditches, drainage structures, road cuts, and fill embankments.~~~~
 - ~~(2) 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:
 - ~~(a) Each sedimentation pond, permanent water impoundment, coal mine waste bank and coal mine waste dam;~~~~

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- ~~(b) The fill area for the disposal of excess spoil;~~
- ~~(c) 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;~~
- ~~(d) The permit area, the original surface topography and the proposed final surface contour;~~
- ~~(e) The location of the proposed final highwall;~~
- ~~(f) The location of each waste disposal facility relating to coal processing or pollution control;~~
- ~~(g) The location of any mine openings within the proposed permit area;~~
- ~~(h) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and~~
- ~~(i) Road widths, road gradients, road surfaces, road cuts, fill embankments, culverts, bridges, drainages, ditches, and drainage structures.~~

~~(L)~~ (J) Prime farmland investigation.

- (1) The applicant shall conduct a pre-application investigation of the proposed permit area to determine whether lands within the area may be prime farmland. The chief, in consultation with the U.S. natural resources conservation service, shall determine the nature and extent of this investigation.
- (2) Land shall not be considered prime farmland if the applicant can demonstrate that:
 - (a) The land has not been historically used for cropland; or
 - (b) On the basis of a soil survey of lands within the permit area, there are no soil map units that have been designated prime farmland by the U.S. natural resources conservation service.
- (3) If the investigation establishes that the lands are not prime farmland, the applicant shall submit with the permit application a request for a negative determination which shows that the land for which the negative determination is sought meets one of the criteria of paragraph ~~(L)~~ (J)(2) of this rule.
- (4) If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the U.S. natural resources conservation service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed permit area, the applicant shall cause a survey to be made that is of the detail of a second order soil survey used by the U.S. natural resources conservation service for operational conservation planning. This survey shall be used to identify and locate prime farmland soils.
 - (a) When a soil survey made pursuant to paragraph ~~(L)~~ (J)(4) of this rule indicates that the land contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with the requirements of paragraph (F) of rule 1501:13-4-12 of the Administrative Code, for such designated land.
 - (b) When a soil survey made pursuant to paragraph ~~(L)~~ (J)(4) of this rule indicates that the land contains soil map units which have not been designated as prime farmland after review by the U.S. natural resources conservation service, the applicant shall submit a request for negative determination for

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- non-designated land with the permit application establishing compliance with paragraph ~~(L)~~(J)(2) of this rule.

~~(M)~~(K) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.

Draft Rule 1501:13-4-05, dated 10/3/2014

This is a summary of the changes made to this rule.

(A)(2)(b). The word "necessary" is restored to this provision. It was removed effective 4/30/2009 but OSM requires that it be put back for the provision to be as effective as the Federal provision.

(G)(2). Additional language per HB 163, effective 9/30/2011, that explains that the provisions of (G)(2) do not apply in cases where no surface disturbance will result from the applicant's proposed use of auger/highwall mining.

(H)(7). New paragraph to address incorporation by reference requirements. The paragraph refers the reader to rule 1501:13-9-04, which contains information on where a copy of Soil Conservation Service Technical Release No. 60 can be obtained.

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Dated 10/3/2014

1501:13-4-05 Permit application requirements for reclamation and operations plans.

(A) Operation plan: general requirements.

- (1) This rule shall apply only to coal mining operations other than underground mining operations.
- (2) Each application shall contain a description of the mining operations proposed to be conducted during the life of the mine within the proposed permit area, including:
 - (a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations;
 - (i) The description shall identify the mining method as area mining, contour mining, another named mining method, or combination of methods to be identified by name;
 - (ii) For contour mining or area mining, the description shall include, at a minimum, the maximum extent of cover to be mined, the location where the mining will begin, the direction the mining will proceed, and the ending point of the operation. If the mining operation will utilize multiple pits, the description shall be included for each mining pit;
 - (iii) For mining methods other than area mining or contour mining, or for combinations of methods, the description shall include each of the items required under paragraph (A)(2)(a)(ii) of this rule and in addition shall include other information that demonstrates the orderly and reasonable progression of mining, including, but not limited to, spoil placement plans, proposed locations of haul roads that will be used or retained for an extended period of time, and the intended timing of mining operations;
 - (iv) The description shall specify for the mining method(s) proposed how the time and distance requirements of rule 1501:13-9-13 of the Administrative Code will be met; and
 - (b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facilities is ~~approved by the chief~~necessary for postmining land use as specified in rule 1501:13-9-17 of the Administrative Code and is approved by the chief):
 - (i) Dams, embankments, and other impoundments;
 - (ii) Overburden and topsoil handling and storage areas and structures;
 - (iii) Coal removal, handling, storage, cleaning, and transportation areas and structures;
 - (iv) Spoil, coal processing waste, and noncoal waste removal, handling, storage, transportation, and disposal areas and structures;
 - (v) Mine facilities; and
 - (vi) Water and air pollution control facilities.
- (3) Each application shall contain the information required under Chapter 1501:13-4 of the Administrative Code for the proposed permit area in the detail necessary for the chief to determine the estimated cost of reclamation, pursuant to paragraph (B) of rule 1501:13-7-01 of the Administrative Code, if the reclamation has to be performed by the division of mineral resources management in the event of forfeiture of the performance security by the permittee. This estimate shall include:

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- (a) Operational detail sufficient to determine the greatest potential reclamation cost liability to the state; and
- (b) Any other operational detail required by the chief that may affect the cost of reclamation by the division of mineral resources management in the event of forfeiture of the performance security by the permittee.

(B) Operation plan: existing structures.

- (1) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the coal mining and reclamation operation. The description shall include:
 - (a) Location;
 - (b) Plans of the structure which describe its current condition;
 - (c) Approximate dates on which construction of the existing structure was begun and completed; and
 - (d) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code.
- (2) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the coal mining and reclamation operation. The compliance plan shall include:
 - (a) Design specifications for the modification or reconstruction of the structure to meet the design and performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code;
 - (b) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;
 - (c) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code are met; and
 - (d) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.

(C) Operation plan: blasting. Each application shall contain a blasting plan for the proposed permit area, explaining how the applicant intends to comply with the blasting requirements of rule 1501:13-9-06 of the Administrative Code and including the following:

- (1) Information setting forth the limitations the operator will meet with regard to ground vibration and airblast, the bases for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations;
- (2) A description of any system to be used to monitor compliance with the airblast and ground vibration limits established under paragraph (C)(1) of this rule, including the type, capability, and sensitivity of any blast-monitoring equipment and proposed procedures and locations of monitoring; and
- (3) For blasting operations within five hundred feet of active underground mines, copies of the approvals given by the state and federal regulatory authorities concerned with the health and safety of underground miners.

(D) Reclamation plan: general requirements.

- (1) Each application shall contain a plan for describing reclamation of the lands within the proposed permit

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area, showing how the applicant will comply with the requirements of Chapter 1513. of the Revised Code and rules adopted thereunder. The plan shall include, at a minimum, all information required under paragraphs (D) to (P) of this rule.

- (2) Each plan shall contain, where appropriate, the following information for the proposed permit area:
- (a) A detailed timetable for the completion of each major step in the reclamation plan which, at a minimum, addresses the reclamation timing requirements of paragraph (A) of rule 1501:13-9-13 of the Administrative Code, and is specific to the mining method described in accordance with paragraph (A)(2)(a) of this rule;
 - (b) A description of the backfilling, soil stabilization and grading;
 - (c) A description of the removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of rule 1501:13-9-03 of the Administrative Code. A demonstration of the suitability of topsoil substitutes or supplements under rule 1501:13-9-03 of the Administrative Code shall be based upon analysis of the thickness of soil horizons, total depth, texture, per cent coarse fragments, pH, and areal extent of the different kinds of soils. The chief may require other chemical and physical analyses, field-site trials, or greenhouse tests if determined to be necessary or desirable to demonstrate the suitability of the topsoil substitutes or supplements;
 - (d) A description of the revegetation as required in rule 1501:13-9-15 of the Administrative Code, including, but not limited to, descriptions of the:
 - (i) Schedule of revegetation;
 - (ii) Species and amounts per acre of seeds and seedlings to be used;
 - (iii) Methods to be used in planting and seeding;
 - (iv) Mulching techniques;
 - (v) A soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;
 - (vi) Irrigation, if appropriate, and disease, pest and vermin control, if any; and
 - (vii) The measures proposed to be used to determine the success of revegetation as required under rule 1501:13-9-15 of the Administrative Code;
 - (e) A description of the measures to be used to maximize the use and conservation of the coal resources as required by rule 1501:13-9-05 of the Administrative Code;
 - (f) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with paragraph (E) of rule 1501:13-9-09 of the Administrative Code and paragraph (J) of rule 1501:13-9-14 of the Administrative Code and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;
 - (g) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with rule 1501:13-9-02 of the Administrative Code; and
 - (h) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. 1251 et seq.) and other applicable air and water quality laws and regulations and health and safety standards.

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(E) Reclamation plan: protection of the hydrologic balance.

- (1) Each application shall contain a plan for the protection of the hydrologic balance. The plan shall be specific to the local hydrologic conditions and shall describe the measures to be taken during and after the proposed coal mining operations in accordance with rule 1501:13-9-04 of the Administrative Code to:**
 - (a) Minimize disturbance to the hydrologic balance within the permit and adjacent areas and to prevent material damage outside the permit area;**
 - (b) Protect the rights of present users of surface and ground water;**
 - (c) Avoid acid or toxic drainage;**
 - (d) Control surface water drainage into, through, and out of the proposed permit area, pursuant to rule 1501:13-9-04 of the Administrative Code;**
 - (e) Treat, when required under these rules, surface and ground water drainage from the area to be disturbed by the proposed activities, so as not to exceed quantitative limits on pollutants in discharges under paragraph (B) of rule 1501:13-9-04 of the Administrative Code;**
 - (f) Restore the approximate recharge capacity of the proposed permit area in accordance with paragraph (L) of rule 1501:13-9-04 of the Administrative Code and protect or replace rights of present water users;**
 - (g) Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow, or runoff outside the permit area. Vegetation may be determined by the chief to be the best technology currently available upon a demonstration by the permittee that the requirements of paragraphs (B)(1) to (B)(1)(b) of rule 1501:13-9-04 of the Administrative Code have been met. If the applicant proposes to make such a demonstration after vegetation is established and remove siltation structures sooner than two years after the last augmented seeding of a drainage area, the applicant shall state such intentions in the timetable and plans for removal of sediment control structures required by paragraph (H)(1)(b)(iv) or (H)(1)(c)(iv) of this rule;**
 - (h) Address any potential adverse hydrologic consequences identified in the determination of probable hydrologic consequences under paragraph (E)(2) of this rule and include preventative and remedial measures; and**
 - (i) Meet applicable state and federal water quality laws and regulations.**

(2) Determination of probable hydrologic consequences (PHC).

- (a) The plan shall include a determination of the probable hydrologic consequences of the proposed coal mining operations on the proposed permit area and adjacent areas. This determination shall be based on baseline hydrologic, geologic and other information collected for the permit application with respect to the hydrologic regime, providing information on the quantity and quality of water in surface and ground-water systems under seasonal conditions, including the contents of dissolved and total suspended solids, total iron, pH, and total manganese.**
- (b) The PHC determination shall include findings on:**
 - (i) Whether adverse impacts may occur to the hydrologic balance;**
 - (ii) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface- or ground-water supplies;**
 - (iii) Whether the proposed operation may proximately result in contamination, diminution or**

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interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial, or other legitimate purpose; and

(iv) What impact the proposed operation will have on:

(a) Sediment yield from the disturbed area;

(b) Acidity, total suspended and dissolved solids, and other important water quality parameters of local impact;

(c) Flooding or streamflow alteration;

(d) Ground-water and surface-water availability; and

(e) Other characteristics as required by the chief.

(c) An application for a permit revision shall be reviewed by the chief to determine whether a new or updated PHC determination shall be required.

(F) Ground-water and surface-water monitoring plans.

(1) Ground-water monitoring plan.

(a) The application shall include a ground-water monitoring plan based upon the PHC determination required under paragraph (E)(2) of this rule and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in paragraph (E)(1) of this rule. It shall identify the quantity and quality parameters to be monitored, sampling frequency, and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, specific conductance corrected to twenty-five degrees centigrade, pH, total iron, total manganese, and water levels shall be monitored. The data resulting from this monitoring shall be submitted to the chief pursuant to paragraph (N) of rule 1501:13-9-04 of the Administrative Code.

(b) If an applicant can demonstrate by the use of the PHC determination and other available information that a particular water-bearing stratum in the proposed permit and adjacent areas is not one which serves as an aquifer which significantly ensures the hydrologic balance within the general area, then monitoring of that stratum may be waived by the chief.

(2) Surface-water monitoring plan.

(a) The application shall include a surface-water monitoring plan based upon the PHC determination required under paragraph (E)(2) of this rule and the analysis of all baseline hydrologic, geologic, and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (E)(1) of this rule as well as the effluent limitations set forth in 40 C.F.R. part 434.

(b) The plan shall identify the surface-water quantity and the quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance.

(i) At all monitoring locations in the permit and adjacent areas, surface-water bodies such as streams, lakes and impoundments, that are potentially affected or into which water will be discharged, and at upstream monitoring locations, the specific conductance corrected to twenty-five degrees centigrade, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.

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- (ii) For point-source discharges, monitoring shall be conducted in accordance with 40 C.F.R. parts 122, 123 and 434 and as required by the national pollutant discharge elimination system permitting authority.
- (iii) The data resulting from this monitoring shall be submitted to the chief pursuant to paragraph (N) of rule 1501:13-9-04 of the Administrative Code.

(G) Reclamation plan: postmining land uses.

- (1) Each application shall contain a plan for the postmining land use. The plan shall describe the proposed use following reclamation of the land within the proposed permit area including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:
 - (a) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and
 - (b) When a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under these rules.
- (2) The plan shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the state and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation. In cases where no surface disturbance will result from the applicant's proposed use of auger/highwall mining, this paragraph shall not apply.
- (3) The plan shall describe the consideration which has been given to making all of the proposed coal mining operations consistent with surface owner plans and applicable state and local land use plans and programs.

(H) Reclamation plan: ponds, impoundments, banks, dams, and embankments.

(1) General requirements.

- (a) Each application shall include a detailed design plan for each proposed siltation structure, water impoundment, and coal mine waste bank, dam, or embankment within the proposed permit area. Each plan shall:
 - (i) Be prepared by, or under the direction of, and certified by an engineer;
 - (ii) Contain a description, map, and cross section of the structure and its location;
 - (iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure; and
 - (iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred.
- (b) Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), or meets the class B or C criteria for dams in the U.S department of agriculture, soil conservation service technical release no. 60, "Earth Dams and Reservoirs," 1985, shall:
 - (i) Be prepared by, or under the direction of, and certified by an engineer;

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- (ii) Include any geotechnical investigation, design, and construction requirements for the structure;
- (iii) Describe the operation and maintenance requirements for each structure; and
- (iv) Describe the timetable and plans to remove each structure, if appropriate. If the applicant proposes to demonstrate that vegetation is the best technology currently available and remove siltation structures sooner than two years after the last augmented seeding of the drainage area, include a statement of such intentions.

(c) Each detailed design plan for a structure that does not meet the size or other criteria of paragraph (H)(1)(b) of this rule, shall:

- (i) Be prepared by, or under the direction of, and certified by an engineer;
- (ii) Include any design and construction requirements for the structure, including any required geotechnical information;
- (iii) Describe the operation and maintenance requirements for each structure; and
- (iv) Describe the timetable and plans to remove each structure, if appropriate. If the applicant proposes to demonstrate that vegetation is the best technology currently available and remove siltation structures sooner than two years after the last augmented seeding of the drainage area, include a statement of such intentions.

(2) Impoundments.

(a) Permanent and temporary impoundments shall be designed in compliance with the requirements of paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any impoundment shall be certified by an engineer experienced in impoundment design and construction. The certification statement shall state that the structure is designed to meet the requirements of paragraph (H) of rule 1501:13-9-04 of the Administrative Code.

(b) Each design plan for an impoundment that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a). The plan required to be submitted to the district manager of MSHA under 30 C.F.R. 77.216 shall also be submitted to the chief as part of the permit application.

(c) Impoundments not meeting the size or other criteria of paragraph (H)(1)(b) of this rule may be designed in compliance with the following design standards, in lieu of performance of engineering tests to demonstrate compliance with the 1.3 minimum static safety factor required in paragraph (H)(1)(c)(ii) of rule 1501:13-9-04 of the Administrative Code:

- (i) The embankment foundation area shall be cleared of all organic matter and the entire foundation surface shall be scarified;
- (ii) If the natural slope of the foundation as measured at right angles to the embankment center line is steeper than 10:1V (ten percent), the embankment shall be benched into the existing slope beginning at the embankment toe and then filled with compacted level lifts;
- (iii) The embankment fill material shall be free of sod, large roots, other large vegetative matter, and coal processing waste;
- (iv) The fill shall be brought up in horizontal layers of such thickness as required to facilitate compaction in accordance with prudent construction standards;
- (v) The moisture content of the fill material shall be sufficient to secure proper compaction. (An indication of sufficient moisture content is that when kneaded by hand the soil should just form a

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ball which does not readily separate. The engineer may specify other methods of testing moisture content, if appropriate.) When it is necessary to use materials of varying texture and gradation, the more impervious material shall be placed in the upstream and center portions of the embankment and the more pervious material shall be placed in the downstream portion of the fill;

- (vi) The embankment's combined upstream and downstream side slopes shall be no steeper than the sum of 5h:1v, with neither slope steeper than 2h:1v. (Example: if downstream slope is 3h:1v, then upstream slope can be no steeper than 2h:1v. The minimum combined slope requirement of 5h:1v refers to the 3h and 2h added together.); and
- (vii) The minimum top width of the embankment shall be $(h + 35)/5$, where "h" is the embankment height as measured from natural ground at the upstream toe to the top of the embankment.

(3) Siltation structures.

- (a) Permanent and temporary siltation structures shall be designed in compliance with the requirements of paragraphs (G) and (H) of rule 1501:13-9-04 of the Administrative Code. The design of any siltation structure shall be certified by an engineer experienced in impoundment design and construction. The certification shall state that the structure is designed to meet the requirements of paragraphs (G) and (H) of rule 1501:13-9-04 of the Administrative Code.
- (b) In addition to the requirements of paragraph (H)(1) of this rule, the plan shall include a determination of:
 - (i) The required sediment storage volume; and
 - (ii) The detention time provided by the pond.
- (c) Each design plan for a siltation structure that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a).

(4) Coal mine waste dams and embankments.

- (a) Coal mine waste dams and embankments shall be designed to comply with the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any coal mine waste dam or embankment shall be certified by an engineer experienced in design of similar earth and waste structures. The certification statement shall state that the structure is designed to meet the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code.
- (b) Each plan shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer, according to the following:
 - (i) The number, location, and depth of borings and test pits shall be determined using current, prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions;
 - (ii) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered;
 - (iii) All springs, seepage, and ground-water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan; and

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- (iv) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.
- (c) Each design plan for a coal mine waste dam or embankment that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a).
- (5) Coal mine waste banks. Coal mine waste banks shall be designed to comply with the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 of the Administrative Code, and with the provisions regarding impoundments under paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any coal mine waste bank shall be certified by an engineer experienced in design of similar earth and waste structures. The certification shall state that the structure is designed to meet the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.
- (6) If the structure meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), or meets the Class B or C criteria for dams in the U.S department of agriculture, soil conservation service technical release no. 60, "Earth Dams and Reservoirs," 1985, each plan under paragraphs (H)(2), (H)(3), and (H)(4) of this rule shall include a stability analysis of each structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.
- (7) For further information about soil conservation service technical release no. 60, which is incorporated by reference in paragraph (H) of this rule, see paragraph (H)(1)(a) of rule 1501:13-9-04 of the Administrative Code.
- (I) Surface mining near underground mining. For surface mining operations within the proposed permit area to be conducted within five hundred feet of an underground mine either active or abandoned, the application shall describe the measures to be used to comply with rule 1501:13-9-08 of the Administrative Code.
- (J) Diversions. Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code.
- (K) Protection of public parks and historic places.
- (1) For any publicly owned parks or any places listed on the "National Register of Historic Places," administered by the national parks service, U.S. department of the interior, that may be adversely affected by the proposed operation, each application shall describe the measures to be used:
- (a) To prevent adverse impacts; or
- (b) If valid existing rights exist or joint agency approval is to be obtained under paragraph (E) of rule 1501:13-3-04 of the Administrative Code, to minimize adverse impacts. The website for the "National Register of Historic Places" for Ohio sites is <http://www.nationalregisterofhistoricplaces.com/oh/state.html>.
- (2) The chief may require the applicant to protect historic or archeological properties listed on or eligible for listing on the "National Register of Historic Places," as referenced in paragraph (K)(1) of this rule, through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.
- (L) Relocation or use of public roads. Each application shall describe the measures to be used to ensure that the interests of the public and landowners affected are protected if, under paragraph (C) of rule 1501:13-3-04 of

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the Administrative Code, the applicant seeks to have the chief approve:

(1) Conducting the proposed coal mining operations within one hundred feet of the right-of-way line of any public road, except where mine access or haul roads join that right-of-way; or

(2) Relocating a public road.

(M) Transportation facilities.

(1) Each application shall contain a detailed description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area. The description shall include a map, appropriate cross sections, and the following:

(a) Specifications for each road width, road gradient, road surface, road cut, fill embankment, culvert, bridge, drainage ditch, and drainage structure;

(b) A description of measures to be taken to obtain approval of the chief for alteration or relocation of a natural drainageway under rule 1501:13-10-01 of the Administrative Code;

(c) A description of measures, other than use of a rock headwall, to be taken to protect the inlet end of a ditch relief culvert, for approval by the chief under rule 1501:13-10-01 of the Administrative Code;

(d) Drawings and specifications for each proposed ford of perennial or intermittent streams outside the mined-out area that is used as a temporary route, as necessary for approval of the ford by the chief in accordance with paragraph (D)(1) of rule 1501:13-10-01 of the Administrative Code; and

(e) A description of plans to remove and reclaim each road that would not be retained under an approved postmining land use, and the schedule for this removal and reclamation.

(2) Primary road embankments may be designed in compliance with the following design standards, in lieu of performance of engineering tests to demonstrate compliance with the 1.3 minimum static safety factor required in paragraph (G)(3) of rule 1501:13-10-01 of the Administrative Code:

(a) The embankment foundation area shall be cleared of all organic matter and the entire foundation surface shall be scarified;

(b) If the natural slope of the foundation as measured at right angles to the roadway center line is steeper than 8h:1v, the embankment shall be benched into the existing slope beginning at the embankment toe and then filled with compacted level lifts;

(c) The embankment fill material shall be free of sod, large roots, other large vegetative matter, and coal processing waste;

(d) The fill shall be brought up in horizontal layers of such thickness as required to facilitate compaction in accordance with prudent construction standards;

(e) The moisture content of the fill material shall be sufficient to secure proper compaction;

(f) The side slopes of the embankment shall be no steeper than 2h:1v;

(g) Embankments with upstream and downstream slopes shall have a minimum top width of $(h + 35)/5$, where "h" is the embankment height as measured from natural ground at the upstream toe to the top of the embankment;

(h) Hillside embankments shall have a minimum top width adequate for the intended use; and

(i) Culverts shall be placed such that the embankment, as defined in rule 1501:13-1-02 of the

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Administrative Code, will not impound water for an extended period of time.

