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REGULATIONS COMPILER

ENERGY AND ENVIRONMENT CABINET

Department for Natural Resources

Division of Mine Permits

(Amendment)

405 KAR 8:040. Underground coal mining permits.

RELATES TO: KRS 350.060, 350.151, 7 C.F.R. Part 657, 30 C.F.R. Parts 77.216-1, 77.216-2, 730-733, 735, 773.13(a), 778, 783, 784, 785.17(b), (d), 917, 40 C.F.R. Parts 136, 434, 16 U.S.C. 1276(a), 1531 et seq., 30 U.S.C. 1253, 1255, 1257, 1258, 1266, 1267

STATUTORY AUTHORITY: KRS 350.020, 350.028, 350.060, 350.151, 350.465, 7 C.F.R. Part 657, 30 C.F.R. Parts 77.216-1, 77.216-2, 730-733, 735, 773.13(a), 778, 783, 784, 785.17(b), (d), 917, 40 C.F.R. Parts 136, 434, 16 U.S.C. 1276(a), 1531 et seq., 30 U.S.C. 1253, 1255, 1257, 1258, 1266, 1267

NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.028(1), (5), 350.151(1), and 350.465(2) authorize the cabinet to promulgate administrative regulations relating to surface and underground coal mining operations. This administrative regulation establishes requirements for the grant of a permit for underground coal mining operations. This administrative regulation differs from the corresponding federal regulations as follows:

(1) Section 16 of this administrative regulation requires information on alternative sources of water supply if the applicant's determination of probable hydrologic consequences under Section 32 of this administrative regulation finds that water supplies may be adversely affected. There is no exact federal counterpart to this requirement for alternative water supply information for

underground mines, although a close parallel is found in the subsidence control plan requirements at 30 CFR 784.20(b)(8), which require a description of measures to be taken to replace adversely affected protected water supplies. This administrative regulation makes underground mines and surface mines subject to the same requirements regarding water supply replacement, consistent with KRS 350.421 as amended in 1994.

(2) Section 26(1) of this administrative regulation requires that the application contain an example of the letter by which the applicant proposes to notify the owners of structures for which a presubsidence condition survey is required under 405 KAR 18:210, Section 1(4). The corresponding federal regulation does not require a sample letter. The federal regulations are structured so that these presubsidence surveys must be included in the permit application prior to permit issuance. The cabinet's administrative regulations allow the detailed surveys of structures to be submitted after permit issuance. The example letter is needed in the permit application to ensure that the applicant is prepared to provide proper notice to owners of structures after permit issuance.

(3) Section 26 of this administrative regulation does not include the requirement at 30 CFR 784.20(a)(3) for detailed surveys of the presubsidence condition of structures that may be damaged by subsidence. These surveys may be submitted after permit issuance, and therefore are required under 405 KAR 18:210 rather than this administrative regulation.

(4) Section 26 of this administrative regulation applies to water supplies for "domestic, agricultural, industrial, or other legitimate use", whereas the corresponding federal regulation is limited to "drinking, domestic, or residential" water supplies. This administrative regulation applies to water supplies protected under KRS 350.421, whereas the federal regulation applies to water supplies protected under 30 USC 1309a.

(5) Section 32(3)(e) of this administrative regulation requires that the applicant's determination of probable hydrologic consequences shall include a finding on whether the proposed underground mining activities conducted after July 16, 1994 may proximately result in contamination, diminution, or interruption of an underground or surface source of water for domestic, agricultural, industrial, or other legitimate use within the permit area or adjacent areas at the time the application is submitted. The corresponding federal requirement at 30 CFR 784.14(e)(3)(iv) applies to underground mining activities conducted after October 24, 1992 and wells or springs used for domestic, drinking, or residential use. This administrative regulation addresses water supplies protected under KRS 350.421, as amended July 16, 1994. The federal regulation addresses water supplies protected under 30 USC 1309a, effective October 24, 1992.

(6) Section 34(3) and (5) of this administrative regulation require that the following be submitted to the cabinet after approval by the Mine Safety and Health Administration (MSHA):

(a) A copy of the final approved design plans for impounding structures;

(b) A copy of all correspondence with MSHA;

(c) A copy of technical support documents requested by MSHA;

(d) A notarized statement by the applicant that the copy submitted to the cabinet is a complete and correct copy of the final plan approved by MSHA. These requirements are necessary to minimize duplication of technical review by MSHA and the cabinet, and to minimize conflicts that may arise from duplication of review.

Section 1. General. (1) Applicability.

(a) This administrative regulation applies to any person who applies for a permit to conduct underground mining activities.

(b) The requirements set forth in this administrative regulation specifically for applications for permits to conduct underground mining activities, are in addition to the requirements applicable to all applications for permits to conduct surface coal mining and reclamation operations as set forth in 405 KAR 8:010.

(c) This administrative regulation sets forth information required to be contained in applications for permits to conduct underground mining activities, including:

1. Legal, financial, compliance, and related information;

2. Environmental resources information; and

3. Mining and reclamation plan information.

(2) The permit applicant shall provide to the cabinet in the application all the information required by this administrative regulation.

Section 2. Identification of Interests. An application shall contain the following information, except that the submission of a Social Security number is voluntary:

(1) A statement as to whether the applicant is a corporation, partnership, single proprietorship, association, or other business entity;

(2) The name, address, telephone number and, as applicable, Social Security number and employer identification number of the:

(a) Applicant;

(b) Applicant's resident agent; and

(c) Person who will pay the abandoned mine land reclamation fee.

(3) For each person who owns or controls the applicant:

(a) The person's name, address, Social Security number, and 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, date position was assumed, and when submitted under 405 KAR 8:010, Section 18(5) date of departure from the position;

(d) Each additional name and identifying number, including employer identification number, federal or state permit number, and MSHA number with date of issuance, under which the person owns or controls, or previously owned or controlled, a surface coal mining and reclamation operation in the United States within the five (5) years preceding the date of the application; and

(e) The application number or other identifier of, and the regulatory authority for, any other pending surface coal mining operation permit application filed by the person in any state in the United States.

(4) For any surface coal mining operation owned or controlled by either the applicant or by any person who owns or controls the applicant, the operation's:

(a) Name, address, identifying numbers, including employer identification number, federal or state permit number, and MSHA number, the date of issuance of the MSHA number, and the regulatory authority; and

(b) Ownership or control relationship to the applicant, including percentage of ownership and location in organizational structure.

(5) 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 coal 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.

(6) The names and addresses of the owners of record of all surface and subsurface areas contiguous to any part of the proposed permit area.

(7) The name of the proposed mine and all MSHA identification numbers that have been assigned for the mine and all mine associated structures that require MSHA approval.

(8) Proof, such as a power of attorney or resolution of the board of directors, that the individual signing the application has the power to represent the applicant in the permit matter.

(9) 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.

(10) After an applicant has been notified that his or her application has been 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 subsections (1) through (4) of this section.

(11) The permittee shall, in writing, inform the cabinet of any change of the permittee's address immediately if changed at any point prior to final bond release.

(12) The permittee shall submit updates of the following information in writing to the cabinet within thirty (30) days of the effective date of any change. Updates shall be submitted for any changes that occur at any point prior to final bond release. Failure to submit updated

information shall constitute a violation of KRS Chapter 350 only upon the permittee's refusal or failure to timely submit, as determined by the cabinet, the information to the cabinet upon request. After the permittee's refusal or failure to timely submit the information to the cabinet upon request, the cabinet may suspend the permit after opportunity for hearing pending compliance with this subsection:

(a) The names and addresses of every officer, partner, director, or person performing a function similar to a director of the permittee;

(b) The names and addresses of principal shareholders; and

(c) Whether the permittee or other persons specified in this subsection are subject to any of the provisions of KRS 350.130(3).

