

PART 780 -- SURFACE MINING PERMIT APPLICATIONS -- MINIMUM REQUIREMENTS
FOR RECLAMATION AND OPERATION PLAN

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AUTHORITY: 30 U.S.C. 1201 et seq. and 16 U.S.C. 470 et seq.

SOURCE: 44 FR 15357, Mar. 13, 1979, unless otherwise noted.

[For the list of Final Rules affecting these sections, as published in the Federal Register, see ["Regulation History - Changes to the Regulations Parts 700-890, 3/13/79 - 6/30/00".](#)]

30 CFR Sec. 780.1 Scope.

This part provides the minimum requirements for the Secretary's approval of regulatory program provisions for the mining operations and reclamation plan portions of applications for permits for surface mining activities, except to the extent that different requirements for those plans are established under 30 CFR part 785.

30 CFR Sec. 780.2 Objectives.

The objectives of this part are to insure that the regulatory authority is provided with comprehensive and reliable information on proposed surface mining activities, and to ensure that those activities are allowed to be conducted only in compliance with the Act, this chapter, and the regulatory program.

30 CFR Sec. 780.4 Responsibilities.

(a) It is the responsibility of the applicant to provide to the regulatory authority all of the information required by this part, except where specifically exempted in this part.

(b) It is the responsibility of State and Federal governmental agencies to provide information to the regulatory authority where specifically required in this part.

30 CFR Sec. 780.10 Information collection.

(a) The collections of information contained in Part 780 have been approved by the Office of Management and Budget under 44 U.S.C. 3501 et seq. and assigned clearance number 1029-0036. The information will be used by the regulatory authority to determine whether the applicant can comply with the applicable performance and environmental standards in Public Law 95-87. Response is required to obtain a benefit.

(b) Public Reporting burden for this information is estimated to average 28 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Ave., NW., Room 640 NC, Washington, DC 20240; and the Office of Management and Budget, Paperwork Reduction Project 1029-0036, Washington, DC 20503.

[59 FR 53028, Oct. 20, 1994]

30 CFR Sec. 780.11 Operation plan: General requirements.

Each application shall contain a description of the mining operations proposed to be conducted during the life of the mine within the proposed permit area, including, 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 such facilities is necessary for postmining land use as specified in Sec. 816.133):

(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, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;

(5) Mine facilities; and

(6) Water and air pollution control facilities.

[44 FR 15357, Mar. 13, 1979, as amended at 45 FR 51550, Aug. 4, 1980]

30 CFR Sec. 780.12 Operation plan: Existing structures.

(a) 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--

(1) Location;

(2) Plans of the structure which describe its current condition;

(3) Approximate dates on which construction of the existing structure was begun and completed; and

(4) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of subchapter K (Permanent Program Standards) of this chapter or, if the structure does not meet the performance standards of subchapter K of this chapter, a showing whether the structure meets the performance standards of subchapter B (Interim Program Standards) of this chapter.

(b) 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--

(1) Design specifications for the modification or reconstruction of the structure to meet the design and performance standards of subchapter K of this chapter;

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

(3) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of subchapter K of this chapter are met; and

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

30 CFR Sec. 780.13 Operation plan: Blasting.

(a) Blasting plan. Each application shall contain a blasting plan for the proposed permit area, explaining how the applicant will comply with the requirements of Secs. 816.61 through 816.68 of this chapter. This plan shall include, at a minimum, information setting forth the limitations the operator will meet with regard to ground vibration and airblast, the bases for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

(b) Monitoring system. Each application shall contain a description of any system to be used to monitor compliance with the standards of Sec. 816.67 including the type, capability, and sensitivity of any blast-monitoring equipment and proposed procedures and locations of monitoring.

(c) Blasting near underground mines. Blasting operations within 500 feet of active underground mines require approval of the State and Federal regulatory authorities concerned with the health and safety of underground miners.

[48 FR 9806, Mar. 8, 1983]

30 CFR Sec. 780.14 Operation plan: Maps and plans.

Each application shall contain maps and plans as follows:

(a) The maps and plans shall show the lands proposed 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 30 CFR 779.24 through 779.25.

(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 subchapter J of this chapter;

(4) Each coal storage, cleaning and loading area;

(5) Each topsoil, spoil, coal waste, and non-coal waste storage area;

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

(7) Each air pollution collection and control facility;

(8) Each source of waste and each waste disposal facility relating to coal processing or pollution control;

(9) Each facility to be used to protect and enhance fish and wildlife and related environmental values;

(10) Each explosive storage and handling facility; and

(11) Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with 30 CFR 780.25, and fill area for the disposal of excess spoil in accordance 30 CFR 780.35.

(c) Except as provided in Secs. 780.25(a)(2), 780.25(a)(3), 780.35(a), 816.71(b), 816.73(c), 816.74(c) and 816.81(c) of this chapter, cross sections, maps and plans required under paragraphs (b) (4), (5), (6), (10) and (11) of this section shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture.