(N) Disposal of excess spoil.

- (1) Each application shall contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal site and design of the spoil disposal structures according to rule 1501:13-9-07 of the Administrative Code. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.
- (2) Each application shall contain the results of a geotechnical investigation of the proposed disposal site, including the following:
 - (a) The character of bedrock and any adverse geologic conditions in the disposal area;
 - (b) A survey identifying all springs, seepage, and ground-water flow observed or anticipated during wet periods in the area of the disposal site;
 - (c) A survey of the potential effects of subsidence of the subsurface strata due to past and future mining operations;
 - (d) A technical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and
 - (e) A stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions. These data shall be accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.
- (3) If, under paragraph (D) of rule 1501:13-9-07 of the Administrative Code, rock-toe buttresses or keyway cuts are required, the application shall include the following:
 - (a) The number, location and depth of borings or test pits. The number, location and depth shall be determined with respect to the size of the spoil disposal structure and sub-surface conditions; and
 - (b) Engineering specifications utilized to design the rock-toe buttresses or key-way cuts which shall be determined in accordance with paragraph (N)(2)(e) of this rule.

(O) Air pollution control plan. Each application shall contain an air pollution control plan, in order to address fugitive dust resulting from erosion. The plan shall include the following:

- (1) An air quality monitoring program, if required by the chief, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under paragraph (O)(2) of this rule to comply with applicable federal and state air quality standards; and
- (2) A plan for fugitive dust control practices.

(P) Fish and wildlife plan.

- (1) Resource information. Each application shall include fish and wildlife resource information for the permit area and adjacent area.
 - (a) The scope and level of detail for such information shall be determined by the chief in consultation with state and federal agencies with responsibilities for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under paragraph (P)(2) of this rule.
 - (b) Site-specific resource information necessary to address the respective species or habitats shall be required when the permit area or adjacent area is likely to include:

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- (i) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the secretary of the interior under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or those species or habitats protected by similar state statutes;
 - (ii) Habitats of unusually high value for fish and wildlife such as important streams, wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, migration routes, or reproduction and wintering areas; or
 - (iii) Other species or habitats identified through agency consultation as requiring special protection under state or federal law.
- (2) Protection and enhancement plan. Each application shall include a description of how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act, during the surface coal mining and reclamation operations and how enhancement of these resources will be achieved where practicable.
- (a) This description shall:
- (i) Be consistent with the requirements of rule 1501:13-9-11 of the Administrative Code;
 - (ii) Apply at a minimum, to species and habitats identified under paragraph (P)(1) of this rule;
 - (iii) Include protective measures that will be used during the active mining phase of the operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, and the monitoring of surface water quality and quantity; and
 - (iv) Include enhancement measures that will be used during the reclamation and postmining phase of the operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the replacement of perches and nest boxes. Where the plan does not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.
- (3) Fish and wildlife service review. Upon request, the chief shall provide the resource information required under paragraph (P)(1) of this rule and the protection and enhancement plan required under paragraph (P)(2) of this rule to the U.S. department of the interior, fish and wildlife service regional or field office for their review. This information shall be provided within ten days of receipt of the request from the service.
- (Q) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.

Draft Rule 1501:13-4-08, dated 4/17/2015.

This is a summary of the changes made to this rule.

This rule is being revised so that it contains all the mapping rules specific to surface coal mining operations, including underground mining surface operations. A new rule, 1501:13-4-08.1, is being proposed to contain all the mapping rules specific to underground workings.

Introductory phrase. The introductory phrase is revised to state that the rule applies to coal mining operations, including underground mining surface operations, but does not apply to underground workings.

(A) and its subparagraphs contain the requirements that are currently effective in 1501:13-4-04(J). These paragraphs are unchanged from the way they are currently in effect in 1501:13-4-04(J) except for the few revisions noted below.

The requirement currently in 1501:13-4-04(J)(22) is proposed to be eliminated as a requirement for the application map because the same information is required for the hydrologic cross-section (see paragraph (F)(1) of this proposed rule) and it makes more sense to show information about subsurface water on a cross-section rather than on a map. Note that subsurface water information will still be required for every application, as stated in paragraphs (F) and (F)(1) of this proposed rule.

(A). Introductory phrase changed from "Maps: general requirements." to "Application maps."

(A)(1), (11), (12), (17), (25) and (26). Revised to add the word "proposed" to clarify that the provisions apply to the "proposed permit area."

(A)(6). Paragraph reference revised to "paragraph (A)(2)(a) of rule 1501:13-4-04." The word "area" changed to "areas" per 30 CFR 779.24(i).

(A)(9) and (10). Sentence re-worded to be consistent with other provisions of (A); it now reads, "located in and within five hundred feet of the proposed permit area."

(A)(13). The phrase "to be permitted" removed and the phrase "within the proposed permit area" added to be consistent with the language of the rest of the rule.

(A)(14), (15), (16), (27), and (30) to (35). The phrase "within the proposed permit area" added to clarify.

(A)(25) and (26). The requirements for gas and oil wells and for water wells have been separated into two distinct paragraphs because their mapping requirements are not similar. The mine safety criteria of section 1563.111 of the Revised Code has been added to the mapping requirements for gas and oil wells: gas and oil wells in and within 25 feet

of the proposed permit area, and producing gas and oil wells in and within 300 feet of the proposed permit area, must be shown on the map.

(A)(36). New provision that requires that the map show the location of each facility that will remain on the proposed permit area as a permanent feature after the completion of the mining operations. This provision is currently included in 1501:13-4-13 (J)(36) and applicable only to underground mining surface operations, but to be consistent such facilities should be shown on maps of surface mining operations also.

(A)(37). The provision requiring the location of each water monitoring point within the proposed permit area to be shown on the application map, which is currently effective in rule 1501:13-4-13 (J)(37), would in this proposed rule be applicable to both surface and underground mines. Monitoring stations are currently required to be shown on the hydro map for surface mines per currently effective 1501-4-08(A)(12); requiring water monitoring stations to also be shown on the application map for surface mines, as well as underground mines, makes this requirement consistent for all coal mining operations.

(A)(38). New provision that will apply only to underground mining surface operations, requiring that the map show the location of each subsidence monitoring point within the proposed permit area. This provision is currently included in 1501:13-4-13(J)(37).

(B) and its subparagraphs contain the requirements that are currently effective in 1501:13-4-04(K). These paragraphs are unchanged from the way they are currently in effect in 1501:13-4-04(K).

(C), (D), (E) and (F) and their subparagraphs contain the requirements that are currently effective in 1501:13-4-08(A), (B), (C), and (D). These paragraphs are unchanged from the way they are currently in effect in 1501:13-4-08 except for the few revisions noted below.

Paragraph references revised as needed.

(C) and (F). Introductory phrases added. The statement "Each application for a permit shall include" that was previously in the introductory statement is added to each of these paragraphs.

(C)(6). Revised to require the location of "each" cross-section. This change is made to agree with the change in (F), where "at least one" cross-section is proposed to be required.

(C)(8). The word "undeveloped" has been removed from this provision to clarify that all springs, whether developed or undeveloped, located on or within 1000 feet of the proposed permit area must be shown on the hydrologic map. Some developed springs are addressed in other sub-paragraphs of (A) -- for example, a developed spring would be a type of water supply that is required to be depicted on the map under (A)(7) -- but

making this clarification assures that there is no doubt that all developed springs are to be included on the map.

(C)(11). Paragraph revised to require the same information about the location and extent of underground mines on the hydrologic map as on the application map in paragraph (A)(21). This will make the information consistent from one map to the other and, when the hydrologic and application maps are combined, this will clarify exactly what underground mine information is required.

(D)(1). Revised to add (C)(7), (C)(10), and (C)(12) to the list of items for which the Chief may require additional information outside the 1000-foot limit to be shown on the map; also revised to specify that the map being referred to is the hydrologic map.

(D)(2). A reference to paragraph (C)(13) is added to be consistent with the other paragraphs referenced in (D)(2). (D)(2) specifies that a water supply [(C)(7)] need not be shown on the hydrologic map in certain circumstances; since a water well [(C)(13)] is a type of water supply, it follows that a water well would also not need to be shown on the hydrologic map under those circumstances.

(F). Revised from the previous draft version of this rule to change “at least one cross-section” to “one or more cross-sections.” The intent of the revision is to clarify that in order to meet the requirements of (F)(1) through (4), the applicant may submit more than one cross section. (The currently effective provision specifies that “a cross-section” is to be included with the application.) DMRM never intended to allow the submission of cross sections that were not prepared by a qualified, registered, professional engineer or professional geologist; this revision should remove any possibility of misinterpretation of the proposed provision. (In addition, a comma is added after “or under the direction of.”)

(G). New paragraph to address incorporation by reference issues.

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Dated 4/17/2015

1501:13-4-08 **Hydrologic map** Application, supplemental and hydrologic maps, and cross-sections, designs and plans.

Each application for a permit shall include: This rule applies to coal mining operations, including underground mining surface operations, but does not apply 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 a an engineer and a surveyor, to the extent such joint certification is required by state law, showing:
- (1) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the proposed permit area; noting the boundaries of land within the proposed permit 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 permit area, 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 permit area;
 - (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 affected areas in the proposed permit area and the location of any discharges to any surface body of water on or adjacent to the land to be affected;
 - (5) Each public road located in or within one hundred feet of the proposed permit area;
 - (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 1501:13-4-04 of the Administrative Code, and known archeological sites within the proposed permit and adjacent areas;
 - (7) Each cemetery that is located in or within one hundred feet of the proposed permit area;
 - (8) Any land within the proposed permit 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 permit 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 permit area;
 - (11) The name of the drainage basin in which the proposed permit area is located as listed in the "Gazetteer of Ohio Streams," published by the Ohio department of natural resources;
 - (12) That part of the proposed permit area that is prime farmland;
 - (13) The areas of land within the proposed permit area on which steep slope mining, mountaintop removal,

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and augering will be performed;

- (14) The drainage control system within the proposed permit area to include the location of:
 - (a) Each sediment pond and the pond identification number;
 - (b) Any diversions; and
 - (c) Any treatment facilities;
- (15) All haul roads and access roads proposed to be constructed within the proposed permit area in conjunction with the operations, and all existing haul roads and access roads within the proposed permit area to be used in conjunction with the operation;
- (16) The location of the proposed final highwall for each coal seam to be mined within the proposed permit area;
- (17) The point at which mining operations will begin and the point at which mining operations will end on the proposed permit area;
- (18) Elevations and locations of test borings and core samplings;
- (19) 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;
- (20) All coal crop lines and the strike and dip of the coal to be mined in the proposed permit area;
- (21) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface, within the proposed permit and adjacent areas;
- (22) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;
- (23) Location and extent of existing or previously surface-mined areas within the proposed permit area;
- (24) Location and extent of existing areas of spoil, waste, and refuse, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;
- (25) Location of gas and oil wells in and within twenty-five feet of the proposed permit area and the location of producing gas and oil wells in and within three hundred feet of the proposed permit area;
- (26) Location of water wells in and within one thousand feet of the proposed permit area;
- (27) The location and start and end points of all submitted cross sections within the proposed permit area;
- (28) Sufficient slope measurements, in degrees, to adequately represent the existing land surface configuration of the proposed permit area;
- (29) 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;
- (30) Buildings, utility corridors within the proposed permit area;
- (31) Each coal storage, cleaning and loading area within the proposed permit area;
- (32) Each topsoil, spoil, coal waste, and noncoal waste storage area within the proposed permit area;

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- (33) Each air pollution collection and control facility within the proposed permit area;
 - (34) Each facility to be used to protect and enhance fish and wildlife and related environmental values within the proposed permit area;
 - (35) Each explosive storage and handling facility within the proposed permit area;
 - (36) The location of each facility that will remain on the proposed permit area as a permanent feature after the completion of mining operations;
 - (37) The location of each water monitoring point within the proposed permit area;
 - (38) For underground mining surface operations, the location of each subsidence monitoring point within the proposed permit area; and
 - (39) Other relevant information required by the chief.
- (B) Supplementary maps, cross sections, designs and plans. When necessary under these rules, the application shall include:
- (1) Designs and plans prepared and certified by an engineer for the following:
 - (a) Sedimentation ponds, impoundments, coal mine waste banks, and coal mine waste dams;
 - (b) Spoil disposal facilities;
 - (c) The sealing or managing of any mine openings within the proposed permit area;
 - (d) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and
 - (e) Road stream crossings, bridges, culverts, drainages, ditches, drainage structures, road cuts, and fill embankments.
 - (2) 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:
 - (a) Each sedimentation pond, permanent water impoundment, coal mine waste bank and coal mine waste dam;
 - (b) The fill area for the disposal of excess spoil;
 - (c) 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;
 - (d) The permit area, the original surface topography and the proposed final surface contour;
 - (e) The location of the proposed final highwall;
 - (f) The location of each waste disposal facility relating to coal processing or pollution control;
 - (g) The location of any mine openings within the proposed permit area;
 - (h) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and

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(i) Road widths, road gradients, road surfaces, road cuts, fill embankments, culverts, bridges, drainages, ditches, and drainage structures.

~~(A)~~(C) A 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 ~~(B)~~(D) of this rule, all hydrologic maps shall show the following:

- (1) The proposed permit area;
- (2) A line identifying the area within one thousand feet of the proposed permit area;
- (3) All occupied buildings on or within one thousand feet of the proposed permit area;
- (4) All perennial and intermittent streams on or within one thousand feet of the proposed permit area;
- (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 ~~the~~each cross-section drawn to show hydrogeologic information as required under paragraph ~~(D)~~(F) of this rule;
- (7) The location and type of water supply used by the occupant of each building described in paragraph ~~(A)~~(C)(3) of this rule for the purpose of domestic, agricultural, or industrial use;
- (8) All ~~undeveloped~~ springs on or within one thousand feet of the proposed permit area;
- (9) All seepage zones on and within one thousand feet of the proposed permit area;
- (10) The location of sampling stations on each stream identified in paragraph ~~(A)~~(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) ~~All underground coal mine entries on or within one thousand feet of the proposed permit area~~Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface, within the proposed permit 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 permit area;
- (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 permit area; and
- (15) Any land determined to be eligible for remining.

~~(B)~~(D)

- (1) For the items listed in paragraphs ~~(A)~~(C)(3), ~~(A)~~(C)(4), ~~(A)~~(8), ~~(A)~~(9), ~~(A)~~(11), ~~(A)~~(13) and (C)(7) to

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~~(A)~~(C)(14) of this rule, the chief may require additional information outside the thousand-foot limit to be shown on the hydrologic map if such identification is necessary based on site-specific conditions.

(2) The items listed in paragraphs ~~(A)~~(C)(3), ~~(A)~~(C)(7), ~~(A)~~(C)(8), ~~(A)~~(C)(9), ~~(A)~~(C)(10), ~~and (A)~~(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.

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

~~(D)~~(F) A 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 permit 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 permit 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 Administrative Code.

Draft Rule 1501:13-4-08.1, dated 4/17/2015.

This is a summary of this new rule.

This new rule is proposed to contain all the mapping rules specific to underground workings. A companion rule, 1501:13-4-08, is proposed to be amended to contain all the mapping rules for surface affectment, including surface coal mining operations and underground mining surface operations.

Introductory phrase. The introductory phrase states that the rule applies only to underground workings.

(A) and its subparagraphs contain requirements that are similar to the requirements currently effective in 1501:13-4-13(J) except that the requirements of this new rule are specific to underground workings and the shadow area. Where applicable, mapping elements are required to be shown on the shadow and adjacent areas. Other differences between this new rule and current rule 1501:13-4-13(J) are noted below:

(A). Introductory phrase used in proposed new rule is "Application map" rather than "Maps: general requirements" of rule 1501:13-4-13 (J).

The following provisions of current 1501:13-4-13(J) do not appear in this rule because they are applicable to underground mining surface operations (and are therefore in proposed amended rule 1501:13-4-08), but not to underground workings: (J)(12) to (17), (28), and (31) to (36).

The requirement currently in 1501:13-4-13(J)(22) is proposed to be eliminated as a requirement for the application map because the same information is required for the hydrologic cross-section (see paragraph (F)(1) of this proposed rule) and it makes more sense to show information about subsurface water on a cross-section rather than on a map. Note that subsurface water information will still be required for every application, as stated in paragraphs (F) and (F)(1) of this proposed rule.

(A)(1), (11) and (20). The word "proposed" is added to clarify that the provisions apply to the "proposed shadow area."

(A)(6). Paragraph reference is to "paragraph (A)(2)(a) of rule 1501:13-4-13."

(A)(9) and (10). Sentence re-worded to use the phrase "located in and within" 500 feet of the proposed shadow area.

(A)(14). The phrase used is "coal contour lines" rather than "coal crop lines" to be consistent with the requirements for underground workings.

(A)(15). "Active" underground mines are added so that the application map would show the 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. The addition is proposed to be consistent with the proposed mine safety additions to rule 1501:13-9-08 (see proposed paragraph (B)) as well as the mine safety requirements of ORC section 1563.39. It is also consistent with 30 CFR 783.25(a)(5).

(A)(18). The phrase "areas of spoil" that is part of current provision 1501:13-4-13(J)(25) is not included in this proposed new rule because it does not apply to underground workings.

(A)(19) and (20). The requirements for gas and oil wells and for water wells have been separated into two distinct paragraphs because their mapping requirements are not similar. The mine safety criteria of section 1563.111 of the Revised Code has been added to the mapping requirements for gas and oil wells: gas and oil wells in and within 25 feet of the proposed shadow area, and producing gas and oil wells in and within 300 feet of the proposed shadow area, must be shown on the map.

(A)(24) and (25). The requirements of 1501:13-4-13(J)(37) have been clearly set out as two separate requirements.

(B). Most provisions of current 1501:13-4-13(K) do not appear in this rule because they are applicable to underground mining surface operations (and are therefore in proposed amended rule 1501:13-4-08), but not to underground workings. Only the requirement of current rule 1501:13-4-13(K)(2)(c) is included in (B). However, a provision has been added to specify that any other relevant supplementary maps, cross sections, design and plans required by the Chief shall be included in the application.

(C), (D), (E) and (F) and their subparagraphs contain the requirements that are currently effective in 1501:13-4-08(A), (B), (C), and (D), except that in this rule they apply only to the underground workings. Other than specifying how these paragraphs apply to the underground workings, the paragraphs are unchanged from the way they are currently in effect in 1501:13-4-08 except for the few revisions noted below.

Paragraph references revised as needed.

(C) and (F). Introductory phrases added. The statement "Each application for a permit shall include" that was previously in the introductory statement is added to each of these paragraphs.

(C). In every sub-paragraph where needed, the following clarification is added: mapping is for the area "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."

The requirement currently in 1501:13-4-08(A)(15) is not included in this rule because remining is related to surface impacts, not underground workings. See the definitions of remining, previously mined area, and coal mining operations in rule 1501:13-1-02.

(C)(1). The hydrologic map is required to show both the permit area and the shadow area so it is clear how the two areas relate to each other. The hydrologic map will also show the area within 1000 feet of the proposed shadow area for full coal recovery mining operations and within 300 feet of the proposed shadow area for room and pillar mining operations.

(C)(6). Revised to require the location of "each" cross-section. This change is made to agree with the change in (F), where "at least one" cross-section is proposed to be required.

(C)(8). The word "undeveloped" has been removed from this provision to clarify that all springs, whether developed or undeveloped, located on or within 1000 feet of the proposed permit area must be shown on the hydrologic map. Some developed springs are addressed in other sub-paragraphs of (A) -- for example, a developed spring would be a type of water supply that is required to be depicted on the map under (A)(7) -- but making this clarification assures that there is no doubt that all developed springs are to be included on the map.

(C)(11). Paragraph revised to require the same information about the location and extent of underground mines on the hydrologic map as on the application map in paragraph (A)(15). This will make the information consistent from one map to the other and, when the hydrologic and application maps are combined, this will clarify exactly what underground mine information is required. Note that "active" underground mines are added so that the hydro map would show the 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. The addition is proposed to be consistent with the proposed mine safety additions to rule 1501:13-9-08 (see proposed paragraph (B)) as well as the mine safety requirements of ORC section 1563.39. It is also consistent with 30 CFR 783.25(a)(5).

(D)(1). Revised to add (C)(7), (C)(10), and (C)(12) to the list of items for which the Chief may require additional information outside the 1000-foot limit to be shown on the map; also revised to specify that the map being referred to is the hydrologic map.

(D)(2). A reference to paragraph (C)(13) is added to be consistent with the other paragraphs referenced in (D)(2). (D)(2) specifies that a water supply [(C)(7)] need not be shown on the hydrologic map in certain circumstances; since a water well [(C)(13)] is a type of water supply, it follows that a water well would also not need to be shown on the hydrologic map under those circumstances.

(F). Revised from the previous draft version of this rule to change "at least one cross-section" to "one or more cross-sections." The intent of the revision is to clarify that in order to meet the requirements of (F)(1) through (4), the applicant may submit more than one cross section. (The currently effective provision specifies that "a cross-section" is to be included with the application.) DMRM never intended to allow the submission of

cross sections that were not prepared by a qualified, registered, professional engineer or professional geologist; this revision should remove any possibility of misinterpretation of the proposed provision. (In addition, a comma is added after “or under the direction of.”)

(G). New paragraph to address incorporation by reference issues.

*****DRAFT - NOT FOR FILING*****

Dated 4/17/2015

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

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;

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- (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;

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- (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.

(D)

- (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

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- (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 Administrative Code.

Draft Rule 1501:13-4-09, dated 5/6/2014.

This is a summary of the changes made to this rule.

(B). Sentence added to require that a map's legend indicate which of the map symbols listed in rule 1501:13-4-10 appear on the map.

(D)(1). Revised to add supplemental map and hydrologic map to the list of maps that are submitted to DMRM.

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Dated 5/6/2014

1501:13-4-09 General map requirements.

All maps and drawings required by Chapter 1513. of the Revised Code or Chapters 1501:13-1 to 1501:13-14 of the Administrative Code shall, in addition to other applicable requirements, be in quadruplicate and, where the area of land to be permitted is ten acres or less, have a scale of one inch equals one hundred feet; where the area of land to be permitted is greater than ten acres but less than one hundred acres, have a scale of one inch equals two hundred feet; and where the area of land to be permitted is equal to or greater than one hundred acres, have a scale of one inch equals four hundred feet. All acreage figures required to be reported or estimated shall be to the nearest one-tenth of an acre. All annual maps, progress maps and the final map shall be at the same scale as the application map submitted for the permit.