Section 3. Violation Information. Each application shall contain the following information:

(1) A statement of whether the applicant or any subsidiary, affiliate, or persons controlled by or under common control with the applicant has:

(a) Had a coal mining permit of the United States or any state suspended or revoked in the five (5) years preceding the date of submission of the application; or

(b) Forfeited a coal mining performance bond or similar security deposited in lieu of bond.

(2) If any suspension, revocation, or forfeiture, as described in subsection (1) of this section, has occurred, the application shall contain a statement of the facts involved, including:

(a) Identification number and date of issuance of the permit, and date and amount of bond or similar security;

(b) Identification of the authority that suspended or revoked the permit or forfeited the bond and the stated reasons for that action;

(c) The current status of the permit, bond, or similar security involved;

(d) The date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation, or forfeiture; and

(e) The current status of these proceedings.

(3) For any violation of a provision of SMCRA, federal regulations enacted pursuant to SMCRA, KRS Chapter 350 and administrative regulations adopted pursuant thereto, any other state's laws or regulations under SMCRA, any federal law, rule, or regulation pertaining to air or water environmental protection, or any Kentucky or other state's law, rule, or regulation enacted pursuant to federal law, rule, or regulation pertaining to air or water environmental protection incurred in connection with any surface coal mining operation, a list of all violation notices received by the applicant during the three (3) year period preceding the application date, and a list of all unabated cessation orders and unabated air and water quality violation notices received prior to the date of the application by any surface coal mining and reclamation operation owned or controlled by either the applicant or by any person who owns or controls the applicant. For each violation notice or cessation order reported, the lists shall include the following information, as applicable:

(a) Any identifying numbers for the operation, including the federal or state permit number and MSHA number, the dates of issuance of the violation notice and MSHA number, the name of the person to whom the violation notice was issued, and the name of the issuing regulatory authority, department, or agency;

(b) A brief description of the particular violation alleged in the notice;

(c) The final resolution of each violation notice, if any;

(d) For each violation notice that has not been finally resolved:

1. The date, location, and type of any administrative or judicial proceedings initiated concerning the violation, including proceedings initiated by any person identified in this subsection to obtain administrative or judicial review of the violation; and

2. The current status of the proceedings and of the violation notice; and

3. The actions, if any, taken or being taken by any person identified in this subsection to abate the violation.

(4) After an applicant has been notified that his or her application has been 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 subsections (1) through (3) of this section.

(5) Upon request by a small operator the cabinet shall provide to the small operator, with regard to persons under subsection (1) of this section which are identified by the small operator, the compliance information required by this section regarding suspension and revocation of permits and forfeiture of bonds under KRS Chapter 350, and information pertaining to violations of KRS Chapter 350 and administrative regulations promulgated thereunder.

Section 4. Right of Entry and Right to Mine. (1) Each application shall contain a description of the documents upon which the applicant bases his or her legal right to enter and begin underground mining activities in the permit area 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) For underground mining activities where the associated surface operations involve the surface mining of coal and the private mineral estate to be mined has been severed from the private

surface estate, the application shall contain, for lands to be affected by those operations within the permit area:

(a) A copy of the written consent of the surface owner for the extraction of coal by surface mining methods; [~~or~~]

(b) A copy of the conveyance that expressly grants or reserves the right to extract coal by surface mining methods; or

(c) If the conveyance does not expressly grant the right to extract the coal by surface mining methods, the surface-subsurface legal relationship shall be determined in accordance with applicable state law, provided that nothing in this administrative regulation shall be construed to authorize the regulatory authority to adjudicate property rights disputes. [~~a copy of the original instrument of severance upon which the applicant bases his right to extract coal by surface mining methods and documentation that under applicable state law, the applicant has the legal authority to extract the coal by those methods.~~]

Section 5. Relationship to Areas Designated Unsuitable for Mining. (1) Each application shall contain a statement of available information on whether the proposed permit area is within an area designated unsuitable for underground mining activities under 405 KAR Chapter 24, or designated unsuitable for surface mining activities if the proposed underground mining activities also involve surface mining of coal, or under study for designation in an administrative proceeding initiated under that chapter.

(2) If an applicant claims the exemption in 405 KAR 8:010, Section 14(4)(b), 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 underground mining activities.

(3) If an applicant proposes to conduct or locate surface operations or facilities within 300 feet of an occupied dwelling, the application shall include the waiver of the owner of the dwelling as required in 405 KAR 24:040, Section 2(5).

(4) If the applicant proposes to conduct or locate surface operations or facilities within 100 feet of a public road, the requirements of 405 KAR 24:040, Section 2(6) shall be met.

Section 6. Permit Term Information. (1) Each application shall state the anticipated or actual starting and termination date of each phase of the underground mining activities and the anticipated number of acres of surface lands to be affected, and the horizontal and vertical extent of proposed underground mine workings including the surface acreage overlying the underground workings, for each phase of mining and over the total life of the permit.

(2) If the applicant proposes to conduct the underground mining activities in excess of five (5) years, the application shall contain the information needed for the showing required under 405 KAR 8:010, Section 17(1).

Section 7. Personal Injury and Property Damage Insurance Information. Each application shall contain a certificate of liability insurance according to 405 KAR 10:030, Section 4.

Section 8. Identification of Other Licenses and Permits. Each application shall contain a list of all other licenses and permits needed by the applicant to conduct the proposed underground mining activities. This list shall identify each license and permit by:

(1) Type of permit or license;

(2) Name and address of issuing authority;

(3) Identification numbers of applications for those permits or licenses or, if issued, the identification numbers of the permits or licenses; and

(4) If a decision has been made, the date of approval or disapproval by each issuing authority.

Section 9. Identification of Location of Public Office for Filing of Application. Each application shall identify, by name and address, the appropriate regional office of the cabinet where the applicant will file a copy of the entire application for public inspection under 405 KAR 8:010, Section 8(8).

Section 10. Newspaper Advertisement and Proof of Publication. A copy of the newspaper advertisement of the application for a permit, major revision, amendment, transfer, or renewal of a permit and proof of publication of the advertisement, which is acceptable to the cabinet, shall be filed with the cabinet and made a part of the application not later than fifteen (15) days after the last date of publication required under 405 KAR 8:010, Section 8(2).

Section 11. Environmental Resource Information. (1) Each permit application shall include a description of the existing environmental resources either within the areas affected by proposed surface operations and facilities, or within the proposed permit area and adjacent areas, as required by Sections 11 through 23 of this administrative regulation. The descriptions required by this administrative regulation may, where appropriate, be based upon published texts or other public documents together with reasonable extrapolations from specific data available from existing permit areas or other appropriate areas.

(2)(a) Each application shall describe and identify the nature of cultural, historic, and archaeological resources listed or eligible for listing on the National Register of Historic Places and known archaeological sites within the proposed permit area and adjacent areas. The description shall be based on all available information, including information from the state Historic Preservation Officer and from local archaeological, historical, and cultural preservation agencies.

(b) The cabinet may require the applicant to identify and evaluate important historic and archaeological resources that may be eligible for listing on the National Register of Historic Places, through collection of additional information, field investigations, or other appropriate analyses.

Section 12. General Requirements for Baseline Geologic and Hydrologic Information. (1) The application shall contain baseline geologic and hydrologic information which has been collected, analyzed, and submitted in the detail and manner acceptable to the cabinet, and which shall be sufficient to:

(a) Identify and describe protective measures pursuant to Section 32(1) of this administrative regulation which will be implemented during the mining and reclamation process to assure protection of the hydrologic balance, or to demonstrate that protection of the hydrologic balance can be assured without the design and installation of protective measures; and to design necessary protective measures pursuant to Section 32(2) of this administrative regulation.

(b) Determine the probable hydrologic consequences of the mining and reclamation operations upon the hydrologic balance in the permit area and adjacent area pursuant to Section 32(3) of this administrative regulation so that an assessment can be made by the cabinet pursuant to 405 KAR 8:010, Section 14(3) of the probable cumulative impacts of all anticipated mining on the hydrologic balance in the cumulative impact area;

(c) Determine pursuant to 405 KAR 8:010, Section 14(2) and (3) whether reclamation as required by 405 KAR can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance; and

(d) Design surface and groundwater monitoring systems pursuant to Section 32(4) of this administrative regulation for the during-mining and postmining time period which, together with the baseline data collected under Sections 14(1) and 15(1) of this administrative regulation, will

demonstrate whether the mining operation is meeting applicable effluent limitations and stream standards and protecting the hydrologic balance.

(2)(a) Geologic and hydrologic information pertaining to the area outside the permit and adjacent area but within the cumulative impact assessment area shall be provided to the applicant by the cabinet:

1. If this information is needed in preparing the cumulative impact assessment; and

2. If this information is available from an appropriate federal or state agency.

(b) If this information is needed by the cabinet for conducting the cumulative impact assessment and is not available from a federal or state agency, the applicant may gather and submit this information to the cabinet as part of the permit application.

(3) Interpolation, modeling, correlation or other statistical methods, and other data extrapolation techniques may be used if the applicant can demonstrate to the satisfaction of the cabinet that the data extrapolation techniques are valid and that information obtained through the techniques meets the requirements of subsection (1) of this section.

(4) All water quality analyses performed to meet the requirements of this chapter shall be conducted according to the methodology in the fourteenth edition of "Standard Methods for the Examination of Water and Wastewater," or the methodology in 40 CFR Parts 136 and 434. All water quality sampling shall be conducted according to either methodology listed above when feasible.

Section 13. Baseline Geologic Information. (1) The application shall contain baseline geologic information collected from the permit area which shall meet the requirements of Section 12(1) of this administrative regulation and shall include at a minimum:

(a) The results of samples obtained from continuous cores; drill cuttings; channel cuttings from fresh, unweathered, rock outcrops; or other rock or soil material which has been collected using acceptable sampling techniques.

1. For those areas where overburden will be removed, the vertical extent of sampling shall include those strata from the surface down to and including the stratum immediately below the lowest coal seam to be mined; and

2. For those areas overlying underground workings where overburden will not be removed, the vertical extent of sampling shall include those strata above and below the coal seam to be mined which may be impacted by the mining operation.

3. Where aquifers within the permit area are located above or below the coal seam to be mined and these aquifers may be adversely affected by the mining operation, the vertical extent of sampling shall also include the aquifer and those strata which lie between the coal seam and the aquifer.

4. The areal and vertical density of sampling shall, at a minimum, be sufficient to determine the distribution of strata which have a potential to produce acid drainage and to determine the areal and vertical extent of aquifers which may be adversely affected.

5. If the vertical extent, and the areal and vertical density of sampling specified in subparagraphs 1 through 4 of this paragraph are not sufficient to locate suitable strata for use as a topsoil substitute, to determine the potential for subsidence, or for other required design or analysis, additional sampling shall be conducted as necessary to furnish adequate geologic information.

(b)1. To identify strata which have a potential to produce acid or toxic drainage for areas where overburden will be removed, chemical analyses including, but not limited to, maximum

potential acidity and neutralization potential of each overburden stratum and the stratum immediately below the lowest coal seam to be mined; and

2. To identify strata which have a potential to produce acid or toxic drainage for areas overlying underground workings where overburden will not be removed, chemical analyses including maximum potential acidity and neutralization potential of the strata immediately above and below the coal seam to be mined.

(c) Chemical analyses of the coal seam to be mined to determine the potential to produce acid or toxic drainage, including the parameters of total sulfur and pyritic sulfur; except that the cabinet shall not require an analysis for pyritic sulfur if the applicant can demonstrate to the satisfaction of the cabinet that an analysis for total sulfur provides adequate information to assure protection of the hydrologic balance.

(d) For standard room and pillar mining operations, the engineering properties of clays or soft rock such as clay shale, if any, located immediately above and below each coal seam to be mined.

(e) Collection of geologic information from the permit area as required in this subsection may be waived in whole or in part if:

1. The applicant can demonstrate to the satisfaction of the cabinet through geologic correlation or other procedures that information collected from outside the permit area is representative of the permit area and is sufficient to meet the requirements of Section 12(1) of this administrative regulation; or

2. Other information equivalent to that required by this subsection is available to the cabinet in a satisfactory form and is made a part of the permit application; and

3. The cabinet provides a written statement granting a waiver.

(2) The application shall contain a description of the geology of the proposed permit area and adjacent area which shall meet the requirements of Section 12(1) of this administrative regulation and be based on the information required in subsection (1) of this section or other appropriate geologic information. The description shall include, at a minimum, geologic logs, cross-sections, fence diagrams, or other appropriate illustrations and written descriptions depicting:

(a) Within the permit area:

1. The structural geology and lithology of overburden strata and the stratum immediately below the lowest coal seam to be mined for those areas where overburden will be removed; and the structural geology and lithology of strata which may be impacted by the mining operation for those areas overlying underground workings where overburden will not be removed.

2. The thickness and chemical characteristics of each overburden stratum and the stratum immediately below the lowest coal seam to be mined for those areas where overburden will be removed; or the thickness and chemical characteristics of each stratum which may be impacted by the mining operation for those areas overlying underground workings where overburden will not be removed.

3. Where aquifers may be adversely affected by the mining operation, the structural geology, lithology, thickness, and areal extent of the aquifers; and structural geology and lithology of strata, and thickness of each stratum, whether located above or below the coal seam to be mined, which lie between the coal seam and the aquifers.

4. For standard room and pillar mining operations, the thickness and engineering properties of clays or soft rock such as clay shale, if any, located immediately above and below each coal seam to be mined.

(b) Within the adjacent area, the approximate areal extent and approximate thickness of aquifers which may be adversely affected by the mining operation.

(3) If determined by the cabinet to be necessary to assure adequate reclamation and protection of the hydrologic balance, the cabinet may require geologic information and description in addition to that required by subsections (1) and (2) of this section including leaching tests of material from strata which may be disturbed by the operation to determine the potential for the operation to produce drainage with elevated levels of acidity, sulfate, and total dissolved solids, and the collection of information to greater depths within the proposed permit area or the collection of information for areas outside the proposed permit area.

Section 14. Baseline Groundwater Information. (1) The application shall contain baseline groundwater information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this administrative regulation.

(2) Groundwater information shall include an inventory of wells, springs, underground mines, or other similar groundwater supply facilities which are currently being used, have been used in the past, or have a potential to be used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall include the location, ownership, type of usage, and where possible, other relevant information such as the depth and diameter of wells and approximate rate of usage, pumpage or discharge from wells, springs, and other groundwater supply facilities.