North shall be toward the top of the map. All maps shall include the following:

- (A) A location or quadrangle map placed in the upper right corner of the map, with a scale of one inch equals one mile, which shall depict:
 - (1) A minimum area of four miles by four miles;
 - (2) The site of the area of land to be permitted;
 - (3) State, county, township, and section lines;
 - (4) Federal, state, county, township, or other roads;
 - (5) The north arrow; and
 - (6) Name of the quadrangle map.
- (B) A legend placed to the right side and below the location map. [The legend shall indicate which map symbols from paragraph \(C\) of rule 1501:13-4-10 of the Administrative Code appear on the map.](#)
- (C)
 - (1) A notarized map certification by the qualified registered professional surveyor placed to the right side and below the map legend. The certification shall read: "I, the undersigned, hereby certify that this map is correct, and shows to the best of my knowledge and belief all the information required by Chapter 1513. of the Revised Code and rules adopted thereunder."
 - (2) If the map under paragraph (C)(1) of this rule has the only depiction of design elements for proposed features, the map shall also be signed and sealed by the qualified registered professional engineer who designed those elements. The certification by the engineer shall read: "I, the undersigned, hereby certify that the design elements are correctly depicted on this map."
- (D) A title block placed in the lower right corner of the map containing the following information in the order listed:
 - (1) The title of the map describing whether it is an application map, [supplemental map, hydrologic map, progress map, annual map, or final map](#);
 - (2) The name of the applicant;

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- (3) The township and range designation;
- (4) The name of the township and county;
- (5) The sections and/or lot numbers;
- (6) The scale of the map;
- (7) The contour interval of the map; and
- (8) The date the map was prepared.

Rule 1501:13-4-10, *proposed for rescission*.

The currently effective version of this rule is proposed to be rescinded and replaced with a new rule with the same title and number. The Division is proposing to rescind the existing rule and enact a new rule because of the large number of changes being made to paragraph (C): every existing symbol in the rule is proposed to be updated and many new symbols are proposed to be added.

This action is in keeping with the Legislative Service Commission's Rule Drafting Manual, which recommends rescinding and enacting a new rule if more than fifty percent of the rule is proposed to be amended.

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This is the currently effective version of the rule; it is proposed to be rescinded and replaced with a new rule of the same title and number.

1501:13-4-10 Uniform color code and map symbols.

- (A) Coal mining permit application maps and plans shall utilize the following uniform color codes:
- (1) The proposed or existing permit area shall have its perimeter designated with a dashed black line and the area included therein, excepting the areas required to be designated in paragraphs (A)(2) to (A)(5) of this rule, shall be shaded yellow.
 - (2) Any areas of topsoil or alternative resoiling material storage shall have its perimeter designated with a dashed black line and the area therein shall be shaded brown.
 - (3) Any areas of existing or proposed sediment ponds shall have their perimeters designated with dashed black lines and the areas therein shall be shaded blue.
 - (4) Any areas within one hundred feet of a stream shall have their perimeters designated with dashed black lines and the areas therein shall be shaded red.
 - (5) Any areas identified as prime farmland shall have their perimeters designated with dashed black lines and the areas therein shall be shaded green.
 - (6) Any area determined to be eligible for remining shall have its perimeter designated with a dashed black line and the areas therein clearly labeled "remine".
- (B) Annual maps and final maps shall utilize the following uniform color codes:
- (1) The existing permit area shall have its perimeter designated with a solid black line.
 - (2) The perimeters of the areas affected during each mining year that are not to be reaffected during the following mining year shall be designated by a solid red line and shall be shaded as follows:
 - (a) First year - blue
 - (b) Second year - green
 - (c) Third year - yellow
 - (d) Fourth year - red
 - (e) Fifth year - brown
 - (3) The perimeter of the total area affected as reported on the annual reports shall be designated on the annual map by a solid orange line.
 - (4) The perimeter of the total area affected as reported on the final report shall be designated on the final map by a solid orange line and the areas reported on the annual reports shall be designated by solid red lines and shaded as required by paragraph (B) (2) of this rule.
- (C) All maps required by Chapter 1513. of the Revised Code or rules adopted thereunder shall utilize the following uniform map symbols:
- (1) Occupied dwelling
 - (2) Unoccupied building
 - (3) Public, community institutional building

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- (4) School
- (5) Church
- (6) Commercial/business building
- (7) Final highwall
- (8) Existing highwall
- (9) Coal outcrop
- (10) Utility
- (11) Test boring
- (12) Entrance Sign
- (13) Property line
- (14) Perennial stream
- (15) Intermittent stream
- (16) Constructed drainway
- (17) Auger area
- (18) Sediment pond
- (19) Inactive mining area
- (20) Roads outside of permit area
- (21) Tree planting area
- (22) Water treatment facility
- (23) Begin mining
- (24) End mining
- (25) Slope measurements
- (26) Public water line
- (27) Seep, seepage zone, swamp
- (28) Deep mine entry
- (29) Deep mine water discharge
- (30) Upstream sampling station
- (31) Downstream sampling station
- (32) Drilled well (log available)
- (33) Drilled well (no log available)

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(34) Dug well

(35) Developed spring

(36) Undeveloped spring

(37) Source of public water supply

(38) Monitoring station

Note: Monitoring station symbol is to circumscribe symbols, where appropriate, e.g.

(39) Background sampling station

Note: Background sampling station symbol is to circumscribe symbols, where appropriate e.g

(1) Occupied dwelling		
(2) Unoccupied building		
(3) Public, community institutional building		
(4) School		
(5) Church		
(6) Commercial/business building		
(7) Final highwall		
(8) Existing highwall		
(9) Coal outcrop		(Identify)
(10) Utility		(Identify)
(11) Test boring		
(12) Entrance sign		
(13) Property line		
(14) Perennial stream		(Blue)
(15) Intermittent stream		(Blue)
(16) Constructed drainway		(Blue)

- | | | |
|--------------------------------------|---|--|
| (17) Auger area |  | |
| (18) Sediment pond |  (Blue) | |
| (19) Inactive mining area |  | |
| (20) Roads outside of permit area |  (Black) | |
| (21) Tree planting area |  (Green) | |
| (22) Water treatment facility |  (Red) | |
| (23) Begin mining |  (Black) | |
| (24) End mining |  (Black) | |
| (25) Slope measurements |  (Degrees) | |
| (26) Public water line |  (Blue) | |
| (27) Seep, seepage zone, swamp |  | |
| (28) Deep mine entry |  | |
| (29) Deep mine water discharge |  DM-1, DM-2, etc. | |
| (30) Upstream sampling station |  U-1, U-2, etc. | |
| (31) Downstream sampling station |  D-1, D-2, etc. | |
| (32) Drilled well (log available) |  WL-1, WL-2, etc. | |
| (33) Drilled well (no log available) |  W-1, W-2, etc. | |
| (34) Dug well |  DW-1, DW-2, etc. | |
| (35) Developed spring |  SD-1, SD-2, etc. | |
| (36) Undeveloped spring |  S-1, S-2, etc. | |
| (37) Source of public water supply |  (Blue) | |
| (38) Monitoring station |  M-1, M-2, etc. | |

Note: Monitoring station symbol is to circumscribe symbols, where appropriate, e.g.  W-2, M-3

- (39) Background sampling station

Note: Background sampling station symbol is to circumscribe symbols, where appropriate e.g.  DS-1

New Rule 1501:13-4-10, dated 5/14/2014.

New rule to replace existing rule 1501:13-4-10. There are so many changes being made to the map symbols that it is preferable to create a new rule rather than revise the existing rule.

This is a summary of how the new rule differs from the existing rule.

(A). Revised to specify that supplemental and hydrologic maps shall also utilize the uniform color codes.

(A)(3). Revised to establish new symbols for wetlands and existing impoundments. (Note that the symbols for sediment ponds have not changed.)

(A)(4). Revised to change the color of the symbol that designates areas within 100 feet of a perennial or intermittent stream and to add a symbol to designate areas within 100 feet of a perennial or intermittent stream where the buffer area will not be disturbed.

(A)(7). New paragraph that requires the shadow area (if applicable) to be shown on the map.

(B)(3). New paragraph that requires remaining areas affected during each mining year that are not to be reaffected during the following mining year to be shown on the annual map.

(C). Revised to add the following sentence: "The size and location of each symbol shall not obscure other necessary information on the map."

(C), sub-paragraphs. Revised to add numerous new symbols and to update existing symbols.

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Dated 5/14/2014

1501:13-4-10 Uniform color code and map symbols.

(A) Coal mining permit application, supplemental, and hydrologic maps and plans shall utilize the following uniform color codes:

- (1) The proposed or existing permit area shall have its perimeter designated with a dashed black line and the area included therein, excepting the areas required to be designated in paragraphs (A)(2) to (A)(5) of this rule, shall be shaded yellow.
- (2) Any areas of topsoil, hydric soil, or alternative resoiling material storage shall have its perimeter designated with a dashed black line and the area therein shall be shaded brown.
- (3) Any areas of existing impoundments or sediment ponds shall have their perimeters designated with solid black lines and the areas therein shall be shaded blue. Any areas of proposed sediment ponds shall have their perimeters designated with dashed black lines and the areas therein shall be shaded blue. Any areas of existing wetlands that have been verified by the U.S. Army Corps of Engineers shall have their perimeters designated with solid black lines and the areas therein shall be cross-hatched in green. Any areas of existing wetlands that have not been verified by the U.S. Army Corps of Engineers shall have their perimeters designated with solid black lines and the areas therein shall be dotted in green. Any areas of proposed/restored/mitigated wetlands shall have their perimeters designated with dashed black lines and the areas therein shall be cross-hatched in green.
- (4) Any areas within one hundred feet of a perennial or intermittent stream shall have their perimeters designated with solid red lines. Any areas within one hundred feet of a perennial or intermittent stream where the buffer area will not be disturbed shall have their perimeters designated with solid red lines and the areas therein shall be shaded red.
- (5) Any areas identified as prime farmland shall have their perimeters designated with dashed black lines and the areas therein shall be shaded green.
- (6) Any area determined to be eligible for remining shall have its perimeter designated with a dashed black line and the area therein clearly labeled "remine".
- (7) Any shadow area shall have its perimeter designated with a dashed line that is black with a yellow highlight.

(B) Annual maps and final maps shall utilize the following uniform color codes:

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- (1) The existing permit area shall have its perimeter designated with a solid black line.
- (2) The perimeters of the areas affected during each mining year that are not to be reaffected during the following mining year shall be designated by a solid red line and shall be shaded as follows:
- (a) First year - blue
 - (b) Second year - green
 - (c) Third year - yellow
 - (d) Fourth year - red
 - (e) Fifth year - brown
- (3) The perimeters of remaining areas affected during each mining year that are not to be reaffected during the following mining year shall be designated by a dashed black line and the area therein clearly labeled "remine." The first year shall be shaded blue and the second year shall be shaded green.
- (4) The perimeter of the total area affected as reported on the annual reports shall be designated on the annual map by a solid orange line.
- (5) The perimeter of the total area affected as reported on the final report shall be designated on the final map by a solid orange line and the areas reported on the annual reports shall be designated by solid red lines and shaded as required by paragraph (B) (2) of this rule.
- (C) All maps required by Chapter 1513. of the Revised Code or rules adopted thereunder shall utilize the uniform map symbols listed in this paragraph. The size and location of each symbol shall not obscure other necessary information on the map.
- (1) Lessee

(L)

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[\(2\) Surface owner](#)

(S)

[\(3\) Coal owner](#)

(C)

[\(4\) Non-coal mineral owner](#)

(NCM)

[\(5\) Occupied dwelling](#)



[\(6\) Unoccupied building](#)



[\(7\) Public, community, institutional building](#)

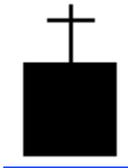


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[\(8\) School](#)



[\(9\) Church](#)



[\(10\) Commercial/business building](#)



[\(11\) Hospital](#)



[\(12\) Cemetery](#)



[\(13\) Final highwall](#)



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(14) Existing highwall

• X • X • X • X •

(15) Backfilled highwall

—|—|—|—

(16) Coal outcrop

• • • • •
(Identify)

(17) Utility (gas, electric, telecommunications, etc.)

— — — — —
(Identify)

(18) High voltage tower



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[\(19\) Radio/cell phone tower](#)



[\(20\) Gas well \(active\)](#)



[\(21\) Gas well \(plugged/abandoned\)](#)



[\(22\) Oil well \(active\)](#)



[\(23\) Oil well \(plugged/abandoned\)](#)



[\(24\) Test boring](#)



[\(25\) Entrance sign](#)



[\(26\) Property line](#)



[\(27\) Property hooks](#)

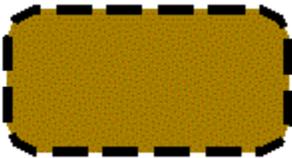


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(28) Permit area, existing or proposed



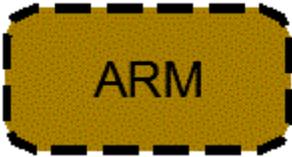
(29) Top soil storage



(30) Hydric soil storage



(31) Alternative resoiling material storage



(32) Buffer zone variance area



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(33) Buffer zone avoidance area



(34) Prime farmland



(35) Hydrologic map one-thousand-foot line, existing



(36) Hydrologic map one-thousand-foot line, proposed

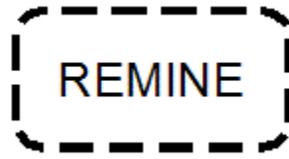


(37) No surface disturbance area



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(38) Remining area



(39) Small area drainage exemption (S.A.D.E.) area



(40) Steep slope mining area



(41) Abandoned underground mine



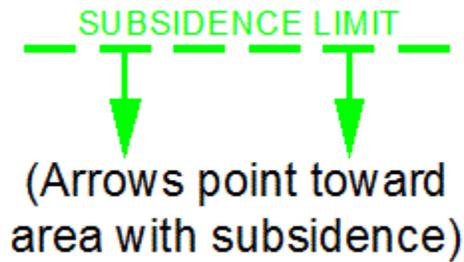
**(Identify the mine
number and seam)**

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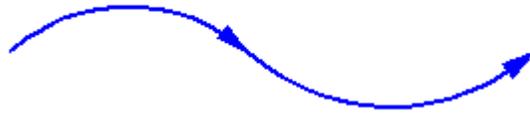
(42) Shadow area



(43) Subsidence limit



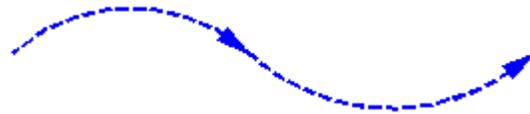
(44) Perennial stream



(45) Intermittent stream



(46) Ephemeral stream



(47) Constructed drainway (diversion ditch)



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(48) Auger/highwall mining area



(49) Impoundment, existing



(50) Sediment pond, existing



(51) Sediment pond, proposed or as-built

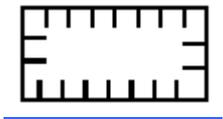


(52) Sump



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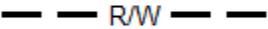
(53) Inactive mining area (previously mined area)



(54) Public road



(55) Road right of way



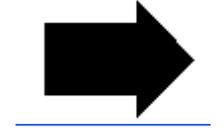
(56) Tree planting area



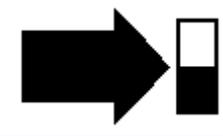
(57) Water treatment facility



(58) Begin mining

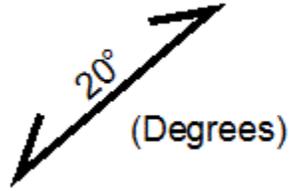


(59) End mining



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(60) Slope measurements



(61) Public water line



(62) Private water line



(63) Seep, seepage zone



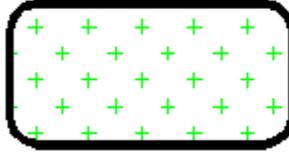
(64) Wetland, existing, verified



(Identify the Corps number)

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(65) Wetland, existing, unverified



(66) Wetland, proposed/restored/mitigated



(Identify the WMA
or WRA number)

(67) Deep mine entry



(68) Deep mine water discharge



DM-1, DM-2, etc.

(69) Gob pile



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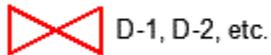
(70) Coal stockpile (long-term)



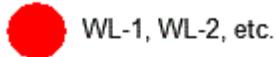
(71) Upstream sampling station



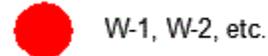
(72) Downstream sampling station



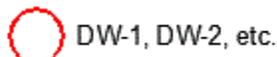
(73) Drilled well (log available)



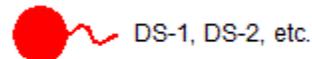
(74) Drilled well (no log available)



(75) Dug well



(76) Developed spring



(77) Undeveloped spring

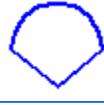


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(78) Cistern



(79) Source of public water supply



(80) Monitoring station, existing. Note: monitoring station symbol is to circumscribe symbols, where appropriate, e.g.



(81) Monitoring station, proposed. Note: monitoring station symbol is to circumscribe symbols, where appropriate, e.g.



(82) Background sampling station. Note: Background sampling station symbol is to circumscribe symbols, where appropriate, e.g.



Draft Rule 1501:13-4-11, dated 9/25/2013.

This is a summary of the changes made to this rule.

(A). Revised to eliminate the word "former" to clarify the meaning of the sentence. The rule applies to maps showing land affected under a permit that is reaffected under a subsequent permit.

(A) and (B). Rule reference changed to 1501:13-4-08 (A) because the mapping requirements of rule 1501:13-4-04 are proposed to be moved to that rule.

(B). Punctuation corrected throughout.

(B), (B)(2 and (B)(5). Revised to restore valid existing rights language to correct an error that was made when the rule was revised in 2009. At that time, the phrase "valid existing rights" was removed from the rule, when in fact it needs to remain in the rule to appropriately distinguish the requirements of (B) from those of (A). A person having valid existing rights to land generally means that his or her rights were secured prior to the enactment of the Federal Surface Mining Control and Reclamation Act (SMCRA) of 1977. If land under an existing permit is reaffected by a person with valid existing rights, mapping and certification requirements for that land would follow (B), rather than (A). The term "valid existing rights" is defined in OAC 1501:13-1-02.

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Dated 9/25/2013

1501:13-4-11 Maps showing reaffected of permit area.

(A) All maps required by Chapter 1513. of the Revised Code or Chapters 1501:13-4 to 1501:13-14 of the Administrative Code showing land affected under a ~~former~~ permit and reaffected under a subsequent permit shall conform to the requirements of paragraph ~~(J)~~(A) of rule ~~1501:13-4-04~~1501:13-4-08 of the Administrative Code. In addition to other applicable requirements, all maps shall show the following information in the prescribed manner set forth below:

- (1) The perimeter of the area of land affected under a previous permit, reaffected under a current permit, or proposed to be reaffected under a subsequent permit, designated by a solid orange line;
- (2) The perimeter of the area of land affected under a current permit or proposed to be affected under a subsequent permit designated by a solid black line;
- (3) The common area included by the lines drawn pursuant to paragraphs (A)(1) and (A)(2) of this rule, shaded red (referred to as the "reaffected area");
- (4) The acreage of the reaffected area; and
- (5) The following certification placed on the map and signed by the permittee, or his or her authorized representative:

"I, the undersigned, hereby certify that _____ acres affected by permit no. _____ have been reaffected and performance security has been provided by permit no. _____."

(B) All maps required by Chapter 1513. of the Revised Code or Chapters 1501:13-4 to 1501:13-14 of the Administrative Code showing land affected under an existing permit reaffected by any person with ~~a~~-valid ~~right to the mineral resource~~existing rights shall conform to the requirements of paragraph ~~(J)~~(A) of rule ~~1501:13-4-04~~1501:13-4-08 to the Administrative Code. In addition to other applicable requirements, all maps shall show the following information in the prescribed manner set forth below:

- (1) The perimeter of the area of land affected under the existing permit, designated by a solid orange line~~;~~;
- (2) The perimeter of the area of land reaffected by any person with ~~a~~-valid ~~right to the mineral resource~~existing rights, or by the landowner~~,~~ designated by a solid black line~~;~~;
- (3) The common area included by the lines drawn pursuant to paragraphs (B)(1) and (B)(2) of this rule, shaded red (referred to as the "reaffected area")~~;~~;
- (4) The acreage of the reaffected area; and
- (5) The following certification placed on the map and signed by the permittee, or his or her authorized representative:

"I, the undersigned, hereby certify that _____ acres affected by permit no. _____ have been reaffected by _____." (any person with ~~a~~-valid ~~right to the mineral resource~~existing rights.)"

Draft Rule 1501:13-4-12, dated 10/2/2013.

This is a summary of the changes made to this rule.

(F)(2). Revised the references to the prime farmland requirements because of changes proposed for rules 1501:13-4-04 and 1501:13-4-13.

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10/2/2013 Rule references in (F)(2) changed because of changes to 1501:13-4-04 and 1501:13-4-13.

1501:13-4-12 Requirements for permits for special categories of mining.

- (A) Scope. This rule establishes the minimum requirements for permits for certain categories of coal mining and reclamation operations. These requirements are in addition to the general permit requirements contained in Chapter 1501:13-4 of the Administrative Code. All of the provisions of Chapter 1501:13-4 of the Administrative Code apply to such operations, unless otherwise specifically provided in this rule.
- (B) Experimental mining practices.
- (1) "Experimental practices," as used in this rule, means the use of alternative coal mining and reclamation operation practices for experimental or research purposes. Experimental practices need not comply with specific environmental protection performance standards of these rules, if approved pursuant to paragraph (B) of this rule.
 - (2) No person shall engage in or maintain any experimental practice, unless that practice is first approved in a permit by the chief and the director of the office of surface mining.
 - (3) Each person who desires to conduct an experimental practice shall submit a permit application for the approval of the chief and the director of the office of surface mining. The permit application shall contain descriptions, maps, plans, and data which show:
 - (a) The nature of the experimental practice, including a description of the performance standards for which variances are requested, the duration of the experimental practice, and the special monitoring which will be conducted;
 - (b) How use of the experimental practice:
 - (i) Encourages advances in mining and reclamation technology; or
 - (ii) Allows a postmining land use for industrial, commercial, residential, or public use (including recreational facilities), on an experimental basis, when the results are not otherwise attainable under Chapter 1513. of the Revised Code and rules adopted thereunder;
 - (c) That the mining and reclamation operations proposed for using an experimental practice are not larger nor more numerous than necessary to determine the effectiveness and economic feasibility of the experimental practice;
 - (d) That the experimental practice:
 - (i) Is potentially more, or at least as, environmentally protective during and after the proposed mining and reclamation operations as those practices otherwise required under these rules; and
 - (ii) Will not reduce the protection afforded public health and safety below that provided by the requirements of these rules; and
 - (e) That the applicant will conduct special monitoring with respect to the experimental practice during and after the operations involved. The monitoring program shall:
 - (i) Ensure the collection, analysis and reporting of sufficient and reliable data to enable the chief and the director of the office of surface mining to make adequate comparisons with other coal

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mining and reclamation operations employing similar experimental practices; and

(ii) Include requirements designed to identify, as soon as possible, potential risks to the environment and public health and safety from the use of the experimental practice.

(4) Each application shall set forth the environmental protection performance standards of these rules which will be implemented in the event the objective of the experimental practice is a failure.

(5) All experimental practices for which variances are sought shall be specifically identified through newspaper advertisements by the applicant and the written notifications by the chief required in sections 1513.07 and 1513.071 of the Revised Code.

(6) No permit authorizing an experimental practice shall be issued, unless the chief first finds, in writing, upon the basis of both a complete application filed in accordance with the requirements of paragraph (B) of this rule and the concurrence of the director of the office of surface mining that:

(a) The experimental practice meets all of the requirements of paragraph (B)(3) of this rule;

(b) The experimental practice has been specifically approved, in writing, by the director of the office of surface mining based on the director's findings that all of the requirements of paragraph (B)(3) of this rule will be met;

(c) The experimental practice is based on a clearly defined set of objectives which can reasonably be expected to be achieved; and

(d) The permit contains conditions which specifically:

(i) Limit the experimental practice authorized to that granted by the chief and the director of the office of surface mining;

(ii) Impose enforceable alternative environmental protection requirements; and

(iii) Require the person to conduct the periodic monitoring, recording and reporting program set forth in the application, with such additional requirements as the chief or the director of the office of surface mining may require.

(7) Each permit which authorizes the use of an experimental practice shall be reviewed in its entirety by the chief at a frequency set forth in the approved permit but no less frequently than every two and one-half years. After review, the chief may require such reasonable revision or modification of the permit provisions necessary to ensure that the operations involved are conducted to protect fully the environment and public health and safety. Copies of the decision of the chief shall be provided to the permittee and be subject to review as provided by section 1513.13 of the Revised Code.

(C) Mountaintop removal mining.

(1) Any person who conducts or intends to conduct surface mining operations by mountaintop removal mining shall apply for a variance from approximate original contour restoration requirements in accordance with the requirements of paragraph (C) of this rule.

(2) The chief may issue a permit for mountaintop removal mining, including a variance from the requirements of rule 1501:13-9-14 of the Administrative Code regarding approximate original contour, if he or she first finds, in writing, on the basis of a complete application, that the following requirements are met:

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- (a) The proposed postmining land use of the lands to be affected will be an industrial, commercial, agricultural, residential, or public facility (including recreational facilities) use and if:
 - (i) After consultation with the appropriate land use planning agencies, if any, the proposed land use is deemed by the chief to constitute an equal or better economic or public use of the affected land compared with the premining use;
 - (ii) The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses of rule 1501:13-9-17 of the Administrative Code;
 - (iii) The proposed use would be compatible with adjacent land uses and existing state and local land use plans and programs; and
 - (iv) The chief has provided, in writing, an opportunity of not more than sixty days to review and comment on such proposed use to the local government in whose jurisdiction the land is located and any state or federal agency which the chief, in his or her discretion, determines to have an interest in the proposed use;
 - (b) The applicant has demonstrated that, in place of restoration of the land to be affected to the approximate original contour under rule 1501:13-9-14 of the Administrative Code, the operation will be conducted in compliance with the requirements of rule 1501:13-13-04 of the Administrative Code;
 - (c) The requirements of rule 1501:13-13-04 of the Administrative Code are made a specific condition of the permit;
 - (d) All other requirements of Chapter 1513. of the Revised Code and these rules are met by the proposed operations; and
 - (e) The permit is clearly identified as being for mountaintop removal mining.
- (3) Review of special permits.
- (a) Any permits incorporating a variance issued under paragraph (C) of this rule shall be reviewed by the chief to evaluate the progress and development of the mining operations to establish that the operator is proceeding in accordance with the terms of the variance:
 - (i) Within the sixth month preceding the third year from the date of its issuance;
 - (ii) Before each permit renewal; and
 - (iii) Not later than the middle of each permit term.
 - (b) Any review required under paragraph (C)(3) of this rule need not be held if the permittee has demonstrated and the chief finds, in writing, within three months before the scheduled review, that all operations under the permit are proceeding and will continue to be conducted in accordance with the terms of the permit and requirements of Chapter 1513. of the Revised Code and these rules.
 - (c) The chief may modify the terms and conditions of a permit for mountaintop removal mining at any time if he or she determines that more stringent measures are necessary to ensure that the operation involved is conducted in compliance with the requirements of Chapter 1513. of the Revised Code and these rules.

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(D) Steep slope mining.

- (1) Any person who conducts or intends to conduct steep slope coal mining and reclamation operations shall comply with the requirements of paragraph (D) of this rule except in any of the following situations:
 - (a) An operator proposes to conduct coal mining and reclamation operations on flat or gently rolling terrain, leaving a plain or predominantly flat area, but on which an occasional steep slope is encountered as the mining operation proceeds;
 - (b) A person obtains a permit under the provisions of paragraph (C) of this rule; or
 - (c) To the extent that a person obtains a permit incorporating a variance under paragraph (E) of this rule.
- (2) Any application for a permit for coal mining and reclamation operations covered by paragraph (D) of this rule shall contain sufficient information to establish that the operations will be conducted in accordance with the requirements of rule 1501:13-13-05 of the Administrative Code.
- (3) No permit shall be issued for any operations covered by paragraph (D) of this rule unless the chief finds, in writing, that in addition to meeting all other requirements of this rule, the operation will be conducted in accordance with the substantive requirements of rule 1501:13-13-05 of the Administrative Code.

(E) Permits incorporating variances from approximate original contour restoration requirements. The chief may, under paragraph (E) of this rule, issue a permit for non-mountaintop removal, steep slope, mining which includes a variance from the requirements of rules 1501:13-9-14 and 1501:13-13-05 of the Administrative Code regarding approximate original contour restoration requirements.

- (1) The chief may issue a permit for coal mining incorporating a variance under paragraph (E) of this rule only if he or she first finds, in writing, on the basis of a complete application, that all of the following requirements are met:
 - (a) The applicant has demonstrated that the purpose of the variance is to make the lands to be affected within the permit area suitable for an industrial, commercial, residential, or public postmining land use (including recreational facilities);
 - (b) The proposed use, after consultation with the appropriate land use planning agencies, if any, constitutes an equal or better economic or public use;
 - (c) The applicant has demonstrated compliance with the requirements for acceptable alternative postmining land uses of rule 1501:13-9-17 of the Administrative Code;
 - (d) The applicant has demonstrated that the watershed of lands within the proposed permit area and adjacent areas will be improved by the operations. The watershed will only be deemed improved if:
 - (i) There will be a reduction in the amount of total suspended solids or other pollutants discharged to ground or surface waters from the permit area as compared to such discharges prior to mining, so as to improve public or private uses or the ecology of such waters, or there will be reduced flood hazards within the watershed containing the permit area by reduction of peak flow discharges from precipitation events or thaws;
 - (ii) The total volume of flows from the proposed permit area, during every season of the year, will not vary in a way that adversely affects the ecology of any surface water or any existing or

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planned use of surface or ground water; and

- (iii) The appropriate Ohio environmental agency approves the plan;
 - (e) The proposed use is designed and certified by an engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site;
 - (f) The highwall is to be completely backfilled with spoil material, in a manner which results in a static safety factor of at least 1.3, using standard geotechnical analysis;
 - (g) Only the amount of spoil necessary to achieve the postmining land use, ensure the stability of spoil retained on the bench, and meet all other requirements of Chapter 1513. of the Revised Code and rules adopted thereunder is to be placed off the mine bench. All spoil not retained on the bench shall be placed in accordance with rule 1501:13-9-07 of the Administrative Code;
 - (h) Federal, state and local government agencies with an interest in the proposed land use have an adequate period in which to review and comment on the proposed use;
 - (i) The applicant has demonstrated that the owner of the surface of the lands within the permit area has knowingly requested, in writing, as part of the application, that a variance be granted. The request shall be made separately from any surface owner consent given for the operations under paragraph (D) of rule 1501:13-4-03 of the Administrative Code and shall show an understanding that the variance could not be granted without the surface owner's request; and
 - (j) All other requirements of Chapter 1513. of the Revised Code and rules adopted thereunder will be met by the proposed operations.
- (2) If a variance is granted under paragraph (E) of this rule:
- (a) The requirements of paragraph (E) of this rule shall be made a specific condition of the permit; and
 - (b) The permit shall be specifically marked as containing a variance from approximate original contour.
- (3) Any permits incorporating a variance issued under paragraph (E) of this rule shall be reviewed by the chief to evaluate the progress and development of the mining operations and to establish that the operator is proceeding in accordance with the terms of the variance:
- (a) Within the sixth month preceding the third year from the date of its issuance;
 - (b) Before each permit renewal; and
 - (c) Not later than the middle of each permit term.
- (4) If the permittee demonstrates to the chief at any of the times specified in paragraph (E)(3) of this rule that the operations involved have been and continue to be conducted in compliance with the terms and conditions of the permit, the requirements of Chapter 1513. of the Revised Code and these rules, the review required at that time need not be held.
- (5) The terms and conditions of a permit incorporating a variance under paragraph (E) of this rule may be modified at any time by the chief if he or she determines that more stringent measures are necessary to ensure that the operations involved are conducted in compliance with the requirements of Chapter 1513.

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of the Revised Code and rules adopted thereunder.

(F) Prime farmlands.

- (1) Paragraph (F) of this rule applies to any person who conducts or intends to conduct coal mining and reclamation operations on prime farmlands used for cropland. It does not apply to lands included in any existing coal mining operations for which a permit was issued for all or any part thereof prior to August 3, 1977, provided that:
 - (a) Such lands are part of a single continuous coal mining operation begun under a permit issued before August 3, 1977;
 - (b) The permittee had a legal right to mine the lands prior to August 3, 1977, through ownership, contract, or lease but not including an option to buy, lease, or contract; and
 - (c) The lands contain part of a continuous recoverable coal seam that was being mined in a single continuous mining pit or multiple pits if the lands are proven to be part of a single continuous coal mining operation begun under a permit issued prior to August 3, 1977.
 - (d) For purposes of paragraph (F) of this rule:
 - (i) A pit shall be deemed to be a single continuous mining pit even if portions of the pit are crossed by a road, pipeline, railroad, or powerline or similar crossing; and
 - (ii) A single continuous coal mining operation is presumed to consist only of a single continuous mining pit under a permit issued prior to August 3, 1977, but may include non-contiguous parcels if the operator can prove by clear and convincing evidence that, prior to August 3, 1977, the non-contiguous parcels were part of a single permitted operation. For the purposes of this paragraph, clear and convincing evidence includes, but is not limited to, contracts, leases, deeds, or other properly executed legal documents (not including options) that specifically treat physically separate parcels as one coal mining operation.
- (2) Application contents for prime farmland. If land within the proposed permit area is identified as prime farmland under paragraph ~~(E)~~(J) of rule 1501:13-4-04 or paragraph ~~(E)~~(J) of rule 1501:13-4-13 of the Administrative Code, the applicant shall submit a plan for the mining and restoration of the land. Each plan shall contain, at a minimum:
 - (a) A soil survey of the permit area according to the standards of the national cooperative soil survey and in accordance with the procedures set forth in the United States department of agriculture handbooks 436 ("Soil Taxonomy," 1975) and 18 ("Soil Survey Manual," 1951);
 - (i) These publications are hereby incorporated by reference as they exist on the date of adoption of paragraph (F)(2)(a) of this rule. Notices of changes made to these publications will be periodically published by the office of surface mining in the "Federal Register." Agriculture handbooks 436 ("Soil Taxonomy") and 18 ("Soil Survey Manual") are on file and available for inspection at "The Office of Surface Mining Central Office, United States Department of the Interior, South Interior Building, Washington, D.C. 20240," at each office of surface mining state office and at the central office of the division of mineral resources management. Copies of these documents are also available from "The Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402," stock number 001-000-02597-0 and

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stock number 10100-0688-6. In addition, these documents are available for inspection at all offices of the division of mineral resources management;

- (ii) The soil survey shall include a description of soil mapping units and a representative soil profile description as determined by the U.S. natural resources conservation service, including, but not limited to, soil-horizon depths, pH, and the range of soil densities for each prime farmland soil unit within the permit area. Other representative soil profile descriptions from the locality, prepared in conjunction with the national cooperative survey, may be used if their use is approved by the state conservationist, U.S. natural resources conservation service;
 - (b) The proposed method and type of equipment to be used for removal, storage, and replacement of the soil in accordance with rule 1501:13-13-03 of the Administrative Code;
 - (c) The method to be employed in avoiding excessive compaction in the replacement of soil;
 - (d) The location of areas to be used for the separate stockpiling of the soil and plans for soil stabilization before redistribution;
 - (e) Plans for seeding or cropping the final graded disturbed land and the conservation practices to be used to adequately control erosion and sedimentation and to restore an adequate soil moisture regime, during the period from completion of regrading until release of the performance security as required by Chapter 1513. of the Revised Code and these rules. Proper adjustments for seasons must be proposed so that final graded land is not exposed to erosion during seasons when vegetation or conservation practices cannot be established due to weather conditions;
 - (f) Available agricultural school studies or other scientific data for areas with comparable soils, climate, and management (including water management) that demonstrate that the proposed method of reclamation will achieve, within a reasonable time, equivalent or higher levels of yield after mining as existed before mining;
 - (g) A demonstration that the applicant has the technological capability to restore the prime farmland to equivalent or higher levels of yield as non-mined prime farmland in the surrounding area under equivalent levels of management; and
 - (h) In all cases, soil productivity for prime farmlands shall be returned to equivalent levels of yield as non-mined land of the same soil type in the surrounding area under equivalent management practices as determined from the soil survey performed pursuant to paragraph (F)(2)(a) of this rule.
- (3) Consultation with the United States secretary of agriculture. Before any permit is issued for areas that include prime farmlands, the chief shall consult with the United States secretary of agriculture. The United States secretary of agriculture shall provide for review of and comment on the proposed method of soil reconstruction in the plan submitted under paragraph (F)(2) of this rule. If the United States secretary of agriculture considers those methods to be inadequate, he or she shall suggest revisions resulting in more complete and adequate reconstruction. The United States secretary of agriculture has assigned his or her responsibilities under this rule to the administrator of the United States natural resources conservation service. The natural resources conservation service shall carry out consultation and review through the conservationist for the state of Ohio.
- (4) Issuance of permit. A permit for the mining and reclamation of prime farmland may be granted by the chief, if he or she first finds, in writing, upon the basis of a complete application, that:

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- (a) The approved proposed post-mining land use of these prime farmlands will be cropland;
 - (b) The permit incorporates as specific conditions the contents of the plan submitted under paragraph (F)(2) of this rule, after consideration of any revisions to that plan suggested by the secretary of agriculture under paragraph (F)(3) of this rule;
 - (c) The applicant has the technological capability to restore the prime farmland, within a reasonable time, to equivalent or higher levels of yield as non-mined prime farmland in the surrounding area under equivalent levels of management;
 - (d) The proposed operations will be conducted in compliance with all of the requirements of rule 1501:13-13-03 of the Administrative Code and other environmental performance and reclamation standards for mining and reclamation of prime farmland; and
 - (e) The aggregate total prime farmland acreage will not be decreased from that which existed prior to mining. Permanent water bodies, if any, to be constructed during mining and reclamation operations will be located within the post-reclamation non-prime farmland portions of the permit area.
 - (i) If the prime farmland acreage is to be restored in a location other than the premining location, the relocation must be approved by the chief and the permittee must obtain the consent of all affected surface owners.
- (G) Variances for delay in contemporaneous reclamation requirement in combined surface and underground mining operations.
- (1) Scope. Any person who conducts or intends to conduct combined surface mining and underground coal mining operations, where contemporaneous reclamation as required by rule 1501:13-9-13 of the Administrative Code is not practicable and a delay is requested to allow underground mining operations to be conducted before the reclamation operation for the surface mining operations can be completed, shall meet the requirements of paragraph (G) of this rule.
 - (2) The chief may allow the delay in reclaiming where the delay will allow underground mining operations to be conducted to ensure both maximum practical recovery of coal resources and to avoid multiple future disturbances of surface lands or waters.
 - (3) Application contents for variances. Any person who desires to obtain a variance under paragraph (G) of this rule shall file with the chief complete applications for both the surface mining and underground mining operations which are to be combined. The mining and reclamation operation plans for these permits shall contain appropriate narratives, maps and plans, which:
 - (a) Show why the proposed underground mining operations are necessary or desirable to assure maximum practical recovery of coal;
 - (b) Show how the multiple future disturbances of surface lands or waters will be avoided;
 - (c) Identify the specific surface areas for which a variance is sought and the particular provisions of Chapter 1513. of the Revised Code and these rules from which a variance is being sought;
 - (d) Show how the operations will comply with rule 1501:13-9-08 of the Administrative Code;
 - (e) Show why the variance sought is necessary for the implementation of the proposed underground

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mining operations;

- (f) Provide an assessment of the adverse environmental consequences and damages, if any, that will result if the reclamation of coal mining operations is delayed; and
 - (g) Show how off-site storage of spoil will be conducted to comply with the applicable requirements of rule 1501:13-9-07 of the Administrative Code.
- (4) Issuance of permit. A permit incorporating a variance under paragraph (G) of this rule may be issued by the chief if he or she first finds, in writing, upon the basis of a complete application filed in accordance with paragraph (G) of this rule, that:
- (a) The applicant has presented, as part of the permit application, specific, feasible plans for the proposed underground mining operations;
 - (b) The proposed underground mining operations are necessary or desirable to assure maximum practical recovery of the mineral resource and will avoid multiple future disturbances of surface land or waters;
 - (c) The applicant has satisfactorily demonstrated that the applications for the surface mining and underground mining operations conform to the requirements of Chapter 1513. of the Revised Code and these rules, and that all other permits necessary for the underground mining operations have been issued by the appropriate authority;
 - (d) The surface area of the surface mining operations proposed for the variance has been shown by the applicant to be necessary for implementing the proposed underground mining operations;
 - (e) No substantial adverse environmental damage, either off-site or on-site, will result from the delay in completion of reclamation otherwise required by division (A)(15) of section 1513.16 of the Revised Code and Chapters 1501:13-9 to 1501:13-11 of the Administrative Code;
 - (f) The operations will, insofar as a variance is authorized, be conducted in compliance with the requirements of Chapter 1513. of the Revised Code and rule 1501:13-9-08 of the Administrative Code;
 - (g) Provisions for the placement of excess spoil will comply with the requirements of division (A)(21) of section 1513.16 of the Revised Code and rule 1501:13-9-07 of the Administrative Code;
 - (h) Liability under the performance security required to be filed by the applicant with the chief pursuant to Chapter 1513. of the Revised Code and these rules shall be for the duration of the underground mining operations and until all requirements of Chapter 1513. of the Revised Code and rules adopted thereunder have been complied with; and
 - (i) The permit for the surface mining operations contains specific conditions:
 - (i) Delineating the particular surface areas for which a variance is authorized; and
 - (ii) Providing a detailed schedule for compliance with the particular requirements of this rule.
- (5) Review of permits containing variances. Variances granted under permits issued under paragraph (G) of this rule shall be reviewed by the chief no later than three years from the dates of issuance of the permit and any permit renewals.

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(H) Augering.

- (1) Paragraph (H) of this rule applies to any person who conducts or intends to conduct coal mining and reclamation operations utilizing augering operations.
- (2) Any application for a permit for operations covered by paragraph (H) of this rule shall contain, in the mining and reclamation plan, a description of the augering methods to be used and the measures to be used to comply with the provisions of rule 1501:13-13-02 of the Administrative Code.
- (3) No permit shall be issued for any operations covered by paragraph (H) of this rule unless the chief finds, in writing, that in addition to meeting all other applicable requirements of this rule, the operation will be conducted in compliance with rule 1501:13-13-02 of the Administrative Code.

(I) Coal preparation plants or support facilities not located within the permit area of a specified mine.

- (1) Paragraph (I) of this rule applies to any person who operates or intends to operate a coal preparation plant or support facility outside the permit area of any mine, other than such plants or facilities which are located at the site of ultimate coal use. Any person who operates such a preparation plant or support facility shall have obtained a permit from the chief in accordance with the requirements of paragraph (I) of this rule.
- (2) Any application for a permit for operations covered by paragraph (I) of this rule shall contain in the mining and reclamation plan, specific plans, including descriptions, maps and cross sections of the construction, operation, maintenance and removal of the preparation plants and support facilities. The plan shall demonstrate that those operations will be conducted in compliance with rule 1501:13-13-06 of the Administrative Code. Each application shall contain the information required under Chapter 1501:13-4 of the Administrative Code for the proposed permit area in sufficient detail for the chief to determine the estimated cost of reclamation, pursuant to paragraph (B) of rule 1501:13-7-01 of the Administrative Code, if the reclamation has to be performed by the division of mineral resources management in the event of forfeiture of the performance security by the permittee. This estimate shall include:
 - (a) Operational detail sufficient to determine the greatest potential reclamation cost liability to the state; and
 - (b) Any other operational detail required by the chief that may affect the cost of reclamation by the division of mineral resources management in the event of forfeiture of the performance security by the permittee.
- (3) No permit shall be issued for any operation covered by paragraph (I) of this rule, unless the chief finds, in writing, that, in addition to meeting all other applicable requirements of Chapter 1501:13-4 of the Administrative Code, the operations will be conducted in compliance with the requirements of rule 1501:13-13-06 of the Administrative Code.

(J) In situ processing activities.

- (1) Paragraph (J) of this rule applies to any person who conducts or intends to conduct coal mining and reclamation operations utilizing in situ processing activities.
- (2) Any application for a permit for operations covered by paragraph (J) of this rule shall be made according to all requirements of these rules applicable to underground mining operations. In addition, the mining

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and reclamation operations plan for operations involving in situ processing activities shall contain information establishing that those operations will be conducted in compliance with the applicable requirements of rule 1501:13-13-07 of the Administrative Code, including:

- (a) Delineation of proposed holes and wells and production zone for approval of the chief;
 - (b) Specifications of drill holes and casings proposed to be used;
 - (c) A plan for treatment, confinement or disposal of all acid-forming, toxic-forming or radioactive gases, solids or liquids constituting a fire, health, safety, or environmental hazard caused by the mining and recovery process; and
 - (d) Plans for monitoring surface and ground water and air quality, as required by the chief.
- (3) No permit shall be issued for operations covered by paragraph (J) of this rule unless the chief first finds, in writing, upon the basis of a complete application made in accordance with paragraph (I)(2) of this rule, that the operation will be conducted in compliance with all requirements of Chapter 1501:13-4 of the Administrative Code relating to underground mining operations and the requirements of Chapters 1501:13-9 to 1501:13-12 and rule 1501:13-13-07 of the Administrative Code.
- (K) Permits incorporating variances from approximate original contour restoration requirements for remining operations on previously mined areas. The chief may issue a permit for remining operations on previously mined lands which includes a variance from the requirements of rule 1501:13-9-14 of the Administrative Code requiring elimination of highwalls, provided requirements of paragraph (K) of this rule are met.
- (1) The operator of the remining operation shall demonstrate in writing to the chief that the volume of all reasonably available spoil is insufficient to completely backfill the reaffected or enlarged highwall.
 - (2) If the operator makes the proper demonstration to the chief under paragraph (K)(1) of this rule and the chief issues a permit with a variance for previously mined areas, the remining operation shall be conducted in accordance with the requirements of paragraph (L)(3) of rule 1501:13-9-14 of the Administrative Code.
- (L) Lands eligible for remining. Paragraph (L) of this rule applies to any person who proposes to conduct coal mining and reclamation operations on areas eligible for remining. The requirements of this paragraph shall apply until September 30, 2004, or any later date authorized by federal law. The application for a permit containing areas proposed to be remined must include the following:
- (1) A description of the proposed lands eligible for remining and a demonstration, to the satisfaction of the chief, how such lands meet the eligibility requirements specified by section 1513.37 of the Revised Code.
 - (2) Identification, to the extent not otherwise addressed in the permit application, of any potential environmental and safety problems related to the prior mining activity at the site which could be reasonably anticipated to occur. This identification shall be based on a due diligence investigation which shall include visual observations at the site, a record review of past mining at the site, and environmental sampling tailored to current site conditions.
 - (3) A description, with regard to potential environmental and safety problems identified in paragraph (L)(2) of this rule, of the mitigative measures that will be taken to ensure that the applicable reclamation requirements of Chapter 1513. of the Revised Code and rules adopted thereunder can be met.