(3) Groundwater information shall include seasonal groundwater quantity and quality data collected from monitoring wells, springs, underground mines, or other appropriate groundwater monitoring facilities, at a sufficient number of monitoring locations with adequate areal distribution to meet the requirements of Section 12(1) of this administrative regulation. Seasonal

groundwater quantity and quality data shall be provided for each water transmitting zone above, and potentially impacted water transmitting zone below, the lowest coal seam to be mined including at a minimum:

(a) Groundwater levels; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; pH; dissolved iron; dissolved manganese; acidity; alkalinity; and sulfate. For data collected prior to August 13, 1985, total iron and total manganese may be substituted for dissolved iron and dissolved manganese.

(4) The groundwater information described in subsection (3) of this section shall be required in whole or in part for coal seams if the coal seams to be mined are serving as water supply sources or are otherwise significant in protecting the hydrologic balance.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the cabinet may require groundwater information in addition to that described in subsections (2), (3), and (4) of this section including information pertaining to aquifer storage, yield, discharge, recharge capacity, and additional water quality parameters.

Section 15. Baseline Surface Water Information. (1) The application shall contain baseline surface water information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this administrative regulation.

(2) Surface water information shall include an inventory of all streams, lakes, impoundments or other surface water bodies in the permit and adjacent area which are currently being used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall

include the name of the surface water body which is being used as a water supply source; the location, drainage area, ownership, and type of usage for the withdrawal; and where possible other relevant information such as the rate of withdrawal and seasonal variation.

(3) Surface water information shall include:

(a) The name, location, and ownership where appropriate, of all streams, lakes, impoundments, and other surface water bodies which receive run-off from watersheds which will be disturbed by the operation; and

(b) The location and description of any existing facilities located in watersheds which will be disturbed by the mining operation which may contribute to surface water pollution, such as existing or abandoned mining operations, oil wells, logging operations, or other similar facilities, including the location of any discharges which may be flowing from the facilities.

(4) Surface water information shall include seasonal quantity and quality data collected from a sufficient number of watersheds which will be disturbed by the operation with adequate areal distribution to meet the requirements of Section 12(1) of this administrative regulation and include at a minimum:

(a) Flow rates; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; total suspended solids; pH; total iron; total manganese; acidity; alkalinity; and sulfate.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the cabinet may require surface water information in addition to that described in subsections (2), (3), and (4) of this section including information pertaining to flood flows and additional water quality parameters.

Section 16. Alternative Water Supply Information. If the determination of probable hydrologic consequences required under Section 32 of this administrative regulation indicates that the proposed underground mining activities may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit area or adjacent area which is used for domestic, agricultural, industrial, or other legitimate use, then the application shall identify and describe the adequacy and suitability of the alternative sources of water supply that could be developed for existing premining uses and approved postmining land uses.

Section 17. Climatological Information. (1) When requested by the cabinet, 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 cabinet may request additional data as deemed necessary to ensure compliance with the requirements of this chapter.

Section 18. Soil Resources Information. (1) If soil survey information for the proposed permit area is available from SCS, the application shall include this information as a part of the description of premining land use capability and productivity required by Section 22(1)(b) of this administrative regulation.

(2) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of the analyses, trials and tests required under 405 KAR 18:050, Section 2(5).

Section 19. Vegetation Information. (1) The permit application shall, as required by the cabinet, contain a map that delineates existing vegetative types and a description of the plant communities within the area affected by surface operations and facilities and within any proposed reference area. This description shall include information adequate to predict the potential for reestablishing vegetation.

(2) When a map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife.

Section 20. Fish and Wildlife Resources Information. (1) Each application shall include fish and wildlife resource information for the area of surface operations and facilities and adjacent area, and areas subject to probable impacts from underground workings, including areas of probable subsidence. The scope and level of detail for this information shall be determined by the cabinet in consultation with the Kentucky Department of Fish and Wildlife Resources and the U.S. Department of the Interior, Fish and Wildlife Service, and shall be sufficient to design the protection and enhancement plan required under Section 36 of this administrative regulation.

(2) Site-specific resource information necessary to address the respective species or habitats shall be required when the area of surface operations and facilities or adjacent area, or areas subject to probable impacts from underground workings, including areas of probable subsidence, are likely to include:

(a) 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 USC Sec. 1531 et seq.), or those species or habitats protected by similar state statutes;

(b) 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

(c) Other species or habitats identified through agency consultation as requiring special protection under state or federal law.

(3) Wetland delineations shall be conducted in accordance with:

(a) The Corps of Engineers Wetlands Delineation Manual;

(b) U. S. Army Corps of Engineers Regulatory Guidance Letter No. 90-7;

(c) National Lists of Plant Species that Occur in Wetlands and Biological Reports and Summary; and

(d) List of Hydric Soils of the United States, All Kentucky Counties.

(4) Upon request, the cabinet shall provide the resource information required under this section 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 (10) days of receipt of the request from the Service.

(5) (a) Fish and wildlife resource information shall be required for amendments and revisions that:

1. Propose extension into a wetland;

2. Propose significant disturbance in a new watershed in which the area of surface operations and facilities or adjacent area, or areas subject to probable impacts from underground workings, including areas of probable subsidence, include an important stream;

3. Seek to obtain a stream buffer zone variance under 405 KAR 18:060, Section 11, or seek to modify an existing stream buffer zone variance;

4. Propose extension of the permit boundary that involves a new surface disturbance of five (5) acres or more;

5. Involve new areas of surface operations and facilities or adjacent areas, or areas subject to probable impacts from underground workings, including areas of probable subsidence, likely to contain, or that could reasonably be expected to contain, a state or federal endangered or threatened species or its critical habitat; or

6. Propose extension of the coal extraction area associated with an underground mine that may by subsidence or other means impact a wetland, important stream, or stream that contains, or could reasonably be expected to contain, a state or federal endangered or threatened species or its critical habitat.

(b) For other amendments and revisions, a determination of whether fish and wildlife information is necessary, and the scope of information needed, shall be made on a case-by-case basis.

(6) This section shall apply to applications for permits, amendments and revisions submitted to the cabinet on or after November 17, 1992.

Section 21. Prime Farmland Investigation. (1) The applicant shall conduct a preapplication investigation of the area proposed to be affected by surface operations or facilities to determine whether lands within the area may be prime farmland.

(2) Land shall not be considered prime farmland where the applicant can demonstrate, to the satisfaction of the cabinet, one (1) or more of the following:

(a) The land has not been historically used as cropland;

(b) The slope of the land is ten (10) percent or greater;

(c) Other relevant factors exist which would preclude the soils from being defined as prime farmland according to 7 CFR 657, such as a very rocky surface, or the land is frequently flooded during the growing season more often than once in two (2) years and the flooding has reduced crop yields; or

(d) On the basis of a soil survey of the lands within the permit area there are no soil map units that have been designated prime farmland by the U.S. SCS.

(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 and results of the investigation which show that the land for which the negative determination is being sought meets one (1) or more of the criteria in subsection (2) of this section.

(4) If the investigation indicates that lands within the proposed area to be affected by surface operations and facilities may be prime farmlands, the applicant shall contact the U.S. SCS to determine if these lands have a soil survey and whether the applicable soil map units have been designated prime farmlands. If no soil survey has been made for these lands, the applicant shall request the SCS to conduct a soil survey.

(a) If a soil survey as required by this section contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with 405 KAR 8:050, Section 3 for the designated land.

(b) If a soil survey as required by this section contains no soil map units which have been designated as prime farmland, after review by the U.S. SCS, the applicant shall submit with the permit application a request for negative determination under subsection (2)(d) of this section for the nondesignated land.

(5) The cabinet shall decide to grant or deny a negative determination based upon documentation provided by the applicant and any other pertinent information, such as cropping history, available to the cabinet from other sources.

(6) The cabinet shall consult with the SCS in deciding on a request for negative determination under subsection (2)(c) of this section.

(7) The cabinet shall examine any records on crop history available from the Agriculture Stabilization and Conservation Service when deciding on a request for negative determination under subsection (2)(a) of this section.

Section 22. Land-use Information. (1) The application shall contain a statement of the condition, capability and productivity of the land which will be affected by surface operations and facilities within the proposed permit area, including:

(a) A map and supporting narrative of the uses of the land existing when the application is filed. If the premining use of the land was changed within five (5) years before the date of application, the historic use of the land shall also be described.

(b) A narrative of land capability and productivity, which analyzes the land-use description in conjunction with other environmental resources information required under this administrative regulation. The narrative shall provide analyses of:

1. 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 surface operations or facilities; and

2. The productivity of the area proposed to be affected by surface operations and facilities before mining, expressed as average yield of food, fiber, forage, or wood products from the lands 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 U.S. 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 local government land use classifications, if any, of the proposed permit area and adjacent areas.

(4) The application shall contain a description identifying the extent to which cities, towns, and municipalities, or parts thereof, are located within the proposed permit area.

Section 23. Maps and Drawings. (1) The permit application shall include maps showing:

(a) The boundaries of all subareas which are proposed to be affected over the estimated total life of the underground mining activities, with a description of size, sequence and timing of the underground mining activities for which it is anticipated that additional permits will be sought;

(b) Any land within the proposed permit area and 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 USC 1276(a)), or which is within the boundaries of a wild river established pursuant to KRS Chapter 146;

(c) The boundaries of any public park and locations of any cultural or historical resources listed on or eligible for listing on the National Register of Historic Places and known archaeological sites within the permit area and adjacent areas;

(d) The locations of water supply intakes for current users of surface waters within a hydrologic area defined by the cabinet, and those surface waters which will receive discharges from affected areas in the proposed permit area;

(e) 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;

(f) The boundaries of land within the proposed permit area upon which, or under which, the applicant has the legal right to conduct underground mining activities. In addition, the map shall indicate the boundaries of that portion of the permit area which the applicant has the legal right to enter upon the surface to conduct surface operations.

(g) The location of surface and subsurface manmade features within, passing through, or passing over the proposed permit area, including, but not limited to, major electric transmission lines, pipelines, and agricultural drainage tile fields;

(h) The location and boundaries of any proposed reference areas for determining the success of revegetation for the permit area;

(i) The location of all buildings in and within 1000 feet of the proposed permit area, with identification of the current use of the buildings;

(j) Each public road located in or within 100 feet of the proposed permit area;

(k) Each cemetery that is located in or within 100 feet of the proposed permit area;

(l) Other relevant information required by the cabinet.

(2) The application shall include drawings, cross-sections, and maps showing:

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

(b) Elevations and locations of monitoring stations or other sampling points in the permit area and adjacent areas used to gather data on water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application or which will be used for this data gathering during the term of the permit;

(c) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;

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

(e) Location and extent of subsurface water, if encountered, within the proposed permit area or adjacent areas;

(f) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drainage patterns, and irrigation ditches within the proposed permit area and adjacent areas;

(g) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent areas;

(h) Location and dimensions of existing coal refuse disposal areas and dams, or other impoundments within the proposed permit area;

(i) Sufficient slope measurements to adequately represent the existing land surface configuration of the area to be affected by surface operations and facilities, measured and recorded according to the following:

1. Each measurement shall consist of an angle of inclination along the prevailing slope extending 100 linear feet above and below or beyond the coal outcrop or the area to be disturbed or, where this is impractical, at locations and in a manner as specified by the cabinet.

2. Where the area has been previously mined, the measurements shall extend at least 100 feet beyond the limits of mining disturbances, or any other distance determined by the cabinet to be representative of the premining configuration of the land.

3. Slope measurements shall take into account natural variations in slope, to provide accurate representation of the range of natural slopes and reflect geomorphic differences of the area to be disturbed.

(3) The permit application shall include the map information specified in Sections 22(1)(a), 24(3), 24(4)(c), 24(4)(h), 26, 27(1), 28, 31, 32, 33, 34, and 38 of this administrative regulation and 405 KAR 8:010, Section 5(6).

(4) Maps, drawings and cross-sections included in a permit application and required by this section shall be prepared by, or under the direction of and certified by a qualified registered professional engineer, and shall be updated as required by the cabinet. The qualified registered professional engineer shall not be required to certify the true ownership of property.

Section 24. Mining and Reclamation Plan; General Requirements. (1) Each application shall contain a detailed mining and reclamation plan (MRP) for the proposed permit area as set forth in this section through Section 39 of this administrative regulation, showing how the applicant will comply with KRS Chapter 350 and 405 KAR Chapters 16 through 20.

(2) Each application shall contain a description of the mining operations proposed to be conducted within the proposed permit area, including, at a minimum, the following:

(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 the facility is to be approved as necessary for postmining land use as specified in 405 KAR 18:220):

1. Dams, embankments, and other impoundments;

2. Overburden and topsoil handling and storage areas and structures;

3. Coal removal, handling, storage, cleaning, and transportation areas and structures;

4. Spoil, coal processing waste, mine development waste, and noncoal waste removal, handling, storage, transportation, and disposal areas and structures;

5. Mine facilities; and

6. Water pollution control facilities.

(3) Each application shall contain plans and maps of the proposed permit area and adjacent areas as follows:

(a) The plans, maps and drawings shall show the underground mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under Section 23 of this administrative regulation.

(b) The following shall be shown for the proposed permit area:

1. Buildings, utility corridors, and facilities to be used;

2. The area of land to be affected within the proposed permit area, according to the sequence of mining and reclamation;

3. Each area of land for which a performance bond or other equivalent guarantee will be posted under 405 KAR Chapter 10;

4. Each coal storage, cleaning and loading area;

5. Each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area;

6. Each water diversion, collection, conveyance, treatment, storage and discharge facility to be used;

7. Each source of waste and each waste disposal facility relating to coal processing or pollution control;

8. Each facility to be used to protect and enhance fish and wildlife related environmental values;

9. Each explosive storage and handling facility;

10. Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with Section 34 of this administrative regulation, and each disposal area for underground development waste and excess spoil, in accordance with Section 28 of this administrative regulation;

11. Cross-sections, at locations as required by the cabinet, of the anticipated final surface configuration to be achieved for the affected areas;

12. Location of each water and any subsidence monitoring point;

13. Location of each facility that will remain on the proposed permit area as a permanent feature, after the completion of underground mining activities.

(c) Plans, maps and drawings required under this section shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer.

(4) Each plan shall contain the following information for the proposed permit area:

(a) A projected timetable for the completion of each major step in the mining and reclamation plan;

(b) A detailed estimate of the cost of the reclamation of the proposed operations required to be covered by a performance bond under 405 KAR Chapter 10, with supporting calculations for the estimates;

(c) A plan for 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 405 KAR 18:190;

(d) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of 405 KAR 18:050 including a demonstration of suitability of any proposed topsoil substitutes or supplements;

(e) A plan for revegetation as required in 405 KAR 18:200, including descriptions of the: schedule of revegetation; species and amounts per acre of seeds and seedlings to be used; methods to be used in planting and seeding; mulching techniques; irrigation, if appropriate, and pest and disease control measures, if any; measures proposed to be used to determine the success of revegetation as required in 405 KAR 18:200, Section 6; and a soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;

(f) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 405 KAR 18:010, Section 2;

(g) 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 405 KAR 18:150 and 405 KAR 18:190, Section 3 and a description of the contingency plans which have been developed to preclude sustained combustion of the materials;

(h) A description, including appropriate drawings 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 405 KAR 18:040; and

(i) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 USC 7401 et seq.), the Clean Water Act (33 USC 1251 et seq.), and other applicable air and water quality laws and regulations and health and safety standards. This description shall, at a minimum, consist of identification of the permits or approvals required by these laws and regulations which the applicant has obtained, has applied for, or intends to apply for.