Draft Rule 1501:13-4-13, dated 4/28/2015.

This is a summary of the changes made to this rule.

(C)(2)(a)(i). Paragraph reference changed to refer to rules 1501:13-4-08 and new rule 1501:13-4-08.1 due to the revisions in paragraphs (J) and (K), as explained below.

(D)(5) and (E)(3). References to new paragraph (D)(6) and (D)(7) added.

(D)(6). New paragraph and sub-paragraphs regarding seasonal variations which provide a standard method for collecting and submitting water samples to identify seasonal variations in water quality and quantity. The provisions include a chart showing the flow periods and their duration.

These new paragraphs contain the requirements of the Division's Permitting & Hydrology Policy/Procedure Directive 2000-2 (also known as PPD 2000-2). The Division is proposing to put these requirements into rule due to a 2007 court decision, *Buckeye Forest Council, Inc. v. Div. of Mineral Res. Mgmt.*, 172 Ohio App.3d 440. In this decision, the court stated that, since PPD 2000-2 uniformly applies to all mining permit application statewide, it qualifies as a rule and its requirements should therefore be adopted by the Division through rule-making.

(D)(7). New paragraph regarding seasonal variations that states: Water quality and quantity data collected and described other than as required by paragraph (D)(6) of this rule may be submitted to identify seasonal variations in ground water and surface water, provided the chief determines that the alternative data are sufficient to identify seasonal variations needed for the hydrologic assessments required by Chapter 1513. of the Revised Code and the rules adopted thereunder.

(J) and (K). The mapping provisions of this rule are proposed to be moved to rule 1501:13-4-08, which will apply to coal mining operations including underground mining surface operations. The mapping requirements for underground workings will be in rule 1501:13-4-08.1.

(L), (M). These paragraphs re-numbered (J) and (K) due to the revisions in paragraphs (J) and (K), as explained above.

(L)(3), and (L)(4)(a) and (b). Paragraph references changed due to the revisions in paragraphs (J) and (K), as explained above.

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Dated 4/28/2015

1501:13-4-13 Underground mining permit application requirements for information on environmental resources.

(A) General requirements.

- (1) This rule applies only to underground mining operations.
- (2)
 - (a) Each application shall describe and identify the nature of cultural, historic and archeological resources listed or eligible for listing on the "National Register of Historic Places," administered by the national parks service, U.S. department of the interior, and known archeological sites within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, information from the state historic preservation officer and from local archeological, historical, and cultural preservation agencies. The website for the "National Register of Historic Places" for Ohio sites is <http://www.nationalregisterofhistoricplaces.com/oh/state.html>.
 - (b) The chief may require the applicant to identify and evaluate important historical and archeological resources that may be eligible for listing on the "National Register of Historic Places," as referenced in paragraph (A)(2)(a) of this rule, through:
 - (i) Collection of additional information;
 - (ii) Conduct of field investigations; or
 - (iii) Other appropriate analyses.
- (3) Each application shall describe and identify the lands subject to coal mining operations over the estimated life of those operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought.

(B) Description of hydrology and geology: general requirements.

Each application shall contain a description of surface and ground water within the permit area, adjacent area, and general area, and any water which will flow into or receive discharges of water from the permit and adjacent area. The description shall be prepared in the manner required by paragraphs (B) to (G) of this rule and conform to the following:

- (1) Information on hydrology, water quality and quantity, and geology related to hydrology of areas outside the proposed permit area and within the adjacent area shall be provided by the chief, to the extent that this data is available from an appropriate federal or state agency.
- (2) If this information is not available from those agencies, the applicant may gather and submit this information to the chief as part of the permit application.
- (3) The permit shall not be approved by the chief until this information is made available in the application.

(C) Geology description.

- (1) Each application shall include geologic information in sufficient detail to assist in:
 - (a) Determining the probable hydrologic consequences of the operation upon the quality and quantity of surface and ground water in the permit and adjacent areas, including the extent to which surface- and ground-water monitoring is necessary.

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- (b) Determining all potentially acid- or toxic-forming strata down to and including the stratum immediately below the lowest coal seam to be mined;
- (c) Determining whether reclamation as required by these rules can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area; and
- (d) Preparing the subsidence control plan required under paragraph (M) of rule 1501:13-4-14 of the Administrative Code.

(2)

- (a) The description shall include a general statement of the geology within the proposed permit and adjacent areas down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely affected by mining. It shall also include the areal and structural geology of the permit and adjacent areas, and the other parameters which influence the required reclamation, and shall show how the areal and structural geology may affect the occurrence, availability, movement, quantity, and quality of potentially affected surface and ground waters. It shall also be based on:
 - (i) The cross sections, maps and plans required by ~~paragraph (K)~~ paragraphs (B) of this rule 1501:13-4-08 of the Administrative Code and (B) of rule 1501:13-4-08.1 of the Administrative Code;
 - (ii) The information obtained under paragraphs (C)(2)(c) to (C)(2)(f) of this rule; and
 - (iii) Geologic literature and practices.
- (b) The geology for all areas proposed to be affected by underground mining surface operations, those surface lands overlying coal to be mined, and the coal to be mined shall be separately described.

Geology of all the strata to be affected by underground mining operations shall be described. The description shall include, at a minimum, the lithologic characteristics and physical and chemical properties of each stratum.
- (c) For those areas to be affected by underground mining surface operations where removal of the overburden down to the level of the coal seam will occur, the geology of the strata down to and including the deeper of either the stratum immediately below any coal seam to be mined, or any aquifer below the lowest coal seam to be mined which may be adversely affected by mining shall be described. This description shall include the following data resulting from analyses of test borings or core samplings down to and including the stratum immediately below any coal seam to be mined:
 - (i) The location of areas where subsurface water will be exposed at the face-up area;
 - (ii) The logs of drill holes showing the lithologic characteristics of the strata to be affected;
 - (iii) The physical properties of each stratum within the overburden;
 - (iv) Chemical analyses of each stratum to be affected, including the stratum immediately below the lowest coal seam to be mined, to identify, at a minimum, those horizons which contain potential acid-forming, toxic-forming, or alkalinity-producing materials; and
 - (v) Analyses of the coal seam for acid- or toxic-forming materials, including, but not limited to, an analysis of the total sulfur and the sulfur present in pyrite, except that the chief may find that the analysis of sulfur present in pyrite is unnecessary.

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- (d) For lands within the permit and adjacent areas where the strata above the coal seam to be mined will not be removed, samples shall be collected and analyzed from test borings or drill cores to provide the following data:
 - (i) Logs of drill holes showing the lithologic characteristics, including physical properties and thickness of each stratum that may be affected and location of ground water where occurring;
 - (ii) Chemical analyses for acid- or toxic-forming or alkalinity-producing materials and their content in the strata immediately above and below the coal seam to be mined;
 - (iii) Chemical analyses of the coal seam for acid- or toxic-forming materials, including but not limited to an analysis of the total sulfur and the sulfur present in pyrite, except that the chief may find that the analysis of pyritic sulfur content is unnecessary; and
 - (iv) For standard room and pillar mining operations, the thickness and engineering properties of clays or soft rock such as clay shale, if any, in the stratum immediately above and below each coal seam to be mined.
 - (e) Each application shall contain the results from test holes bored or drilled on lands above the underground workings:
 - (i) At a minimum of three points, not in a straight line, spaced so as to indicate the strike and dip of the coal seam; and
 - (ii) At a minimum of one test hole per one hundred sixty acres.
 - (f) Additional test hole data or test holes may be required by the chief at specific sites when necessary to describe localized conditions or variations in geology which may affect the ability of the underground coal mining operation to be conducted in accordance with these rules.
 - (g) If more precise information than can be provided by drilling techniques is warranted by potentially adverse site conditions, the chief may require that the test hole information required in paragraph (C) of this rule be obtained by core drilling.
- (3) Prior to submission of an application, an applicant may request that the requirements of paragraphs (C)(2)(c) to (C)(2)(e) of this rule be waived by the chief. The waiver may be granted only if the chief makes a written determination that the statement required is unnecessary because other equivalent information is accessible to him or her in a satisfactory form. If the chief grants a waiver, the waiver shall be submitted with the permit application.

(D) Ground water information.

- (1) The application shall contain a description of the ground-water hydrology for the proposed permit and adjacent areas and the area above the underground workings, including, at a minimum:
 - (a) The depth below the surface and the horizontal extent of the water table and aquifers;
 - (b) The lithology and thickness of the aquifers;
 - (c) Known uses of the water in the aquifers and water table;
 - (d) The quality of subsurface water, if encountered;
 - (e) The depth to the water in the coal seam if the seam is a water-bearing stratum, and each water-bearing stratum above and potentially affected water-bearing stratum below the coal seam; and
 - (f) Additional information which describes the recharge and storage characteristics of aquifers, the

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approximate rate of discharge or usage, and the quality and quantity of ground water.

- (2) The application shall contain a water supply inventory to include, at a minimum:
- (a) A list of existing water wells on the proposed permit and adjacent areas to describe the quality and quantity of the ground water to include:
 - (i) The identification number of each well;
 - (ii) Surface elevation of the well;
 - (iii) Depth of the well in feet below the land surface;
 - (iv) Static water level of the well in feet below the land surface;
 - (v) The lithology of the aquifer in which each well is developed; and
 - (vi) Name of owner of the well;
 - (b) A list of existing springs on the proposed permit area and existing developed springs on the adjacent area to include:
 - (i) The identification number of each spring;
 - (ii) Name of owner of any spring that is developed for use as a water supply;
 - (iii) The surface elevation of the spring; and
 - (iv) The aquifer each spring flows from; and
 - (c) A list of the location and type of any public water supply sources on the permit and adjacent areas.
- (3) Where information required in the water supply inventory of paragraph (D)(2) of this rule is unobtainable, a statement to that effect shall be made, giving the reasons therefor.
- (4) The application shall contain the results of water quality analyses and measurements of static water level or discharge, conducted on at least ten (or all if less than ten) of the wells and springs identified in paragraphs (D)(2)(a) and (D)(2)(b) of this rule or twenty-five per cent of such wells and springs, whichever number is greater.
- (a) Wells and springs chosen for analysis and measurement shall, as a group, represent all known aquifers present in the permit and adjacent areas.
 - (b) Sampling for water quality analysis shall be conducted at a minimum one time prior to submission of an application for a permit.
 - (c) The measurement of the static water level or discharge shall be conducted for each well and spring identified in paragraph (D)(4) of this rule at a minimum one time prior to submission of an application for a permit.
 - (d) Water samples collected at the sites prescribed in this paragraph shall be analyzed for the following parameters according to the methodology specified in 40 C.F.R. parts 136 and 434:
 - (i) pH in standard units;
 - (ii) Total acidity in milligrams per liter of CaCO₃;

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- (iii) Total alkalinity in milligrams per liter of CaCO₃;
- (iv) Total manganese in milligrams per liter;
- (v) Total iron in milligrams per liter;
- (vi) Total hardness in milligrams per liter of CaCO₃;
- (vii) Total dissolved solids or specific conductance corrected to twenty-five degrees centigrade;
- (viii) Total aluminum in milligrams per liter;
- (ix) Total sulfates in milligrams per liter; and
- (x) Other such information as the chief determines relevant.

(e) The results of water quality analyses and measurements required in paragraph (D) of this rule shall be reported on a form to be provided by the chief.

(5) Water quality and quantity data sufficient to identify seasonal variations pursuant to paragraph (D)(6) or (D)(7) of this rule shall be submitted with an application for a permit.

(6) Identifying seasonal variations for ground water and surface water. For each application, the applicant shall submit three water samples from each required sampling site designated pursuant to paragraphs (D)(4) and (E)(1) of this rule. One sample shall be from the low flow period, one sample from the high flow period, and one sample from either of the intermediate flow periods, as established in the following table:

Flow Periods and Duration of Flow Periods

<u>Low Flow</u>	<u>August 16 to October 31</u>
<u>Transition Flow</u>	<u>November 1 to November 15</u>
<u>Intermediate Flow</u>	<u>November 16 to January 31</u>
<u>Transition Flow</u>	<u>February 1 to February 14</u>
<u>High Flow</u>	<u>February 15 to April 30</u>
<u>Transition Flow</u>	<u>May 1 to May 15</u>
<u>Intermediate Flow</u>	<u>May 16 to July 31</u>
<u>Transition Flow</u>	<u>August 1 to August 15</u>

(a) For samples submitted to meet the seasonal variations requirements, the period between consecutive samples shall be at least thirty days, but not more than eighteen months, and no sample shall be collected more than thirty-six months before the date of submission of the application to the chief. A sample that exceeds the eighteen month or thirty-six month time limit of this paragraph may be acceptable if the applicant submits the following information with the sample:

(i) The date and sampling site of the sample; and

(ii) A description of all land disturbance activities that existed at the time of the sample date or that have occurred since the sample date within the local watershed that could affect the quality and quantity of the surface water or ground water. The description shall include, but is not limited to, land disturbances such as mining operations, highway construction, cut and fill operations,

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building construction, and dam construction or demolition.

- (iii) A sample that exceeds the eighteen month or thirty-six month time limit is acceptable only if the chief determines that it is still representative of the quality and quantity of the surface water or ground water at the time of submission of the application.
- (b) The applicant is not required to collect samples from consecutive flow periods.
- (c) The applicant may record a low flow sample as "no flow" if the applicant documents that the applicant made at least two attempts, at least thirty days apart, to collect a flow at that site during the low flow period.
- (d) Transition flow periods. A sample obtained during a transition flow period may be used for either the preceding or succeeding flow period if the following conditions are met:

 - (i) The applicant submits documentation showing that the sample from the transition period accurately reflects the flow period for which the sample is submitted and the chief agrees with this assessment;
 - (ii) The sample obtained during a transition period is not used for both the preceding and succeeding flow periods;
 - (iii) At least one of the three required samples is obtained during a flow period other than a transition period; and
 - (iv) The applicant submits precipitation data for the local watershed for the thirty days prior to the sample date.
- (e) Substitute sampling site for one sample. The applicant may request, in writing, that a sample obtained from a site other than a designated sampling site be substituted for one of the three designated site samples. A sample from a substitute site shall not be used as the earliest of the three samples from a designated sampling site. The chief shall review this request and determine whether the substitute sampling site and the data collected from the site are acceptable. In making the request, the applicant shall:

 - (i) Describe how the substitute sampling site adequately represents the original sampling site;
 - (ii) Demonstrate that the substitute sampling site is located in the same aquifer as the original sampling site;
 - (iii) Demonstrate that the geology of the groundwater recharge area of the substitute site, as well as the surface disturbance of the recharge area of the substitute site, are similar to that of the original site;
 - (iv) Demonstrate that the substitute sampling site represents and performs the same function as the original site;
 - (v) Demonstrate that the analysis of the water quality and quantity data from the substitute site accurately represents the quality and quantity of the water at the original site and explain any anomalies in water quality or quantity at the substitute site;
 - (vi) Demonstrate that the flow obtained at the substitute site was obtained during the flow period missed at the original site;
 - (vii) Include precipitation data for the thirty days prior to the sample date at the substitute site;

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(viii) Provide a description of the location of the substitute sampling site relative to the original sampling location. The description shall include bearing and distance measurements from the original sampling location to the substitute sampling location; and

(ix) Submit additional information if required by the chief to support the use of a substitute sample.

(f) The applicant may submit additional samples and other data related to seasonal variations beyond that submitted to meet the minimum requirements of paragraph (D)(6).

(7) Water quality and quantity data collected and described other than as required by paragraph (D)(6) of this rule may be submitted to identify seasonal variations in ground water and surface water, provided the chief determines that the alternative data are sufficient to identify seasonal variations needed for the hydrologic assessments required by Chapter 1513. of the Revised Code and the rules adopted thereunder.

(E) Surface-water information.

(1) Within the proposed permit and adjacent areas, all surface-water bodies such as streams, lakes and impoundments and all discharges from the permit area into surface-water bodies shall be described and sampled for analysis under paragraph (E) of this rule. The description shall include the name of any watershed that will receive water discharges, the name, ownership and location of all surface-water bodies and the known uses of the water in these water bodies.

(2) Water samples collected under paragraph (E) of this rule shall be analyzed according to the methodology specified in 40 C.F.R. parts 136 and 434. Surface-water information shall include:

(a) Minimum, maximum, and average discharge conditions, which identify critical low flows and peak discharge rates of streams; and

(b) The following water quality data to identify the characteristics of surface waters within the proposed permit and adjacent areas:

(i) Total suspended solids in milligrams per liter;

(ii) Total acidity in milligrams per liter of CaCO_3 ;

(iii) Total alkalinity in milligrams per liter of CaCO_3 ;

(iv) pH in standard units;

(v) Total iron in milligrams per liter;

(vi) Total manganese in milligrams per liter;

(vii) Total dissolved solids or specific conductance corrected to twenty-five degrees centigrade;

(viii) Total aluminum in milligrams per liter;

(ix) Total sulfates in milligrams per liter; and

(x) Other such information as the chief determines relevant.

(3) Water quality and quantity data sufficient to identify seasonal variations pursuant to paragraph (D)(6) or (D)(7) of this rule shall be submitted with an application for a permit.

(4) The results of water quality analyses and measurements prescribed in paragraph (E) of this rule shall be reported on a form to be provided by the chief.

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- (F) Alternative water supply information. The application shall identify the extent to which the proposed underground mining operations, including subsidence impacts, may proximately result in contamination, diminution, or interruption of an underground or surface source of water that is for domestic, agricultural, industrial, or other legitimate use. If contamination, diminution, or interruption may result, then the description shall contain information on water availability and alternative sources of water, including the suitability of alternative water sources for existing premining uses and approved postmining land uses.
- (G) Supplemental information. If the determination of the probable hydrologic consequences required by paragraph (E)(2) of rule 1501:13-4-14 of the Administrative Code indicates that adverse impacts on or off the proposed permit area may occur to the hydrologic balance, or that acid-forming or toxic-forming material is present that may result in the contamination of ground-water or surface-water supplies, then information supplemental to that required under paragraphs (D) and (E) of this rule shall be provided to evaluate such probable hydrologic consequences and to plan remedial and reclamation activities. Such supplemental information may be based upon drilling, aquifer tests, hydrogeologic analysis of the water-bearing strata, flood flows, or analyses of other water quality or quantity characteristics.
- (H) Climatological information.
- (1) If required by the chief, the application shall contain a statement of the climatological factors that are representative of the proposed permit and adjacent areas, including:
 - (a) The average seasonal precipitation;
 - (b) The average direction and velocity of prevailing winds; and
 - (c) Seasonal temperature ranges.
 - (2) The chief may request such additional data as deemed necessary to ensure compliance with the requirements of these rules.
- (I) Land-use information.
- (1) The application shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:
 - (a) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within five years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described.
 - (b) A narrative of the land capability and productivity, which analyzes the land use described under paragraph (I)(1)(a) of this rule in conjunction with other environmental resources information required under these rules. The narrative shall provide analyses of:
 - (i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover and the hydrology of the area proposed to be affected by underground mining surface operations or facilities; and
 - (ii) The productivity of the area proposed to be affected by underground mining surface operations or facilities before mining, including appropriate classification as prime farmlands, as well as the average yield of food, fiber, forage or wood products from the land obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the United States department of agriculture, state agricultural universities, or appropriate state natural resources or agricultural agencies.
 - (2) The application shall state whether the proposed permit area has been previously mined, and if so, the following information, if available:

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- (a) The type of mining method used;
- (b) The coal seams or other mineral strata mined;
- (c) The extent of coal or other minerals removed;
- (d) The approximate dates of past mining; and
- (e) The uses of the land preceding mining.

(3) The application shall contain a description of the existing land uses and land-use classifications under local law, if any, of the proposed permit and adjacent areas.