Section 25. MRP; Existing Structures. (1) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the surface 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 405 KAR Chapters 16 through 20, or if the structure does not meet those performance standards, a showing whether the structure meets the interim performance standards of 405 KAR Chapter 3.

(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 surface coal mining and reclamation operation. The compliance plan shall include:

(a) Design specifications for the modification or reconstruction of the structure to meet the performance standards of 405 KAR Chapters 16 through 20;

(b) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;

(c) Provisions for monitoring the structure as required by the cabinet to ensure that the performance standards of 405 KAR Chapters 16 through 20 are met; and

(d) A showing that the risk of harm to the environment or to public health or safety will not be significant during the period of modification or reconstruction.

Section 26. MRP; Subsidence Control. (1)(a) The application shall include a map of the permit and adjacent areas at a scale of 1:12,000, or larger if determined necessary by the cabinet, showing the location and type of structures and renewable resource lands that subsidence may materially damage or for which the value or reasonably foreseeable use may be diminished by subsidence, and showing the location and type of water supplies for domestic, agricultural, industrial or other legitimate use that could be contaminated, diminished, or interrupted by subsidence.

(b) The application shall include a narrative indicating whether subsidence, if it occurred, could cause material damage to or diminish the value or reasonably foreseeable use of structures identified in paragraph (a) of this subsection or renewable resource lands or could contaminate, diminish, or interrupt water supplies for domestic, agricultural, industrial or other legitimate use.

(c) The application shall include an example of the letter by which the applicant proposes to notify the owners of all structures identified under this subsection for which a presubsidence survey is required under 405 KAR 18:210 Section 1(4).

(d)1. The application shall include a survey of the quantity and quality of each water supply for domestic, agricultural, industrial or other legitimate use within the permit area and adjacent area that could be contaminated, diminished, or interrupted by subsidence. If the applicant cannot

make this survey because the owner will not allow access to the site, the application shall include documentation of the denial of access. The applicant shall pay for its technical assessment or engineering evaluation used to determine the quantity and quality of a water supply for domestic, agricultural, industrial or other legitimate use. The applicant shall provide copies of the survey and any technical assessment or engineering evaluation to the property owner and the cabinet.

2. If the owner or his representative is present at the time a survey, technical assessment, or engineering evaluation is conducted under this paragraph, the report shall include the name of the person. If the owner disagrees with the results of the survey, technical assessment or engineering evaluation, he may submit in writing to the cabinet and to the permittee, a detailed description of the specific areas of disagreement. The cabinet may require additional measures to ensure that adequate and accurate information is included in the survey, technical assessment or engineering evaluation and to ensure compliance with 405 KAR 18:210.

(2) If the information submitted under subsection (1) of this section shows that no structures, or water supplies for domestic, agricultural, industrial or other legitimate use, or renewable resource lands exist, or that no material damage or diminution in value or reasonably foreseeable use of the structures or lands, and no contamination, diminution, or interruption of the water supplies would occur as a result of mine subsidence, and if the cabinet agrees with this conclusion, no further information need be provided under this section.

(3) If the information submitted under subsection (1) of this section shows that structures, renewable resource lands, or water supplies exist and that subsidence could cause material damage or diminution in value or reasonably foreseeable use, or contamination, diminution, or interruption of protected water supplies, or if the cabinet determines that damage, diminution in value or

foreseeable use, or contamination, diminution, or interruption 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 mining, room and pillar removal or hydraulic mining, including the size, sequence and timing of the development of underground workings.

(b) A map of the underground workings at a scale of 1:12,000, or larger if determined necessary by the cabinet, that describes the location and extent of the areas in which planned subsidence mining methods will be used and that identifies all areas where the measures described in paragraphs (d), (e), and (g) of this subsection will be taken to prevent or minimize subsidence and subsidence related damage; and, when applicable, to correct subsidence related material damage.

(c) A description of the physical conditions, such as depth of cover, seam thickness and lithology of overlying strata, that affect the likelihood or extent of subsidence and subsidence related damage.

(d) A description of the 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 405 KAR 18:210, Section 3.

(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:

1. Backstowing or backfilling of voids;

2. Leaving support pillars of coal;

3. 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

4. Taking measures on the surface to prevent or minimize material damage or diminution in value of the surface.

(f) A description of the anticipated effects of planned subsidence, if any.

(g) For those areas where planned subsidence is projected to be used, a description of methods to be employed to minimize damage from planned subsidence to noncommercial buildings and occupied residential dwellings and structures related thereto; or the written consent of the owner of the structure or facility that minimization measures not be taken; or, unless the anticipated damage would constitute a threat to health or safety, a demonstration that the costs of minimizing damage exceed the anticipated costs of repair;

(h) A description of the measures to be taken in accordance with 405 KAR 18:060, Section 12, and 405 KAR 18:210, Section 3, to replace adversely affected protected water supplies or to mitigate or remedy any subsidence related material damage to the land and protected structures; and

(i) Other information specified by the cabinet as necessary to demonstrate that the operation will be conducted in accordance with 405 KAR 18:210.

Section 27. MRP; Return of Coal Processing Waste to Abandoned Underground Workings. (1) Each plan shall describe the design, operation and maintenance of any proposed use of abandoned underground workings for coal processing waste disposal, including flow diagrams and any other necessary drawings and maps, for the approval of the cabinet and MSHA under 405 KAR 18:140, Section 7.

(2) Each plan shall describe the source and quality of waste to be stowed, area to be backfilled, percent 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 this section shall also apply to pneumatic backfilling operations, except where the operations are exempted by the cabinet from requirements specifying hydrologic monitoring.

Section 28. MRP; Underground Development Waste and Excess Spoil. 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 according to 405 KAR 18:130, 405 KAR 18:140, and 405 KAR 18:160 as applicable. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the structures and be prepared according to 405 KAR 8:030, Section 27 and the applicable requirements of this administrative regulation.

Section 29. MRP; Transportation Facilities. (1) Each application shall contain a description of each road, conveyor, and 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 report of appropriate geotechnical analysis, where approval of the cabinet is required for alternative specifications or for steep cut slopes under 405 KAR 18:230.

(c) A description of each measure to be taken to obtain approval of the cabinet for alteration or relocation of a natural drainageway under 405 KAR 18:230.

(d) 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 cabinet under 405 KAR 18:230.

(2) Each plan shall contain a general description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area.

Section 30. MRP; Protection of Public Parks and Historic Places. (1) For any publicly-owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operations, each plan shall describe the measures to be used to prevent adverse impact; or, if valid existing rights exist or joint agency approval is to be obtained under 405 KAR 24:040, Section 2(4), to minimize adverse impacts.

(2) The cabinet may require the applicant to protect historic or archaeological properties listed or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. These measures need not be completed prior to permit issuance, but shall be completed before the properties are affected by underground mining activities.

Section 31. MRP; Relocation or Use of Public Roads. Each application shall describe, with appropriate maps and drawings the measures to be used to ensure that the interests of the public

and landowners affected are protected if, under 405 KAR 24:040, Section 2(6), the applicant seeks to have the cabinet approve:

(1) Conducting the proposed underground mining activities within 100 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.

Section 32. MRP; Protection of Hydrologic Balance. (1) Each application shall contain a description, as set forth in this subsection, of the measures to be taken to minimize disturbances to the hydrologic balance within the permit area and adjacent area and to prevent material damage to the hydrologic balance outside the permit area.

(a) The description shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this administrative regulation and other appropriate information, shall be specific to local hydrologic conditions, and shall be prepared in a manner and detail acceptable to the cabinet.

(b) The description shall identify the protective measures to be taken to enable the operation to meet, at a minimum, each of the hydrologic requirements referenced in this paragraph, or shall demonstrate to the satisfaction of the cabinet that protective measures are not necessary for the operation to meet the requirements:

1. Meet applicable water quality statutes, administrative regulations, standards, and effluent limitations as required by 405 KAR 18:060, Section 1(3);

2. Avoid acid or toxic drainage as required by 405 KAR 18:060, Sections 4, 5, and 6;

3. Control the discharge of sediment to streams located outside the permit area as required by 405 KAR 18:060, Section 2;

4. Control the drainage and discharge of water within the permit area as required by 405 KAR 18:060, Sections 1(4), 3, 8 and 9, and 405 KAR 18:080; and

5. Protect or replace the water supply of present users as required by 405 KAR 18:060, Section 12.

(c) The cabinet may require that the description include protective measures in addition to those identified under paragraph (b) of this subsection, if the cabinet determines that additional measures are needed to protect the hydrologic balance in accordance with 405 KAR 18:060.

(2) Each application shall include the design of any necessary protective measures identified under subsection (1) of this section. The design shall be prepared in a manner and detail acceptable to the cabinet including, as appropriate, calculations, maps, drawings, and written explanations as necessary to document the design.

(3) Each application shall include a determination of the probable hydrologic consequences of the mining and reclamation operations for the permit area and adjacent area.

(a) The determination shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this administrative regulation and other appropriate information, and may include information statistically representative of the site.

(b) The determination shall be completed according to the parameters and in the detail required by the cabinet to enable the cabinet to prepare a cumulative impact assessment, and shall take into account the anticipated effects of protective measures required by this chapter.

(c) For surface water systems, the determination shall, at a minimum, include probable impacts on:

1. Peak discharge rates, emphasizing the potential for flooding;

2. Settleable solids at peak discharge;

3. Low-flow discharge rates, emphasizing the potential for water supply diminution;

4. Suspended solids at low flow;

5. pH, at low flow, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(d) For groundwater systems, the determination shall, at a minimum, include probable impacts on:

1. Water quantity, emphasizing water levels and the potential for water supply diminution for existing users, and dewatering of aquifers which are not currently being used for water supply but have the potential to be developed as a water supply source.

2. pH, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(e) The determination shall include a finding on whether the proposed underground mining activities conducted after July 16, 1994 may proximately result in contamination, diminution or interruption of an underground or surface source of water within the permit area or adjacent areas that is used for domestic, agricultural, industrial or other legitimate use at the time the application is submitted.

(f) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated determination of the probable hydrologic consequences shall be required.

(4)(a) The application shall include a plan for the collection, recording, and reporting of groundwater and surface water quantity and quality data to monitor the effects of the mining and reclamation operations on the hydrologic balance, according to 405 KAR 18:110.

(b) The monitoring plan shall be based on the geologic and hydrologic baseline information, the mining and reclamation plan, and the determination of probable hydrologic consequences; and shall:

1. Identify the quantity and quality parameters to be monitored, sampling frequency, and monitoring site locations; and

2. Describe how the data may be used to determine the impacts of the operation on the hydrologic balance.

(5) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated cumulative hydrologic impact assessment shall be made.

Section 33. MRP; 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 405 KAR 18:080.

Section 34. MRP; Impoundments and Embankments. (1) General. Each application shall include detailed design plans for each proposed sedimentation pond, water impoundment, and coal mine waste bank, dam, or embankment within the proposed permit area. Each design plan shall:

(a) Be prepared by, or under the direction of, and certified by, a qualified registered professional engineer;

(b) Contain a description, map, and appropriate cross-sections and drawings of the structure and its location;

(c) Contain all hydrologic and geologic information and computations necessary to demonstrate compliance with the design and performance standards of 405 KAR Chapter 18; and all information utilized by the applicant to determine the probable hydrologic consequences of the mining operation under Section 32(3) of this administrative regulation;

(d) Contain an assessment of the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred;

(e) Include any geotechnical investigation, design, and construction requirements for the structure;

(f) Describe the operation and maintenance requirements for each structure; and

(g) Describe the timetable and plans to remove each structure, if appropriate.

(2) Sedimentation ponds. Sedimentation ponds, whether temporary or permanent, shall be designed in compliance with the requirements of 405 KAR 18:090 and 18:100.

(3) Permanent and temporary impoundments. Permanent and temporary impoundments shall be designed to comply with the requirements of 405 KAR 18:100. Each plan for an impoundment meeting the size or other criteria of MSHA, 30 CFR 77.216(a), shall comply with the requirements of 30 CFR 77.216-1 and 77.216-2. The plan required to be submitted to the District Manager of MSHA under 30 CFR 77.216 shall be submitted to the cabinet as part of the permit application. After the plan has been approved by MSHA, the applicant shall submit to the cabinet a copy of the final approved plan, a copy of all correspondence from MSHA regarding the plan, a copy of any technical support documents requested by MSHA during its review, and a notarized statement by the applicant that the copy submitted to the cabinet is a complete and correct copy of the final plan approved by MSHA.

(4) Coal mine waste banks. Coal mine waste banks shall be designed to comply with the requirements of 405 KAR 18:140.

(5) Coal mine waste dams and embankments. Coal mine waste dams and embankments shall be designed to comply with the requirements of 405 KAR 18:100 and 18:160. The plan for an impounding structure that is required to be submitted to the District Manager of MSHA under 30 CFR 77.216 shall be submitted to the cabinet as part of the permit application. After the plan has been approved by MSHA, the applicant shall submit to the cabinet a copy of the final approved plan, a copy of all correspondence from MSHA regarding the plan, a copy of any technical support documents requested by MSHA during its review, and a notarized statement by the applicant that the copy submitted to the cabinet is a complete and correct copy of the final plan approved by MSHA. Each plan shall comply with the requirements of MSHA, 30 CFR 77.216-1 and 77.216-2, and 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 or engineering geologist, according to the following:

(a) 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.

(b) 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.

(c) All springs, seepage, and groundwater flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(d) Consideration shall be given to the possibility of mud flows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(6) If the structure is Class B-moderate hazard or Class C-high hazard under 405 KAR 7:040, Section 5, and 401 KAR 4:030, or if the structure meets the size or other criteria of MSHA, 30 CFR 77.216(a), each plan under subsections (2), (3), and (5) of this section shall include a stability analysis of the structure. The stability analysis shall include 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.

Section 35. MRP; Air Pollution Control. For all surface operations associated with underground mining activities, the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program, if required by the cabinet, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices, under subsection (2) of this section to comply with applicable federal and state air quality standards; and

(2) A plan for fugitive dust control practices, as required under 405 KAR 18:170.

Section 36. MRP; Fish and Wildlife Protection and Enhancement. (1) Each application shall include a description of how, to the extent possible using the best technology currently available, the permittee 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.

(2) This description shall:

(a) Apply, at a minimum, to species and habitats identified under Section 20 of this administrative regulation;

(b) Include protective measures that will be used during the active mining phase of operation. Protective 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

(c) Include enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Enhancement 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. If the plan does not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.

(3) Upon request, the cabinet shall provide the protection and enhancement plan required under this section 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 (10) days of receipt of the request from the Service.