- ~~(J) (J) Maps: general requirements. 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) (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 permit area; noting the boundaries of land within the proposed permit 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) (2) The location of all buildings on and within one thousand feet of the proposed permit area, 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) (3) The location of surface and subsurface man-made features within, passing through, or passing over the proposed permit area;~~
 - ~~(4) (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 affected areas in the proposed permit area and the location of any discharges to any surface body of water on or adjacent to the land to be affected;~~
 - ~~(5) (5) Each public road located in or within one hundred feet of the proposed permit area;~~
 - ~~(6) (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 this rule, and known archeological sites within the proposed permit and adjacent areas;~~
 - ~~(7) (7) Each cemetery, that is located in or within one hundred feet of the proposed permit area;~~
 - ~~(8) (8) Any land within the proposed permit and adjacent areas 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 to that act;~~
 - ~~(9) (9) The boundaries and names of counties, municipal corporations, townships, section and lot lines within the permit and within five hundred feet of the permit;~~
 - ~~(10) (10) The names, locations, and directions of flow of all perennial and intermittent streams within the permit area and within five hundred feet of the permit area;~~
 - ~~(11) (11) The name of the drainage basin in which the permit area is located as listed in the "Gazetteer of Ohio Streams," published by the Ohio department of natural resources;~~
 - ~~(12) (12) That part of the permit area that is prime farmland;~~

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- ~~(13) (13) The areas of land to be permitted on which steep slope mining, mountaintop removal, and augering will be performed;~~
- ~~(14) (14) The drainage control system to include the location of:
 - ~~(a) (a) Each sediment pond and the pond identification number;~~
 - ~~(b) (b) Any diversion; and~~
 - ~~(c) (c) Any treatment facilities;~~~~
- ~~(15) (15) All haul roads and access roads proposed to be constructed in conjunction with the operations, and all existing haul roads and access roads to be used in conjunction with the operation;~~
- ~~(16) (16) The location of the proposed final highwall for each coal seam to be mined;~~
- ~~(17) (17) The point at which mining operations will begin and the point at which mining operations will end on the permit area;~~
- ~~(18) (18) Elevations and locations of test borings and core samplings within the proposed permit area;~~
- ~~(19) (19) Elevations and locations of monitoring stations within the permit area used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application;~~
- ~~(20) (20) All coal crop lines and the strike and dip of the coal to be mined in the proposed permit area;~~
- ~~(21) (21) Location and extent of known workings of inactive or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;~~
- ~~(22) (22) Location and extent of subsurface water, if encountered, within the proposed permit and adjacent areas;~~
- ~~(23) (23) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;~~
- ~~(24) (24) Location and extent of existing or previously surface-mined areas within the proposed permit area;~~
- ~~(25) (25) Location and extent of existing areas of spoil, waste, and refuse, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;~~
- ~~(26) (26) Location of gas and oil wells within the proposed permit area and water wells in the permit and adjacent areas;~~
- ~~(27) (27) The location and start and end points of all submitted cross sections;~~
- ~~(28) (28) Sufficient slope measurements, in degrees, to adequately represent the existing land surface configuration of the proposed permit area;~~
- ~~(29) (29) 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;~~
- ~~(30) (30) Buildings, utility corridors within the permit area;~~
- ~~(31) (31) Each coal storage, cleaning and loading area;~~
- ~~(32) (32) Each topsoil, spoil, coal waste, and noncoal waste storage area;~~

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- ~~(33)~~ (33) Each air pollution collection and control facility within the permit area;
 - ~~(34)~~ (34) Each facility to be used to protect and enhance fish and wildlife and related environmental values within the permit area;
 - ~~(35)~~ (35) Each explosive storage and handling facility within the permit area;
 - ~~(36)~~ (36) The location of each facility that will remain on the proposed permit area as a permanent feature, after the completion of underground mining operations;
 - ~~(37)~~ (37) The location of each water and subsidence monitoring point; and
 - ~~(38)~~ (38) Other relevant information required by the chief.
- ~~(K)~~ (K) Supplementary maps, cross sections, designs and plans. When necessary under these rules, the application shall include:
- ~~(1)~~ (1) Designs and plans prepared and certified by an engineer for the following:
 - ~~(a)~~ (a) Sedimentation ponds, impoundments, coal mine waste banks, and coal mine waste dams;
 - ~~(b)~~ (b) Spoil disposal facilities;
 - ~~(c)~~ (c) The sealing or managing of any mine openings within the proposed permit area;
 - ~~(d)~~ (d) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and
 - ~~(e)~~ (e) Road stream crossings, bridges, culverts, drainages, ditches, drainage structures, road cuts, and fill embankments.
 - ~~(2)~~ (2) 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:
 - ~~(a)~~ (a) Each sedimentation pond, permanent water impoundment, coal mine waste bank, and coal mine waste dam;
 - ~~(b)~~ (b) The fill area for the disposal of excess spoil;
 - ~~(c)~~ (c) 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;
 - ~~(d)~~ (d) The permit area, the original surface topography and the proposed final surface contour of the permit area;
 - ~~(e)~~ (e) The location of the proposed final highwall;
 - ~~(f)~~ (f) The location of any mine openings within the proposed permit area;
 - ~~(g)~~ (g) Stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code; and
 - ~~(h)~~ (h) Road widths, road gradients, road surface, road cuts, fill embankments, culverts, bridges, drainages, ditches, and drainage structures.

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~~(L)~~(J) Prime farmland investigation.

- (1) The applicant shall conduct a pre-application investigation of the area proposed to be affected by surface operations or facilities to determine whether lands within the area may be prime farmland. The chief, in consultation with the U.S. natural resources conservation service, shall determine the nature and extent of this investigation.
- (2) Land shall not be considered prime farmland if the applicant can demonstrate that:
 - (a) The land has not been historically used for cropland; or
 - (b) On the basis of a soil survey of lands within the permit area, there are no soil map units that have been designated prime farmland by the U.S. natural resources conservation service.
- (3) If the investigation establishes that the lands are not prime farmland, the applicant shall submit with the permit application a request for a negative determination which shows that the land for which the negative determination is sought meets one of the criteria of paragraph ~~(L)~~(J)(2) of this rule.
- (4) If the investigation indicates that lands within the area proposed to be affected by surface operations and facilities may be prime farmlands, the applicant shall contact the U.S. natural resources conservation service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for these lands, the applicant shall cause a survey to be made that is of the detail of a second order soil survey used by the U.S. natural resources conservation service for operational conservation planning. This survey shall be used to identify and locate prime farmland soils.
 - (a) When a soil survey made pursuant to paragraph ~~(L)~~(J)(4) of this rule indicates that the land contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with the requirements of paragraph (F) of rule 1501:13-4-12 of the Administrative Code, for such designated land.
 - (b) When a soil survey made pursuant to paragraph ~~(L)~~(J)(4) of this rule indicates that the land contains soil map units which have not been designated as prime farmland after review by the U.S. natural resources conservation service, the applicant shall submit a request for negative determination for non-designated land with the permit application establishing compliance with paragraph ~~(L)~~(J)(2) of this rule.

~~(M)~~(K) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.

Draft Rule 1501:13-4-14, dated 10/3/2014

This is a summary of the changes made to this rule.

(A)(2)(b). The word "necessary" is restored to this provision. It was removed effective 4/30/2009 but OSM requires that it be put back for the provision to be as effective as the Federal provision.

(H)(7). New paragraph to address incorporation by reference requirements. The paragraph refers the reader to rule 1501:13-9-04, which contains information on where a copy of Soil Conservation Service Technical Release No. 60 can be obtained.

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Dated 10/3/2014

1501:13-4-14 Underground mining permit application requirements for reclamation and operations plans.

(A) Operation plan: general requirements.

- (1) This rule shall apply only to underground mining operations.
- (2) Each application shall contain a description of the mining operations proposed to be conducted during the life of the mine including:
 - (a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations; and
 - (b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facilities is ~~approved by the chief~~necessary for postmining land use as specified in rule 1501:13-9-17 of the Administrative Code and is approved by the chief):
 - (i) Dams, embankments, and other impoundments;
 - (ii) Overburden and topsoil handling and storage areas and structures;
 - (iii) Coal removal, handling, storage, cleaning, and transportation areas and structures;
 - (iv) Spoil, coal processing, waste, and noncoal waste removal, handling, storage, transportation, and disposal areas and structures;
 - (v) Mine facilities; and
 - (vi) Water and air pollution control facilities.
- (3) Each application shall contain the information required under Chapter 1501:13-4 of the Administrative Code for the proposed permit area in the detail necessary for the chief to determine the estimated cost of reclamation, pursuant to paragraph (B) of rule 1501:13-7-01 of the Administrative Code, if the reclamation has to be performed by the division of mineral resources management in the event of forfeiture of the performance security by the permittee. This estimate shall include:
 - (a) Operational detail sufficient to determine the greatest potential reclamation cost liability to the state; and
 - (b) Any other operational detail required by the chief that may affect the cost of reclamation by the division of mineral resources management in the event of forfeiture of the performance security by the permittee.

(B) Operation plan: existing structures.

- (1) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the coal mining and reclamation operation. The description shall include:
 - (a) Location;
 - (b) Plans of the structure which describe its current condition;
 - (c) Approximate dates on which construction of the existing structure was begun and completed; and

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- (d) A showing, including relevant monitoring data or other evidence, of whether the structure meets the performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code.
- (2) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the coal mining and reclamation operation. The compliance plan shall include:
 - (a) Design specifications for the modification or reconstruction of the structure to meet the design and performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code;
 - (b) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;
 - (c) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of rules 1501:13-8-01 to 1501:13-13-07 of the Administrative Code are met; and
 - (d) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.
- (C) Operation plan: blasting. If surface blasting incident to the underground mine operation is to be conducted, the application shall contain a blasting plan for the proposed permit area, explaining how the applicant intends to comply with the blasting requirements of rule 1501:13-9-06 of the Administrative Code and including the following:
 - (1) Information setting forth the limitations the operator will meet with regard to ground vibration and airblast, the bases for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations;
 - (2) Description of any system to be used to monitor compliance with the airblast and ground vibration limits established under paragraph (C)(1) of this rule, including the type, capability, and sensitivity of any blast-monitoring equipment and proposed procedures and locations of monitoring; and
 - (3) For blasting operations within five hundred feet of active underground mines, copies of the approvals given by the state and federal authorities concerned with the health and safety of underground miners.
- (D) Reclamation plan: general requirements.
 - (1) Each application shall contain a plan for describing reclamation of the lands within the proposed permit area, showing how the applicant will comply with the requirements of Chapter 1513. of the Revised Code and rules adopted thereunder. The plan shall include, at a minimum, all information required under paragraphs (D) to (R) of this rule.
 - (2) Each plan shall contain, where appropriate, the following information for the proposed permit area:
 - (a) A detailed timetable for the completion of each major step in the reclamation plan;
 - (b) A plan for the backfilling, soil stabilization, compacting, and grading, with contour maps or cross sections that show the anticipated final surface configuration of the proposed permit area, in accordance with rule 1501:13-9-14 of the Administrative Code;
 - (c) A description of the removal, storage, and redistribution of the topsoil, subsoil, and other material to meet the requirements of rule 1501:13-9-03 of the Administrative Code. A demonstration of the suitability of topsoil substitutes or supplements under rule 1501:13-9-03 of the Administrative Code shall be based upon analysis of the thickness of soil horizons, total depth, texture, per cent coarse fragments, pH, and areal extent of the different kinds of soils. The chief may require other chemical and physical analyses, field-site trials, or greenhouse tests if determined to be necessary or desirable

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to demonstrate the suitability of the topsoil substitutes or supplements;

- (d) A description of the revegetation as required in rule 1501:13-9-15 of the Administrative Code, including, but not limited to, descriptions of the:
 - (i) Schedule of revegetation;
 - (ii) Species and amounts per acre of seeds and seedlings to be used;
 - (iii) Methods to be used in planting and seeding;
 - (iv) Mulching techniques;
 - (v) A soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;
 - (vi) Irrigation, if appropriate, and disease, pest and vermin control, if any; and
 - (vii) The measures proposed to be used to determine the success of revegetation as required under rule 1501:13-9-15 of the Administrative Code;
- (e) A description of the measures to be used to maximize the use and conservation of the coal resources as required by rule 1501:13-9-05 of the Administrative Code;
- (f) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials and materials constituting a fire hazard are disposed of in accordance with paragraph (E) of rule 1501:13-9-09 and paragraph (J) of rule 1501:13-9-14 of the Administrative Code and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;
- (g) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings and to plug, case or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with rule 1501:13-9-02 of the Administrative Code; and
- (h) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. 1251 et seq.) and other applicable air and water quality laws and regulations and health and safety standards.

(E) Reclamation plan: protection of hydrologic balance.

- (1) Each application shall contain a plan for the protection of the hydrologic balance. The plan shall be specific to the local hydrologic conditions and shall describe the measures to be taken during and after the proposed underground mining operations in accordance with rule 1501:13-9-04 of the Administrative Code to:
 - (a) Minimize disturbance to the hydrologic balance within the permit and adjacent areas and to prevent material damage outside the permit area;
 - (b) Protect the rights of present users of surface and ground waters within the permit area and adjacent areas;
 - (c) Avoid acid or toxic drainage;
 - (d) Control surface-water drainage into, through, and out of the proposed permit area, pursuant to rule 1501:13-9-04 of the Administrative Code;

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- (e) Treat, when required under these rules, surface- and ground-water drainage from the area to be disturbed by the proposed underground mining surface operations, so as not to exceed quantitative limits on pollutants in discharges under paragraph (B) of rule 1501:13-9-04 of the Administrative Code;
 - (f) Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow, or runoff outside the permit area. Vegetation may be determined by the chief to be the best technology currently available upon a demonstration by the permittee that the requirements of paragraphs (B)(1) to (B)(1)(b) of rule 1501:13-9-04 of the Administrative Code have been met. If the applicant proposes to make such a demonstration after vegetation is established and remove siltation structures sooner than two years after the last augmented seeding of a drainage area, the applicant shall state such intentions in the timetable and plans for removal of sediment control structures required by paragraph (H)(1)(b)(iv) or (H)(1)(c)(iv) of this rule;
 - (g) Address any potential adverse hydrologic consequences identified in the determination of probable hydrologic consequences under paragraph (E)(2) of this rule and include preventative and remedial measures; and
 - (h) Meet applicable federal and state water quality laws and regulations.
- (2) Determination of probable hydrologic consequences (PHC).
- (a) The plan shall include a determination of the probable hydrologic consequences of the proposed underground mining operations on the proposed permit area and adjacent areas. This determination shall be based on baseline hydrologic, geologic and other information collected for the permit application with respect to the hydrologic regime, providing information on the quantity and quality of water in surface- and ground-water systems under seasonal conditions, including the contents of dissolved and total suspended solids, total iron, pH, and total manganese.
 - (b) The PHC determination shall include findings on:
 - (i) Whether adverse impacts may occur to the hydrologic balance;
 - (ii) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface- or ground-water supplies;
 - (iii) Whether the proposed operation may proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial, or other legitimate purpose; and
 - (iv) What impact the proposed operation will have on:
 - (a) Sediment yield from the disturbed area;
 - (b) Acidity, total suspended and dissolved solids, and other important water quality parameters of local impact;
 - (c) Flooding or streamflow alteration;
 - (d) Ground-water and surface-water availability; and
 - (e) Other characteristics as required by the chief.
 - (c) An application for a permit revision shall be reviewed by the chief to determine whether a new or updated PHC determination shall be required.
- (3) Each plan shall contain a detailed description, with appropriate drawings, of permanent entry seals and

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downslope barriers designed to ensure stability under anticipated hydraulic heads developed while promoting mine inundation after mine closure for the proposed permit area.

(F) Ground-water and surface-water monitoring plans.

(1) Ground-water monitoring plan.

- (a) The application shall include a ground-water monitoring plan based upon the PHC determination required under paragraph (E)(2) of this rule and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in paragraph (E)(1) of this rule. It shall identify the quantity and quality parameters to be monitored, sampling frequency, and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, specific conductance corrected to twenty-five degrees centigrade, pH, total iron, total manganese, and water levels shall be monitored. Data resulting from monitoring shall be submitted to the chief pursuant to paragraph (N) of rule 1501:13-9-04 of the Administrative Code.
- (b) If an applicant can demonstrate by the use of the PHC determination and other available information that a particular water-bearing stratum in the proposed permit and adjacent areas is not one which serves as an aquifer which significantly ensures the hydrologic balance within the general area, then monitoring of that stratum may be waived by the chief.

(2) Surface-water monitoring plan.

- (a) The application shall include a surface-water monitoring plan based upon the PHC determination required under paragraph (E)(2) of this rule and the analysis of all baseline hydrologic, geologic, and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (E)(1) of this rule as well as the effluent limitations set forth in 40 C.F.R. part 434.
- (b) The plan shall identify the surface-water quantity and quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance.
 - (i) At all monitoring locations in the permit and adjacent areas, surface-water bodies such as streams, lakes and impoundments, that are potentially affected or into which water will be discharged, and at upstream monitoring locations, the specific conductance corrected to twenty-five degrees centigrade, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.
 - (ii) For point-source discharges, monitoring shall be conducted in accordance with 40 C.F.R. parts 122, 123 and 434 and as required by the national pollutant discharge elimination system permitting authority.
 - (iii) Data resulting from this monitoring shall be submitted to the chief pursuant to paragraph (N) of rule 1501:13-9-04 of the Administrative Code.

(G) Reclamation plan: postmining land uses.

- (1) Each application shall contain a plan for the postmining land use. The plan shall describe the proposed use following reclamation of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use polices and plans. This description shall explain:

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- (a) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and
 - (b) When a land use different from the premining land use is proposed, all materials needed for approval of the alternatives used under these rules.
- (2) The plan shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the state and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.
- (3) The plan shall describe the consideration which has been given to making all of the proposed coal mining operations consistent with surface owner plans and applicable state and local land use plans and programs.
- (H) Reclamation plan: ponds, impoundments, banks, dams, and embankments.
- (1) General requirements.
- (a) Each application shall include a detailed design plan for each proposed siltation structure, water impoundment, and coal mine waste bank, dam, or embankment within the proposed permit area. Each plan shall:
 - (i) Be prepared by, or under the direction of, and certified by an engineer;
 - (ii) Contain a description, map, and cross section of the structure and its location;
 - (iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure; and
 - (iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred.
 - (b) Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), or meets the class B or C criteria for dams in the U.S department of agriculture, soil conservation service technical release no. 60, "Earth Dams and Reservoirs," 1985, shall:
 - (i) Be prepared by, or under the direction of, and certified by an engineer;
 - (ii) Include any geotechnical investigation, design, and construction requirements for the structure;
 - (iii) Describe the operation and maintenance requirements for each structure; and
 - (iv) Describe the timetable and plans to remove each structure, if appropriate. If the applicant proposes to demonstrate that vegetation is the best technology currently available and remove siltation structures sooner than two years after the last augmented seeding of the drainage area, include a statement of such intentions.
 - (c) Each detailed design plan for a structure that does not meet the size or other criteria of paragraph (H)(1)(b) of this rule, shall:
 - (i) Be prepared by, or under the direction of, and certified by an engineer;
 - (ii) Include any design and construction requirements for the structure including any required geotechnical information;

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- (iii) Describe the operation and maintenance requirements for each structure; and
- (iv) Describe the timetable and plans to remove each structure, if appropriate. If the applicant proposes to demonstrate that vegetation is the best technology currently available and remove siltation structures sooner than two years after the last augmented seeding of the drainage area, include a statement of such intentions.

(2) Impoundments.

- (a) Permanent and temporary impoundments shall be designed in compliance with the requirements of paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any impoundment shall be certified by an engineer experienced in impoundment design and construction. The certification statement shall state that the structure is designed to meet the requirements of paragraph (H) of rule 1501:13-9-04 of the Administrative Code.
- (b) Each design plan for an impoundment that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a). The plan required to be submitted to the district manager of MSHA under 30 C.F.R. 77.216 shall also be submitted to the chief as part of the permit application.
- (c) Impoundments not meeting the size or other criteria of paragraph (H)(1)(b) of this rule may be designed in compliance with the following design standards, in lieu of performance of engineering tests to demonstrate compliance with the 1.3 minimum static safety factor required in paragraph (H)(1)(c)(ii) of rule 1501:13-9-04 of the Administrative Code:
 - (i) The embankment foundation area shall be cleared of all organic matter and the entire foundation surface shall be scarified;
 - (ii) If the natural slope of the foundation as measured at right angles to the embankment center line is steeper than 10h:1v (ten per cent), the embankment shall be benched into the existing slope beginning at the embankment toe and then filled with compacted level lifts;
 - (iii) The embankment fill material shall be free of sod, large roots, other large vegetative matter, and coal processing waste;
 - (iv) The fill shall be brought up in horizontal layers of such thickness as required to facilitate compaction in accordance with prudent construction standards;
 - (v) The moisture content of the fill material shall be sufficient to secure proper compaction. (An indication of sufficient moisture content is that when kneaded by hand the soil should just form a ball which does not readily separate. The engineer may specify other methods of testing moisture content if appropriate). When it is necessary to use materials of varying texture and gradation, the more impervious material shall be placed in the upstream and center portions of the embankment and the more pervious material shall be placed in the downstream portion of the fill;
 - (vi) The embankment's combined upstream and downstream side slopes shall be no steeper than the sum of 5h:1v, with neither slope steeper than 2h:1v. (Example: if downstream slope is 3h:1v, then upstream slope can be no steeper than 2h:1v. The minimum combined slope requirement of 5h:1v refers to the 3h and 2h added together.); and
 - (vii) The minimum top width of the embankment shall be $(h + 35)/5$, where "h" is the embankment height as measured from natural ground at the upstream toe to the top of the embankment.

(3) Siltation structures.

- (a) Permanent and temporary siltation structures shall be designed in compliance with the requirements of

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paragraphs (G) and (H) of rule 1501:13-9-04 of the Administrative Code. The design of any siltation structure shall be certified by an engineer experienced in impoundment design and construction. The certification shall state that the structure is designed to meet the requirements of paragraphs (G) and (H) of rule 1501:13-9-04 of the Administrative Code.

(b) In addition to the requirements of paragraph (H)(1) of this rule, the plan shall include a determination of:

- (i) The required sediment storage volume; and
- (ii) The detention time provided by the pond.

(c) Each design plan for a siltation structure that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a).

(4) Coal mine waste dams and embankments.

(a) Coal mine waste dams and embankments shall be designed to comply with the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any coal mine waste dam or embankment shall be certified by an engineer experienced in design of similar earth and waste structures. The certification statement shall state that the structure is designed to meet the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code.

(b) Each plan shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer, according to the following:

- (i) The number, location, and depth of borings and test pits shall be determined using current, prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions;
- (ii) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered;
- (iii) All springs, seepage, and ground-water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan; and
- (iv) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(c) Each design plan for a coal mine waste dam or embankment that meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216(a), shall contain the information required under 30 C.F.R. 77.216-2(a).

(5) Coal mine waste banks. Coal mine waste banks shall be designed to comply with the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 of the Administrative Code, and with the provisions regarding impoundments under paragraph (H) of rule 1501:13-9-04 of the Administrative Code. The design of any coal mine waste bank shall be certified by an engineer experienced in design of similar earth and waste structures. The certification shall state that the structure is designed to meet the requirements of paragraphs (A) to (C) of rule 1501:13-9-09 and paragraph (H) of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

(6) If the structure meets or exceeds the size or other criteria of MSHA, 30 C.F.R. 77.216 (a), or meets the Class B or C criteria for dams in the U.S department of agriculture, soil conservation service technical

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release no. 60, "Earth Dams and Reservoirs," 1985, each plan under paragraphs (H)(2), (H)(3), and (H)(4) of this rule shall include a stability analysis of each structure. The stability analysis shall include, but not limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

(7) For further information about soil conservation service technical release no. 60, which is incorporated by reference in paragraph (H) of this rule, see paragraph (H)(1)(a) of rule 1501:13-9-04 of the Administrative Code.

- (I) Diversions. Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with paragraphs (D) and (F) of rule 1501:13-9-04 of the Administrative Code.
- (J) Protection of public parks and historic places.
- (1) For any publicly owned parks or any places listed on the "National Register of Historic Places," administered by the national parks service, U.S. department of the interior, that may be adversely affected by the proposed operation, each application shall describe the measures to be used:
- (a) To prevent adverse impacts; or
- (b) If valid existing rights exist or joint agency approval is to be obtained under paragraph (E) of rule 1501:13-3-04 of the Administrative Code to minimize adverse impacts. The website for the "National Register of Historic Places" for Ohio sites is <http://www.nationalregisterofhistoricplaces.com/oh/state.html>.
- (2) The chief may require the applicant to protect historic or archeological properties listed on or eligible for listing on the "National Register of Historic Places," as referenced in paragraph (J)(1) of this rule, through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.
- (K) Relocation or use of public roads. Each application shall describe the measures to be used to ensure that the interests of the public and landowners affected are protected if, under paragraph (C) of rule 1501:13-3-04 of the Administrative Code, the applicant seeks to have the chief approve:
- (1) Conducting the proposed coal mining operation within one hundred feet of the right-of-way line of any public road, except where mine access or haul roads join that right-of-way; or
- (2) Relocating a public road.
- (L) Transportation facilities.
- (1) Each application shall contain a detailed description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area. The description shall include a map, appropriate cross sections, and the following:
- (a) Specifications for each road width, road gradient, road surface, road cut, fill embankment, culvert, bridge, drainage ditch, and drainage structure;
- (b) A description of measures to be taken to obtain approval of the chief for alteration or relocation of a natural drainageway under rule 1501:13-10-01 of the Administrative Code;
- (c) A description of measures, other than use of a rock headwall, to be taken to protect the inlet end of a ditch relief culvert, for approval by the chief under rule 1501:13-10-01 of the Administrative Code;

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- (d) Drawings and specifications for each proposed ford of perennial or intermittent streams outside the mined-out area that is used as a temporary route, as necessary for approval of the ford by the chief in accordance with paragraph (D)(1) of rule 1501:13-10-01 of the Administrative Code; and
 - (e) A description of plans to remove and reclaim each road that would not be retained under an approved postmining land use, and the schedule for this removal and reclamation.
- (2) Primary road embankments may be designed in compliance with the following design standards, in lieu of performance of engineering tests to demonstrate compliance with the 1.3 minimum static safety factor required in paragraph (G)(3) of rule 1501:13-10-01 of the Administrative Code:
- (a) The embankment foundation area shall be cleared of all organic matter and the entire foundation surface shall be scarified;
 - (b) If the natural slope of the foundation as measured at right angles to the roadway center line is steeper than 8h:1v, the embankment shall be benched into the existing slope beginning at the embankment toe and then filled with compacted level lifts;
 - (c) The embankment fill material shall be free of sod, large roots, other large vegetative matter, and coal processing waste;
 - (d) The fill shall be brought up in horizontal layers of such thickness as required to facilitate compaction in accordance with prudent construction standards;
 - (e) The moisture content of the fill material shall be sufficient to secure proper compaction;
 - (f) The side slopes of the embankment shall be no steeper than 2h:1v;
 - (g) Embankments with upstream and downstream slopes shall have a minimum top width of $(h + 35)/5$, where "h" is the embankment height as measured from natural ground at the upstream toe to the top of the embankment;
 - (h) Hillside embankments shall have a minimum top width adequate for the intended use; and
 - (i) Culverts shall be placed such that the embankment, as defined in rule 1501:13-1-02 of the Administrative Code, will not impound water for an extended period of time.
- (M) Subsidence control plan.
- (1) The application shall include, for the shadow area, the most recent available U.S. geologic survey 7.5-minute topographic map showing:
 - (a) The extent of underground workings proposed for the term of the permit, including existing works that will continue to be used under the permit, all shown on a year-by-year basis;
 - (b) Those parts of the proposed underground workings from which there will be full coal recovery;
 - (c) The angle of draw for the workings described in paragraphs (M)(1)(a) and (M)(1)(b) of this rule; and
 - (d) Those areas in which measures will be taken to prevent or minimize subsidence and subsidence-related damage.
 - (2) The application shall include a survey which shall show whether structures or renewable resource lands exist within the proposed permit and adjacent areas and whether subsidence, if it occurred, could cause material damage or diminution of the reasonably foreseeable use of such structures or renewable resource lands. If the survey shows that no such structures or renewable resource lands exists or no such material damage or diminution could be caused in the event of mine subsidence, and if the chief agrees

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with such conclusion, no further information need be provided in the application under paragraphs (M)(2)(a) to (M)(2)(e) of this rule. In the event the survey shows that such structures or renewable resource lands exist, and that subsidence could cause material damage or diminution of value or foreseeable use of the land, or if the chief determines that such damage or diminution could occur, the application shall include a subsidence control plan which shall contain the following information:

- (a) A description of the method of coal removal, such as longwall, room-and-pillar removal, hydraulic mining, or other extraction methods, including the size, sequence, and timing for the development of underground workings;
- (b) A map of the shadow area which describes the location and extent of areas in which planned-subsidence mining methods will be used and which includes all areas where the measures described in paragraphs (M)(2)(d) and (M)(2)(e) of this rule will be taken to prevent or minimize subsidence and subsidence-related damage; and, where appropriate, to correct subsidence-related material damage;
- (c) A description of the physical conditions, such as depth of cover, seam thickness, and lithology, which affect the likelihood or extent of subsidence and subsidence-related damage;
- (d) A description of monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage in accordance with rule 1501:13-12-03 of the Administrative Code;
- (e) Except for those areas where planned subsidence is projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, including such measures as:
 - (i) Backstowing or backfilling voids;
 - (ii) Leaving support pillars of coal;
 - (iii) Leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving the coal in place; and
 - (iv) Taking measures on the surface to prevent material damage or lessening of the value or reasonably foreseeable use of the surface;
- (f) A description of the anticipated effects of planned subsidence, if any;
- (g) A general description of the measures to be taken, in accordance with rule 1501:13-12-03 of the Administrative Code, to mitigate or remedy any subsidence-related damage to or diminution in value or reasonably foreseeable use of:
 - (i) The land; or
 - (ii) Structures or facilities to the extent required pursuant to this rule; and
- (h) Other information required by the chief as necessary to demonstrate that the operation will be conducted in accordance with the performance standards of rule 1501:13-12-03 of the Administrative Code for subsidence control.

(N) Return of coal mine wastes to abandoned underground workings.

- (1) Each application shall contain a plan for the return of coal mine wastes to abandoned underground workings. The plan shall describe the design, operation and maintenance of any proposed coal processing waste disposal facility, including flow diagrams and any other necessary drawings and maps, for the approval of the chief and MSHA under paragraph (A)(7) of rule 1501:13-9-09 of the

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Administrative Code.

- (2) The plan shall describe the source and quality of waste to be stowed, area to be backfilled, per cent of the mine void to be filled, method of constructing underground retaining walls, influence of the backfilling operation on active underground mine operations, surface area to be supported by the backfill, and the anticipated occurrence of surface effects following backfilling.
 - (3) The applicant shall describe the source of the hydraulic transport mediums, method of dewatering the placed backfill, retainment of water underground, treatment of water if released to surface streams, and the effect on the hydrologic regime.
 - (4) The plan shall describe each permanent monitoring well to be located in the backfilled area, the stratum underlying the mined coal, and gradient from the backfilled area.
 - (5) The requirements of paragraphs (N)(1) to (N)(4) of this rule shall also apply to pneumatic backfilling operations, except where the operations are exempted by the chief from requirements specifying hydrologic monitoring.
- (O) Underground development waste. Each plan shall contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal methods and sites for placing underground development waste and excess spoil generated at surface areas affected by underground mining surface operations and facilities according to rule 1501:13-9-07 of the Administrative Code. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the structures and be prepared according to paragraph (P) of this rule.
- (P) Disposal of excess spoil.
- (1) Each application shall contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal site and design of the spoil disposal structures according to rule 1501:13-9-07 of the Administrative Code. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.
 - (2) Each application shall contain the results of a geotechnical investigation of the proposed disposal site, including the following:
 - (a) The character of bedrock and any adverse geologic conditions in the disposal area;
 - (b) A survey identifying all springs, seepage, and ground-water flow observed or anticipated during wet periods in the area of the disposal site;
 - (c) A survey of the potential effects of subsidence of the subsurface strata due to past and future mining operations;
 - (d) A technical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and
 - (e) A stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions. These data shall be accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.
 - (3) If, under paragraph (D) of rule 1501:13-9-07 of the Administrative Code, rock-toe buttresses or keyway cuts are required, the application shall include the following:
 - (a) The number, location, and depth of borings or test pits. The number, location, and depth shall be determined with respect to the size of the spoil disposal structure and sub-surface conditions; and

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(b) Engineering specifications utilized to design the rock-toe buttresses or keyway cuts which shall be determined in accordance with paragraph (P)(2)(e) of this rule.

(Q) Air pollution control plan. For all underground mining surface operations, the application shall contain an air pollution control plan in order to address fugitive dust resulting from erosion. The plan shall include the following:

- (1) An air quality monitoring program, if required by the chief, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under paragraph (Q)(2) of this rule to comply with applicable federal and state air quality standards; and
- (2) A plan for fugitive dust control practices.

(R) Fish and wildlife plan.

(1) Resource information. Each application shall include fish and wildlife resource information for the permit area and adjacent area.

(a) The scope and level of detail for such information shall be determined by the chief in consultation with state and federal agencies with responsibilities for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under paragraph (R)(2) of this rule.

(b) Site-specific resource information necessary to address the respective species or habitats shall be required when the permit area or adjacent area is likely to include:

- (i) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the secretary of the interior under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or those species or habitats protected by similar state statutes;
- (ii) Habitats of unusually high value for fish and wildlife such as important streams, wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, migration routes, or reproduction and wintering areas; or
- (iii) Other species or habitats identified through agency consultation as requiring special protection under state or federal law.

(2) Protection and enhancement plan. Each application shall include a description of how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act, during the surface coal mining and reclamation operations and how enhancement of these resources will be achieved where practicable.

(a) This description shall:

- (i) Be consistent with the requirements of rule 1501:13-9-11 of the Administrative Code;
- (ii) Apply at a minimum, to species and habitats identified under paragraph (R)(1) of this rule;
- (iii) Include protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, and the monitoring of surface water quality and quantity; and
- (iv) Include enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the replacement of perches and nest boxes. Where the plan does

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not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.

- (3) Fish and wildlife service review. Upon request, the chief shall provide the resource information required under paragraph (R)(1) of this rule and the protection and enhancement plan required under paragraph (R)(2) of this rule to the U.S. department of the interior, fish and wildlife service regional or field office for their review. This information shall be provided within ten days of receipt of the request from the service.
- (S) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.

Draft Rule 1501:13-5-01, dated 9/23/2013.

This is a summary of the changes made to this rule.

(E)(6). Additional language per HB 163 (effective 9/30/2011) so that this rule agrees with the language of rule 1501:13-4-03 (D)(2).

(G)(3). Added a reference to proposed new mapping rule 1501:13-4-08.1

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Dated 9/23/2013 See (E)(6) and (G)(3) for amendments.

1501:13-5-01 **Review, public participation, and approval or disapproval of permit applications and permit terms and conditions.**

(A) Public notices of filing of permit applications, applications for significant revisions to permits, and applications for permit renewal.

(1) After the chief determines an application for a permit, for a significant revision to a permit, or for a permit renewal to be complete, the applicant shall place an advertisement in a local newspaper of general circulation in the locality of the proposed coal mining and reclamation operations at least once a week for four consecutive weeks. The advertisement shall contain, at a minimum, the following information:

(a) The name and business address of the applicant;

(b) A description which shall:

(i) Clearly describe towns, rivers, streams, or other bodies of water, local landmarks, and any other information, including routes, streets, or roads and accurate distance measurements, necessary to allow local residents to readily identify the proposed permit area;

(ii) Clearly describe the exact location and boundaries of the proposed permit area; and

(iii) State the name of the U.S. geological survey 7.5 minute quadrangle map(s) which contains the area described;

(c) The location where a copy of the application is available for public inspection under paragraph (A)(4) of this rule;

(d) The address of the "Division of Mineral Resources Management, 2045 Morse Road, Building H-3, Columbus, Ohio 43229" to which written comments, objections, or requests for informal conferences on the application may be submitted under paragraph (B) of this rule and rule 1501:13-14-05 of the Administrative Code;

(e) If the application includes a road permit, approved by the road authority, to conduct coal mining operations within one hundred feet of the outside right-of-way of a public road or to relocate or close a public road, a concise statement describing the public road, the particular part to be relocated, where the relocation is to occur, and the approximate timing and duration of the relocation or closing; and

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- (f) If the application includes a request for an experimental practice under rule 1501:13-4-12 of the Administrative Code, a statement indicating that an experimental practice is requested and identifying the rule of the Administrative Code for which a variance is requested.
- (2) Upon receipt of a complete application for a permit, for a significant revision to a permit or for a permit renewal, the chief shall issue written notification of:
- (a) The applicant's intention to conduct coal mining and reclamation operations at a particularly described tract of land;
 - (b) The application or permit number;
 - (c) Where a copy of the application may be inspected; and
 - (d) Where comments on the application may be submitted under paragraph (C) of this rule.
- (3) The written notification described in paragraph (A)(2) of this rule shall be sent to:
- (a) Federal, state, and local government agencies with jurisdiction over or an interest in the area of the proposed operations;
 - (b) Government planning agencies with jurisdiction to act with regard to land use, air, or water quality planning in the area of the proposed operations;
 - (c) Sewage and water treatment authorities and water companies, either providing sewage or water services to users in the area of the proposed operations or having water sources or collection, treatment, or distribution facilities located in these areas;
 - (d) The federal or state government agencies with authority to issue all other permits and licenses needed by the applicant in connection with operations proposed in the application; and
 - (e) The board of county commissioners, the board of township trustees, the legislative authorities of municipal corporations, private water companies, regional councils of governments, and the boards of directors of conservancy districts in each county or part of a county in which the proposed operations are located.
- (4) Availability of permit applications, applications for significant revisions to permits, and applications for permit renewal.

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- (a) The applicant shall make a full copy of the complete application for a permit, a significant permit revision, or a permit renewal available for the public to inspect and copy. This shall be done by filing a copy of the application submitted to the chief at the division of mineral resources management district office responsible for inspection of the proposed operation, or if no such office is maintained in the county where the mining is proposed to occur, the applicant shall file a copy of the application with the county recorder of that county or at the office of the natural resources conservation service of the United States department of agriculture located in the county where the mining is proposed to occur.
 - (b) The applicant shall file the copy of the complete application under paragraph (A)(4)(a) of this rule by the first date of newspaper advertisement of the application. The applicant shall file any subsequent changes to the application with the public office at the same time the change is submitted to the chief.
- (B) Comments and objections on permit applications, applications for significant revisions to permits and applications for permit renewal.
- (1) Within thirty days of notification by the chief, as provided under paragraph (A)(3) of this rule, written comments or objections on an application for a permit, significant revision to a permit, or permit renewal may be submitted to the chief by such public entities with respect to the effects of the proposed mining operations on the environment within their area of responsibility.
 - (2) Written comments regarding or objections to an application for a permit, significant revision to a permit, or permit renewal may be submitted to the chief by any person having an interest which is or may be adversely affected by the decision on the application, or by an officer or head of any federal, state or local government agency or authority, within thirty days after the last publication of the newspaper notice required under paragraph (A) of this rule.
 - (3) The chief shall, upon receipt of such written comments or objections, transmit a copy of such written comments or objections to the applicant and file a copy for public inspection at the same public office where the application is filed.
- (C) Informal conferences. Any person having an interest which is or may be adversely affected by the issuance of or significant revision to a permit, or by the renewal of a permit, or the officer or head of any federal, state or local government agency or authority may, in writing, within thirty days after the last publication of the newspaper notice required under paragraph (A) of this rule, request that the chief hold an informal conference in accordance with rule 1501:13-14-05 of the Administrative Code.

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(D) Review of permit applications, applications for revisions to permits, and applications for permit renewals.

(1) Preliminary review by the chief.

(a) The chief shall review the complete application and any written comments or written objections submitted, and records of any informal conference held under rule 1501:13-14-05 of the Administrative Code.

(b) The applicant for a permit, revision to a permit, or permit renewal shall have the burden of establishing that the application is in compliance with all of the requirements of Chapter 1513. of the Revised Code and these rules.

(2) Time frames for review.

(a) If there has been no informal conference held pursuant to section 1513.071 of the Revised Code, the chief shall submit to the applicant for a permit the written finding of the chief granting or denying the permit in whole or in part and stating the reasons therefor within the time frames established in paragraph (D)(2)(b) of this rule. If there has been an informal conference held pursuant to section 1513.071 of the Revised Code, the chief shall submit to the applicant for a permit the written finding of the chief granting or denying the permit in whole or in part and stating the reasons therefor within the time frames established in paragraph (B)(3) of rule 1501:13-14-05 of the Administrative Code and paragraph (D)(2)(b) of this rule.

(b) The chief shall grant or deny a permit not later than two hundred forty business days after the submission of a complete application for the permit. Any time during which the applicant is making revisions to the application or providing additional information requested by the chief regarding an application shall not be included in the two hundred forty business days. If the chief determines that a permit cannot be granted or denied within the two-hundred-forty-business-day time frame, the chief, not later than two hundred ten business days after the submission of a complete application for the permit, shall provide the applicant with written notice of the expected delay.

(3) If the chief decides to approve the application, he or she shall require that the applicant file the performance security before the permit is issued, in accordance with the requirements of Chapter 1513. of the Revised Code and these rules.

(4) The chief shall determine, based on the list of violation notices submitted as part of the application under paragraph (C)(3) of rule 1501:13-4-03 of the Administrative Code or on available information concerning federal or state failure-to-abate cessation orders, unabated federal or state imminent harm cessation orders, delinquent civil penalties issued pursuant to rule 1501:13-14-

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03 of the Administrative Code or section 518 of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1268), delinquent abandoned mine reclamation fees, or forfeitures of a coal mining bond, performance security, or similar security deposited in lieu of a bond in this or any other state or with the United States where the violations upon which the forfeitures were based have not been corrected, that any coal mining operation owned or controlled by the applicant or by any person who owns or controls the applicant is not currently in violation of any law, rule, or regulation of the United States or any state law, rule or regulation enacted pursuant to federal law, rule or regulation pertaining to air or water environmental protection. If this determination cannot be made, the chief shall not issue the permit. The chief shall require the applicant, before the issuance of the permit, to either:

- (a) Submit to the chief proof that the violation has been corrected or is in the process of being corrected to the satisfaction of the agency that has jurisdiction over the violation, and submit to the chief proof that any civil penalties owed to the state for a violation not the subject of an appeal have been paid; or
 - (b) Establish for the chief that the applicant, or any person owned or controlled by either the applicant or any person who owns or controls the applicant, has filed and is presently pursuing, in good faith, a direct administrative or judicial appeal to contest the validity of that violation. If the administrative or judicial hearing authority affirms the violation, then any coal mining operations being conducted under a permit issued according to this paragraph shall be immediately terminated, unless and until the provisions of paragraph (D)(4)(a) of this rule are satisfied.
- (5) For the purposes of paragraph (D)(4) of this rule, the chief may presume that, in the absence of a failure-to-abate cessation order, a notice of violation issued pursuant to paragraph (B) of rule 1501:13-14-02 of the Administrative Code or under any equivalent state or federal law, rule or regulation has been or is being corrected to the satisfaction of the agency with jurisdiction over the violation, except where evidence to the contrary is set forth in the permit application, or where the notice of violation is issued for nonpayment of abandoned mine reclamation fees or civil penalties.
- (6) No permit shall be issued to an applicant if a determination is made by the chief that the applicant, anyone who owns or controls the applicant, or the operator specified in the application controls or has controlled mining operations with a demonstrated pattern of willful violations of Chapter 1513. of the Revised Code and these rules of a nature and duration to result in irreparable damage to the environment as to indicate an intent not to comply with or a disregard of Chapter 1513. of the Revised Code or these rules.

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- (7) Any permit that is issued on the basis of proof submitted under paragraph (D)(4)(a) of this rule that a violation is in the process of being corrected, or pending the outcome of an appeal described in paragraph (D)(4)(b) of this rule, shall be conditionally issued.

- (8) Subsequent to the effective date of this rule, the prohibitions of paragraph (D)(4) of this rule regarding the issuance of a new permit, shall not apply to any violation that:
 - (a) Occurs after that date;

 - (b) Is unabated; and

 - (c) Results from an unanticipated event or condition that arises from a surface coal mining and reclamation operation on lands that are eligible for remining under a permit:
 - (i) Issued pursuant to paragraph (L) of rule 1501:13-4-12 of the Administrative Code; and

 - (ii) Held by the person making application for the new permit.

 - (d) For permits issued under paragraph (L) of rule 1501:13-4-12 of the Administrative Code, an event or condition shall be presumed to be unanticipated for the purposes of this paragraph if it:
 - (i) Arose after permit issuance;

 - (ii) Was related to prior mining; and

 - (iii) Was not identified in the permit.