(4)(a) A fish and wildlife protection and enhancement plan shall be required for amendments and revisions that:

1. Propose extension into a wetland;

2. Propose significant disturbance in a new watershed in which the area of surface operations and facilities or adjacent area, or areas subject to probable impacts from underground workings, including areas of probable subsidence, include an important stream;

3. Seek to obtain a stream buffer zone variance under 405 KAR 18:060, Section 11, or seek to modify an existing stream buffer zone variance;

4. Propose extension of the permit boundary that involves a new surface disturbance of five (5) acres or more;

5. Involve new areas of surface operations and facilities or adjacent areas, or areas subject to probable impacts from underground workings, including areas of probable subsidence, likely to contain, or that could reasonably be expected to contain, a state or federal endangered or threatened species or its critical habitat; or

6. Propose extension of the coal extraction area associated with an underground mine that may by subsidence or other means impact a wetland, important stream, or stream that contains, or could reasonably be expected to contain, a state or federal endangered or threatened species or its critical habitat.

(b) For other amendments and revisions, a determination of whether a protection and enhancement plan is necessary shall be made on a case-by-case basis.

(5) This section shall apply to applications for permits, amendments and revisions submitted to the cabinet on or after November 17, 1992.

Section 37. MRP; Postmining Land Use. (1) Each plan shall contain a description of the proposed land use or uses following reclamation of the land to be affected within the proposed permit area by surface operations and facilities, including:

(a) 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;

(b) A discussion of 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, including management practices to be conducted during the liability period for the commercial forest land, cropland (including hayland), and pastureland land uses;

(c) If a land use different from the premining land use is proposed, all supporting documentation required for approval of the proposed alternative use under 405 KAR 18:220;

(d) A discussion of The consideration which has been given to making all of the proposed underground mining activities consistent with surface owner plans and applicable state and local land use plans and programs;

(e) A copy of the comments concerning the proposed use from the legal or equitable owner of record of the area to be affected by surface operations and facilities and the state and local government agencies, if any, which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

(2) Approval of the initial postmining land use plan pursuant to this section shall not preclude subsequent consideration and approval of a revised postmining land use plan in accordance with the applicable requirements of 405 KAR Chapters 7 through 24.

Section 38. MRP; Blasting. (1) Each application shall contain a blasting plan for the proposed permit area explaining how the applicant intends to comply with the requirements of 405 KAR 18:120. This plan shall include, at a minimum, information setting forth the limitations the permittee will meet with regard to ground vibration and airblast, the bases for the ground vibration

and airblast limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

(2) Each application shall contain a description of the systems to be used to monitor compliance with the standards for ground vibration and airblast including the types, capabilities, and sensitivities of blast monitoring equipment and identification of the monitoring procedures and locations.

(3) Blasting operations within 500 feet of active underground mines require approval of the cabinet, MSHA, and the Kentucky Office of Mine Safety and Licensing.

Section 39. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Standard Methods for the Examination of Water and Wastewater", (14th Edition, 1975), American Public Health Association, American Water Works Association, and Water Pollution Control Federation;

(b) "Corps of Engineers Wetlands Delineation Manual", (January, 1987 Edition), U. S. Army Corps of Engineers;

(c) "U. S. Army Corps of Engineers Regulatory Guidance Letter No. 90-7", (September 26, 1990), U. S. Army Corps of Engineers;

(d) "National Lists of Plant Species that Occur in Wetlands and Biological Reports and Summary", (May, 1988 Edition), Fish and Wildlife Service, U. S. Department of the Interior; and

(e) "List of Hydric Soils of the United States, All Kentucky Counties", (December, 1991 Edition), Soil Conservation Service, U. S. Department of Agriculture;

(2) This material may be inspected, copied, or obtained at the Department for Natural Resources, #2 Hudson Hollow, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m.

405 KAR 8:040 approved for filing.
Pages (1-52)

8/5/14

Date

Leonard K. Peters, Secretary
Energy and Environment Cabinet

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on September 30, 2014 at 10:00 A.M. (Eastern Time) at Conference Room D-16 of the Department for Natural Resources at #2 Hudson Hollow, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by September 23, 2014, five workdays prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until September 30, 2014. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to the contact person.

CONTACT PERSON: Michael Mullins, Regulation Coordinator, #2 Hudson Hollow, Frankfort, Kentucky 40601, phone (502) 564-6940, fax (502) 564-5698, email Michael.Mullins@ky.gov.

REGULATORY IMPACT ANALYSIS
AND TIERING STATEMENT

Administrative Regulation No.: 405 KAR 8:040
Contact Person: Michael Mullins, Regulation Coordinator

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation establishes requirements for the grant of a permit for underground coal mining operations.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to establish the criteria to grant an underground mining permit.

(c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 350.028(1) authorizes the cabinet to promulgate administrative regulations relating to surface and underground coal mining operations. KRS 350.060 authorizes the cabinet to require a permit before coal mining can begin within the Commonwealth. This administrative regulation establishes the criteria for the issuance of a permit for underground mining operations.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation establishes the criteria for the issuance of an underground permit which is required by KRS 350.060.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment clarifies the process by which an entity submits proof of right of entry procedures on proposed coal mines sites with severed minerals.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to clarify the agency's position on right of entry for proposed coal mines sites with severed minerals.

(c) How the amendment conforms to the content of the authorizing statutes: KRS 350.060 authorizes the cabinet to require a permit before coal mining can begin within the Commonwealth. This amendment is clarifies the agency's position on right of entry for proposed coal mines sites with severed minerals.

(d) How the amendment will assist in the effective administration of the statutes: This amendment is clarifies the agency's position on right of entry for proposed coal mines sites with severed minerals.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: There are 332 permittees with active permits that this administrative regulation could impact. They would only be impacted if they requested a permit on properties where the private mineral estate is severed from the private surface estate.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: This amendment simply clarifies an applicant's right to enter a property and mine would be determined by applicable state law.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The cabinet is unable to determine the cost to each permit applicant. The nature of the dispute will ultimately determine the cost associated with this amendment.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): The amendment will help a permit applicant better understand the right of entry requirements for permits involving severed mineral estates.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: This new administrative regulation will not significantly increase the cost to the Division of Mine Permits.

(b) On a continuing basis: Future costs would remain essentially unchanged related to this amendment.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: A combination of general funds and restricted funds will be used.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: There will not be a need to increase fees or funding related to this proposed administrative regulation.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: This administrative regulation does not increase or establish any fees.

(9) TIERING: Is tiering applied? (Explain why or why not) No. All entities that request a permit involving severed minerals will be treated the same.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Admin. Regulation No. 405 KAR 8:040
Contact Person: Michael Mullins, Regulation Coordinator

1. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? The Division of Mine Permits.

2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 350.028, and 350.060.

3. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This new administrative regulation will not generate any new revenue for the state or local government.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This new administrative regulation will not generate revenue in subsequent years.

(c) How much will it cost to administer this program for the first year? There will not be a cost increase associated with the amendments to this administrative regulation.

(d) How much will it cost to administer this program for subsequent years? Future costs would remain essentially unchanged related to this amendment.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): NA
Expenditures (+/-): NA
Other Explanation: NA

FEDERAL MANDATE ANALYSIS COMPARISON

Administrative Regulation # 405 KAR 8:040
Agency Contact: Michael Mullins, Regulation Coordinator

1. Federal statute or regulation constituting the federal mandate. 30 C.F. R. Part 730

2. State Compliance Standards. KRS 350.060(3)(d).

3. Minimum or uniform standards contained in the federal mandate. 30 C.F. R. Part 778.15.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No. This amendment will mirror the federal language

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. NA