- (E) Criteria for approval or denial of an application. No application for a permit, significant revision to a permit, or permit renewal shall be approved unless the application affirmatively demonstrates, and the chief finds, in writing, on the basis of information set forth in the application or from information otherwise available, that is documented in the approval and made available to the applicant, that:
 - (1) The application is accurate and complete and that all requirements of Chapter 1513. of the Revised Code and all rules adopted thereunder have been complied with;

 - (2) The applicant has demonstrated that coal mining and reclamation operations, as required by Chapter 1513. of the Revised Code and all rules adopted thereunder,

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can be feasibly accomplished under the mining and reclamation operations plan contained in the application;

- (3) The assessment of the probable cumulative hydrologic impacts of all anticipated coal mining in the general area on the hydrologic balance, as described in divisions (B)(1)(k) and (E)(2)(c) of section 1513.07 of the Revised Code, has been made by the chief and the operations proposed under the application have been designed to prevent material damage to the hydrologic balance outside the proposed permit area;
- (4) The proposed permit area is:
 - (a) Not included within an area designated unsuitable for coal mining operations under rule 1501:13-3-07 of the Administrative Code;
 - (b) Not within an area under study for designation as unsuitable for coal mining operations in an administrative proceeding begun under rule 1501:13-3-07 of the Administrative Code, unless the applicant demonstrates that, before January 4, 1977, substantial legal and financial commitments were made in relation to the operation for which the applicant is applying for a permit;
 - (c) Not on any lands subject to the prohibitions or limitations of paragraph (A)(1), (A)(2), (A)(6), (A)(7) or (A)(8) of rule 1501:13-3-03 of the Administrative Code;
 - (d) Not within one hundred feet of the outside right-of-way line of any public road, except as provided for in paragraph (C) of rule 1501:13-3-04 of the Administrative Code; and
 - (e) Not within three hundred feet from any occupied dwelling, except as provided for in paragraph (A)(5) of rule 1501:13-3-03 or paragraph (D) of rule 1501:13-3-04 of the Administrative Code;
- (5) The proposed operations will not adversely affect any publicly owned parks or places included in the "National Register of Historic Places," administered by the national parks service, U.S. department of the interior, except as provided for in paragraph (A)(3) of rule 1501:13-3-03 of the Administrative Code. The website for the "National Register of Historic Places" for Ohio sites is <http://www.nationalregisterofhistoricplaces.com/oh/state.html>;
- (6) For operations involving the mining of coal where the private mineral estate to be mined has been severed from the private surface estate and surface disturbance will result from the applicant's proposed use of a surface mining method, the applicant has submitted to the chief the documentation required under paragraph (D)(2) of rule 1501:13-4-03 of the Administrative Code;

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- (7) The applicant has either:
- (a) Submitted the proof required by paragraph (D)(4)(a) of this rule; or
 - (b) Made the demonstration required by paragraph (D)(4)(b) of this rule;
- (8) The applicant has submitted proof, by affidavit and supporting documentation, that all reclamation fees from previous and existing operations as required by Subchapter R of Chapter VII of Title 30 of the Federal Code of Regulations have been paid;
- (9) The coal mining and reclamation operations to be performed under the permit will not be inconsistent with other such operations anticipated to be performed during the same permit term in areas adjacent to the proposed permit area;
- (10) The applicant will submit the performance security required under Chapter 1513. of the Revised Code and these rules prior to the issuance of the permit;
- (11) The applicant has, with respect to prime farmland, obtained either a negative determination or satisfied the requirements of paragraph (F) of rule 1501:13-4-12 of the Administrative Code;
- (12) The proposed postmining land use of the permit area has been approved by the chief in accordance with the requirements of rule 1501:13-9-17 of the Administrative Code;
- (13) The chief has made all specific approvals required under these rules;
- (14) The operations are not likely to jeopardize the continued existence of endangered or threatened species or are not likely to result in the destruction or adverse modification of their critical habitats as determined under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.);
- (15) The applicant has satisfied the applicable permit requirements for special categories of mining under requirements of rule 1501:13-4-12 of the Administrative Code;
- (16) The chief has taken into account the effect of the proposed permitting action on properties listed on or eligible for listing on the "National Register of Historic Places," as referenced in paragraph (E)(5) of this rule. Some of the ways in which the chief may take into account the effect of the proposed permitting action on such historic resources include, but are not limited to:
- (a) Imposing permit conditions which protect the historic resource;

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- (b) Requiring revision of the proposed operation plan before application approval; and
 - (c) Concluding in a written finding that no protection measures are necessary;
- (17) The applicant has demonstrated that any existing structure will comply with the requirements of paragraph (C) of rule 1501:13-1-01 of the Administrative Code and the applicable performance standards of these rules;
- (18) For a proposed remining operation where the applicant intends to reclaim in accordance with the requirements of paragraph (L)(3) of rule 1501:13-9-14 of the Administrative Code, the site of the operation is a previously mined area as defined in rule 1501:13-1-02 of the Administrative Code; and
- (19) For operations which will include remining areas under paragraph (L) of rule 1501:13-4-12 of the Administrative Code, the application includes:
- (a) Lands eligible for remining;
 - (b) An identification of the potential environmental and safety problems related to prior mining activity which could reasonably be anticipated to occur at the site; and
 - (c) Mitigation plans to sufficiently address these potential environmental and safety problems so that reclamation as required by the applicable requirements of Chapter 1513. of the Revised Code can be accomplished.
- (F) Final compliance review. After an application is approved, but before the permit is issued, the chief shall reconsider his or her decision to approve the application, based on the compliance review required by paragraph (D)(4) of this rule in light of any new information submitted under paragraphs (B)(11) and (C)(5) of rule 1501:13-4-03 of the Administrative Code.
- (G) Conditions of permits: general and right of entry. Each permit issued by the chief shall ensure and contain specific conditions requiring that:
- (1) Except to the extent that the chief otherwise directs in the permit that specific actions be taken, the permittee shall conduct all coal mining and reclamation operations as described in the complete application;
 - (2) The permittee shall allow the authorized representatives of the secretary of the department of the interior, including, but not limited to, inspectors and fee compliance officers, and the chief and his or her authorized representatives, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to:

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- (a) Have the rights of entry provided for in paragraph (B) of rule 1501:13-14-01 of the Administrative Code; and
 - (b) Be accompanied by private persons for the purpose of conducting an inspection in accordance with rule 1501:13-14-01 of the Administrative Code when the inspection is in response to an alleged violation reported to the chief by the private person;
- (3) The permittee shall conduct coal mining and reclamation operations only on those lands specifically designated on the maps submitted under rules 1501:13-4-04, 1501:13-4-05, 1501:13-4-07, 1501:13-4-08, [1501:13-4-08.1](#), 1501:13-4-13 and 1501:13-4-14 of the Administrative Code and approved for the term of the permit and which are subject to the performance security in effect pursuant to Chapter 1501:13-7 of the Administrative Code;
- (4) The permittee shall not operate without adequate performance security coverage in effect at all times; and
- (5) Within thirty days after a cessation order is issued under rule 1501:13-14-02 of the Administrative Code or 30 C.F.R. 843.11, for operations conducted under the permit, except where a stay of the cessation order is granted and remains in effect, the permittee shall submit to the chief the following information, current to the date the cessation order was issued, or notify the chief in writing that there has been no change since the immediately preceding submittal of such information:
- (a) Any new information needed to correct or update the information previously submitted to the chief by the permittee under paragraph (B)(5) of rule 1501:13-4-03 of the Administrative Code; or
 - (b) If not previously submitted, the information required from a permit applicant by paragraph (B)(5) of rule 1501:13-4-03 of the Administrative Code.
- (H) Conditions of permits: environment, public health and safety. Each permit issued by the chief shall ensure and contain specific conditions requiring that:
- (1) The permittee shall take all possible steps to minimize any adverse impacts to the environment or public health and safety resulting from noncompliance with any term or condition of the permit, including, but not limited to:
 - (a) Any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance;
 - (b) Immediate implementation of measures necessary to comply; and

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- (c) Warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance;
 - (2) The permittee shall dispose of solids, sludge, filter backwash, or pollutants removed in the course of treatment or control of waters or emissions to the air in the manner required by Chapter 1513. of the Revised Code and all rules adopted thereunder and which prevents violation of any other applicable state or federal law;
 - (3) The permittee shall conduct his or her operations:
 - (a) In accordance with any measures specified in the permit as necessary to prevent significant, imminent environmental harm to the health and safety of the public; and
 - (b) Utilizing any methods specified in the permit by the chief in approving alternative methods of compliance with the performance standards of Chapter 1513. of the Revised Code and all rules adopted thereunder;
 - (4) As applicable, the permittee shall comply with paragraph (C) of rule 1501:13-1-01 of the Administrative Code and with the permanent or interim program requirements of these rules for compliance, modification, or abandonment of existing structures; and
 - (5) The permittee shall pay all reclamation fees, as required by Subchapter R of Chapter VII of Title 30 of the Federal Code of Regulations for coal produced under the permit for sale, transfer or use.
- (I) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.

Draft Rule 1501:13-6-03, dated 10/2/2013.

This is a summary of the changes made to this rule.

(F)(2)(c). Revised the references to cross section maps and plans, since these are being moved to rules 1501:13-4-08 and 1501:13-4-08.1

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10/2/2013 Rule references in (F)(2)(c) changed because mapping provisions are now in 1501:13-4-08 and 1501:13-4-08.1

1501:13-6-03 Small operator assistance program.

(A) General.

- (1) The small operator assistance program (S.O.A.P.) governs the procedures for providing financial assistance to qualified small mine operators who request assistance under division (B)(3) of section 1513.07 of the Revised Code for:
 - (a) The determination of the probable hydrologic consequences of mining and reclamation under division (B)(1)(k) of section 1513.07 of the Revised Code including the engineering analyses and designs necessary for the determination;
 - (b) The geologic drilling and statement of the results of physical and chemical analyses of test borings or core samples required under division (B)(1)(o) of section 1513.07 of the Revised Code;
 - (c) The development of cross-section maps and plans required under division (B)(1)(n)(i) of section 1513.07 of the Revised Code;
 - (d) The collection of archaeological information required under division (B)(1)(m) of section 1513.07 of the Revised Code and any other archaeological and historical information required by the chief, and the preparation of plans necessitated thereby;
 - (e) Pre-blast surveys required under division (E) of section 1513.161 of the Revised Code; and
 - (f) The collection of site-specific resource information and production of protection and enhancement plans for fish and wildlife habitats and other environmental values required by the chief under Chapter 1513. of the Revised Code.
- (2) The objective of this rule is to meet the intent of division (B)(3) of section 1513.07 of the Revised Code by providing financial assistance to qualified small operators.
- (3) The chief shall provide financial assistance under division (B)(3) of section 1513.07 of the Revised Code to the extent funds are appropriated by congress specifically for this program.
- (4) The chief shall:
 - (a) Review requests for financial assistance and determine eligible applicants;
 - (b) Develop and maintain a list of qualified laboratories;
 - (c) Select and pay laboratories, or reimburse eligible applicants for paying laboratories that have been selected by the division of mineral resources management for services rendered; and
 - (d) Conduct periodic on-site evaluations of the program activities with the appropriate small operator and laboratories.
- (5) The chief shall develop policies and procedures for:
 - (a) Data acquisition, analysis and interpretation;

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(b) Model contract stipulations; and

(c) Qualification of labs.

(6) The chief shall ensure that applicable equal opportunity in employment provisions are included within any contract or other procurement documents.

(B) Program services. To the extent possible with available funds, the chief shall, for eligible small operators who request financial assistance, select and pay a qualified laboratory or reimburse an eligible operator to hire a qualified laboratory selected by the division of mineral resources management to provide those services requested and eligible under paragraph (A) of this rule.

(C) Eligibility for assistance.

(1) An applicant is eligible for assistance if he or she:

(a) Intends to apply for a permit pursuant to Chapter 1513. of the Revised Code; and

(b) Establishes that his or her probable total actual and attributed annual production from all locations during any consecutive twelve-month period either during the term of his or her permit or during the first five years after issuance of his or her permit, whichever period is shorter, will not exceed three hundred thousand tons.

(2) In determining an applicant's eligibility his or her production figures will be verified by referencing production figures on file at the Ohio department of taxation and the Ohio department of natural resources. Production from the following operations shall be attributed to the permittee:

(a) The pro rata share, based upon percentage of ownership of applicant, of coal produced by operations in which the applicant owns ten per cent or more interest;

(b) The pro rata share, based upon percentage of ownership of applicant, of coal produced in other operations by persons who own ten per cent or more of the applicant's operation;

(c) All coal produced by operations owned by persons who directly or indirectly control the applicant by reason of direction of the management; and

(d) All coal produced by operations owned by members of the applicant's family and the applicant's relatives, unless it is established that there is no direct or indirect business relationship between or among them.

(3) An applicant is not eligible if he or she organizes or reorganizes his or her company solely for the purpose of obtaining assistance under this rule.

(D) Filing for assistance. Each applicant shall submit the following information to the chief:

(1) A statement of intent to file a permit application;

(2) The names, addresses and telephone numbers of:

(a) The potential permit applicant; and

(b) The potential operator if different from the applicant;

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- (3) The business structure of the applicant, i.e., sole proprietorship, partnership, etc.;
 - (4) Applicant's three most recent "out of state" permits, if any;
 - (5) A schedule of the estimated total production of coal from the proposed permit area and all other locations from which production is attributed to the applicant under paragraph (C) of this rule. The schedule shall include for each location:
 - (a) The name under which coal is or will be mined and severance tax account number of any other company from which production is attributed to the applicant;
 - (b) The permit number and mine safety and health administration identification number;
 - (c) The actual coal production for the year preceding the application for assistance and that portion of the production attributed to the applicant; and
 - (d) The estimated coal production for each year of the proposed permit and that portion attributed to the applicant;
 - (6) The federal tax identification number of the applicant;
 - (7) A statement of the anticipated starting and termination dates of the proposed mining operations;
 - (8) A description of the method of coal mining operation proposed and the number of acres to be affected by the proposed mining;
 - (9) A topographic map on a scale as required by rule 1501:13-4-09 of the Administrative Code which shows:
 - (a) The area of land to be permitted;
 - (b) The adjacent area;
 - (c) The location of any existing or proposed test borings;
 - (d) The location and extent of known workings of any underground mines; and
 - (e) Any additional information required by the chief;
 - (10) Copies of documents showing that:
 - (a) The applicant has a legal right to enter and commence mining within the permit area; and
 - (b) A legal right of entry has been obtained for the office of surface mining, the chief and his or her authorized representatives, and laboratory personnel to inspect the lands which may be affected to collect environmental data or install necessary instruments; and
 - (11) A general statement on the probable depth and thickness of the coal resource including a statement of reserves in the permit area and the method by which they were calculated.
- (E) Application approval and notice.
- (1) If the chief finds the applicant eligible, and he or she does not have information readily available which would preclude issuance of a permit to the applicant for mining in the area proposed, he or she shall

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provide for the acquisition of the necessary information by qualified laboratories to fulfill the data requirements of paragraph (F) of this rule.

- (2) If the chief finds the applicant eligible, the chief shall inform the applicant in writing that the application is approved. If the chief finds the applicant ineligible, the chief shall inform the applicant in writing that the application is denied and shall state the reasons for denial.
- (3) The granting of assistance under this part shall not be a factor in decisions by the chief on a subsequent permit application.

(F) Data requirements.

- (1) The chief shall determine the data collection requirements for each applicant or group of applicants. Data collection and analysis may proceed concurrently with the development of mining and reclamation plans by the applicant. The data requirements will be based on:
 - (a) The extent of currently available hydrologic and overburden analysis data for the applicable area provided by the division of mineral resources management; and
 - (b) The data collection and analysis guidelines developed and provided by the chief.
- (2) The data, results, analyses, and statements provided to the chief shall be sufficient to satisfy the requirements for:
 - (a) The determination of the probable hydrologic consequences of the mining and reclamation operations on the proposed permit area and adjacent areas, including the engineering analyses and designs necessary for the determination, shall be made by a qualified laboratory. The data for this determination shall include that information required by division (B)(1)(k) of section 1513.07 of the Revised Code and paragraph (E)(2) of rule 1501:13-4-05 or paragraph (E)(2) of rule 1501:13-4-14 of the Administrative Code;
 - (b) The drilling and statement, by a qualified laboratory, of the result of test borings or core samplings from the proposed permit area, including that information required by division (B)(1)(o) of section 1513.07 of the Revised Code and paragraphs (C)(2) and (C)(3) of rule 1501:13-4-04 or paragraph (C)(2) of rule 1501:13-4-13 of the Administrative Code, unless this requirement is waived as provided by division (B)(1)(o) of section 1513.07 of the Revised Code;
 - (c) The development of cross-section maps and plans required by division (B)(1)(n)(i) of section 1513.07 of the Revised Code and paragraph ~~(K)(B)~~ of rule ~~1501:13-4-04~~[1501:13-4-08](#) or paragraph ~~(K)(B)~~ of rule ~~1501:13-4-13~~[1501:13-4-08.1](#) of the Administrative Code;
 - (d) The collection of archeological information required under division (B)(1)(m) of section 1513.07 of the Revised Code and paragraph (A) of rule 1501:13-4-04 or paragraph (A) of rule 1501:13-4-13 of the Administrative Code, any other archaeological and historical information required by the chief, and the preparation of plans necessitated thereby;
 - (e) Pre-blast surveys required under division (E) of section 1513.161 of the Revised Code and paragraph (C) of rule 1501:13-9-06 of the Administrative Code; and
 - (f) The collection of site-specific resource information and production of protection and enhancement plans for fish and wildlife habitats and other environmental values required by the chief under

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Chapter 1513. of the Revised Code and paragraph (P) of rule 1501:13-4-05 or paragraph (R) of rule 1501:13-4-14 of the Administrative Code.

- (3) Data availability. Data collected under this program shall be made available to all interested persons, except information related to the chemical and physical properties of coal. Information regarding the mineral or elemental content of the coal which is potentially toxic in the environment shall be made available. The program administrator shall develop procedures for interstate coordination and exchange of data.

(G) Qualified laboratories.

(1) General.

- (a) As used in this rule, "qualified laboratory" means a designated public agency, private consulting firm, institution, or analytical laboratory which can provide services for the required determination or statement under the S.O.A.P. program.
- (b) The chief shall establish a list of qualified laboratories which may be used under the procedures of this rule.
- (c) Persons who desire to be included in the list of qualified laboratories shall apply to the division of mineral resources management and provide such information as is necessary to establish the qualifications required by paragraph (G)(2) of this rule.

(2) Basic qualifications.

- (a) To qualify for designation, the laboratory shall demonstrate that it:
- (i) Is staffed with experienced, professional or technical personnel in the fields applicable to the work to be performed;
 - (ii) Has adequate space for material preparation and cleaning and sterilizing equipment, and has stationary equipment, storage, and space to accommodate periods of peak work loads;
 - (iii) Meets the requirements for the Occupational Safety and Health Act, 29 U.S.C. 651 et seq., as amended, or the equivalent state safety and health program;
 - (iv) Has analytical, monitoring and measuring equipment capable of meeting applicable standards and methods;
 - (v) Is capable of making hydrologic field measurements and analytical laboratory determinations by acceptable hydrologic, geologic or analytical methods in accordance with the requirements of these rules. Methods or guidelines for data acquisition recommended by the chief may also be used; and
 - (vi) Is capable of collecting necessary field data and samples in accordance with the requirements of these rules.
- (b) The qualified laboratory shall be capable of performing services for either the determination(s) or statement(s) under paragraph (F)(2) of this rule.

- (3) Subcontractors. Subcontractors may be used to provide some of the required services under this rule,

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provided their use is identified at the time a determination is made that a firm is qualified and they meet the requirements specified by the chief.

(H) Assistance funding.

- (1) Use of funds. Funds specifically authorized to cover payments for services rendered by qualified laboratories under this program shall not be used to cover state administrative costs. In addition to the basic services authorized under paragraph (A)(1) of this rule the following costs are allowed under payments to qualified laboratories or eligible small operators provided that on a case-by-case basis the information is determined necessary to complete the determination and statement required under divisions (B)(1)(k) and (B)(1)(o) of section 1513.07 of the Revised Code:
 - (a) Observation well drilling and development for ground water monitoring;
 - (b) Water availability information;
 - (c) Soils information;
 - (d) Land use information; and
 - (e) Necessary maps, charts and diagrams.
- (2) Allocation of funds. The chief shall, to the extent practicable, establish procedures for allocating funds to provide services for eligible small operators if available funds are less than those required to provide the services pursuant to this rule.

(I) Applicant liability.

- (1) The applicant shall reimburse the division of mineral resources management for the cost of the services performed pursuant to this rule if the applicant:
 - (a) Submits false information;
 - (b) Fails to submit a permit application within one year from the date of receipt of the approved laboratory report;
 - (c) Fails to mine after obtaining a permit;
 - (d) Produces, from actual and attributed production, more than three hundred thousand tons for all locations during any consecutive twelve-month period of mining either during the term of the permit for which the assistance is provided or during the first five years after issuance of the permit, whichever is shorter; or
 - (e) Sells, transfers, or assigns the permit to another person and the transferee's total actual and attributed production exceeds the three-hundred-thousand-ton annual production limit during any consecutive twelve-month period of the remaining term of the permit. Under this paragraph, the applicant and its successor are jointly and severally obligated to reimburse the division of mineral resources management.
- (2) The chief may waive the reimbursement obligation if he or she finds that the applicant at all times acted in good faith.

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

Draft Rule 1501:13-9-01, dated 10/16/2014

This is a summary of the changes made to this rule.

(C)(1). Phrase "but shall not be limited to" proposed to be removed.

(C)(2). Sentence reworded for clarity.

(C)(3) to (5). Conjunctions and punctuation corrected.

(E). Buffer zone marking requirements clarified and a reference to the stream buffer zone provisions of rule 1501:13-9-04 added.

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Dated 10-16-2014

1501:13-9-01 Signs and markers

- (A) All signs and markers required to be posted shall be of uniform design throughout the operation, easily visible, and shall be made of durable material. The signs and markers shall be maintained during all operations to which they pertain and shall conform to local ordinances and codes.
- (B) Signs identifying the mine area shall be displayed at all points of access to the permit area from public roads. Signs shall clearly show the name, business address, and telephone number of the permittee and the permit number issued by the division of mineral resources management. Such signs shall not be removed until after release of all performance security.
- (C) An applicant shall define the perimeter of the proposed permit area by means of clearly visible markers prior to filing an application for a permit. Such markers shall substantially comply with the following:
- (1) Markers shall include, ~~but shall not be limited to,~~ fence posts, trees, engineering lath or stakes;
 - (2) ~~Markers~~The proposed permit boundary shall be ~~either~~ marked either with six inches of orange paint, or ~~marked~~ with an orange plastic flag, approximately three feet above the ground;
 - (3) Each marker shall be firmly placed with at least three feet extending above ground; ~~and~~
 - (4) Markers shall be located so that they clearly define the limits of the proposed permit area and so that when a person is standing at any marker on the proposed permit boundary, the adjacent markers in either direction are visible;
 - (5) All perimeter markers shall be maintained with reasonable diligence in place until final grading is approved; ~~and~~
 - (6) This rule does not apply to that portion of any perimeter which overlaps or is contiguous to an area currently permitted to the same operator.
- (D) Where topsoil or other vegetation-supporting material is segregated and stockpiled according to rule 1501:13-9-03 of the Administrative Code, the stockpiled material shall be marked. Markers shall remain in place until the material is removed.
- (E) Buffer zones, as described in paragraph (E) of rule 1501:13-9-04 of the Administrative Code, shall be clearly marked along their boundaries as required by ~~paragraph~~paragraphs (C)(1), (C)(3) and (C)(5) of this rule. Buffer zones shall be marked either with six inches of orange paint with black stripes or with an orange and black striped plastic flag, approximately three feet above the ground. Markers shall be located so that they clearly define the limits of the buffer zone and so that when a person is standing at any marker on the buffer zone boundary, the adjacent buffer zone markers in either direction are visible.

Draft Rule 1501:13-11-02, dated 5/28/2014.

This is a summary of the changes made to this rule.

(A). Rule references changes to 1501:13-4-08 and 1501:13-4-08.1 because the mapping requirements of rules 1501:13-4-04 and 1501:13-4-13 are proposed to be moved to those rules.

(C). Paragraph amended to require that coal mining operations minimize damage, destruction, or disruption of services provided by oil, gas, and water wells, and by water and sewage lines, to mirror the requirements of 30 CFR 816.180. Paragraph also amended to include telephone "and other telecommunication lines."

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Dated 5/28/2014

1501:13-11-02 **Support facilities and utility installations.**

- (A) Each applicant for a coal mining and reclamation permit shall submit a description, plans and drawings for each support facility to be constructed, used or maintained within the proposed permit area, in addition to mapping of certain support facilities; as required in ~~paragraphs (J)(30) to (J)(36) of rules 1501:13-4-04 and 1501:13-4-13-~~ paragraphs (A)(30) to (A)(36) of rule 1501:13-4-08 of the Administrative Code and paragraph (A)(23) of rule 1501:13-4-08.1 of the Administrative Code, submittal of narrative explanations and descriptions as required in paragraphs (A)(2)(b) and (B)(1)(d) of rules 1501:13-4-05 and 1501:13-4-14 of the Administrative Code, and submittal of descriptions, including maps and cross-sections, as required in paragraph (M) of rule 1501:13-4-05 of the Administrative Code and paragraph (L) of rule 1501:13-4-14 of the Administrative Code. The plans and drawings shall include a map, appropriate cross sections, design drawings, and specifications sufficient to demonstrate compliance with paragraph (B) of this rule.
- (B) Support facilities required for, or used incidentally to, the operation of the mine, including, but not limited to, mine buildings, coal loading facilities at or near the minesite, coal storage facilities, equipment storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops, and other buildings, shall be designed, constructed or reconstructed and located to prevent or control erosion and siltation, water pollution, and damage to public or private property. Support facilities shall be designed, constructed or reconstructed, maintained and used in a manner which prevents, to the extent possible using the best technology currently available:
- (1) Damage to fish, wildlife, and related environmental values;
 - (2) Additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of state or federal law.
- (C) All coal mining operations shall be conducted in a manner which minimizes damage, destruction, or disruption of services provided by oil, gas, and water wells, oil, gas, and coal-slurry pipelines, railroads, electric lines, ~~and~~ telephone and other telecommunication lines, and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the chief.