[44 FR 15357, Mar. 13, 1979; 44 FR 49685, Aug. 24, 1979, as amended at 45 FR 51550, Aug. 4, 1980; 48 FR 14822, Apr. 5, 1983; 50 FR 16199, Apr. 24, 1985; 56 FR 65635, Dec. 17, 1991]

30 CFR Sec. 780.15 Air pollution control plan.

(a) For all surface mining activities with projected production rates exceeding 1,000,000 tons of coal per year and located west of the 100th meridian west longitude, the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices proposed under paragraph (a)(2) of this section to comply with Federal and State air quality standards; and

(2) A plan for fugitive dust control practices as required under 30 CFR 816.95.

(b) For all other surface 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 regulatory authority, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under paragraph (b)(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 30 CFR 816.95.

30 CFR Sec. 780.16 Fish and wildlife information.

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

(1) The scope and level of detail for such information shall be determined by the regulatory authority in consultation with State and Federal agencies with responsibilities for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under paragraph (b) of this section.

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

(i) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the Secretary under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or those species or habitats protected by similar State statutes;

(ii) Habitats of unusually high value for fish and wildlife such as important streams, wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, migration routes, or reproduction and wintering areas; or

(iii) Other species or habitats identified through agency consultation as requiring special protection under State or Federal law.

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

(1) Be consistent with the requirements of Sec. 816.97 of this chapter;

(2) Apply, at a minimum, to species and habitats identified under paragraph (a) of this section; and

(3) Include--

(i) Protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, and the monitoring of surface water quality and quantity; and

(ii) Enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the replacement of perches and nest boxes. Where the plan does not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.

(c) Fish and Wildlife Service review. Upon request, the regulatory authority shall provide the resource information required under paragraph (a) of this section and the protection and enhancement plan required under paragraph (b) of 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 10 days of receipt of the request from the Service.

[52 FR 47359, Dec. 11, 1987]

30 CFR Sec. 780.18 Reclamation plan: General requirements.

(a) Each application shall contain a plan for reclamation of the lands within the proposed permit area, showing how the applicant will comply with section 515 of the Act, subchapter K of this chapter, and the environmental protection performance standards of the regulatory program. The plan shall include, at a minimum, all information required under 30 CFR 780.18 through 780.37.

(b) Each plan shall contain the following information for the proposed permit area--

(1) A detailed timetable for the completion of each major step in the reclamation plan;

(2) A detailed estimate of the cost of reclamation of the proposed operations required to be covered by a performance bond under subchapter J of this chapter, with supporting calculations for the estimates;

(3) 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 30 CFR 816.102 through 816.107;

(4) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of Sec. 816.22 of this chapter. A demonstration of the suitability of topsoil substitutes or supplements under Sec. 816.22(b) of this chapter shall be based upon analysis of the thickness of soil horizons, total depth, texture, percent coarse fragments, pH, and areal extent of the different kinds of soils. The regulatory authority may require other chemical and physical analyses, field-site trials, or greenhouse tests if determined to be necessary or desirable to demonstrate the suitability of the topsoil substitutes or supplements.

(5) A plan for revegetation as required in 30 CFR 816.111 through 816.116, including, but not limited to, descriptions of the--

(i) Schedule of revegetation;

(ii) Species and amounts per acre of seeds and seedlings to be used;

(iii) Methods to be used in planting and seeding;

(iv) Mulching techniques;

(v) Irrigation, if appropriate, and pest and disease control measures, if any; and

(vi) Measures proposed to be used to determine the success of revegetation as required in 30 CFR 816.116.

(vii) A soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation.

(6) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 30 CFR 816.59;

(7) 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 30 CFR 816.89 and 816.102 and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;

(8) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case, or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with 30 CFR 816.13 through 816.15; and

(9) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. 1251 et seq.), and other applicable air and water quality laws and regulations and health and safety standards.

[44 FR 15357, Mar. 13, 1979, as amended at 48 FR 22100, May 16, 1983; 48 FR 44779, Sept. 30, 1983]

30 CFR Sec. 780.21 Hydrologic information.

(a) Sampling and analysis methodology. All water-quality analyses performed to meet the requirements of this section shall be conducted according to the methodology in the 15th edition of "Standard Methods for the Examination of Water and Wastewater," which is incorporated by reference, or the methodology in 40 CFR parts 136 and 434. Water quality sampling performed to meet the requirements of this section shall be conducted according to either methodology listed above when feasible. "Standard Methods for the Examination of Water and Wastewater," is a joint publication of the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation and is available from the American Public Health Association, 1015 15th Street, NW., Washington, DC 20036. This document is also available for inspection at the Office of the Federal Register Information Center, Room 8301, 1100 L Street, NW., Washington, DC; at the Office of the OSM Administrative Record, U.S. Department of the Interior, Room 5315, 1100 L Street, NW., Washington, DC; at the OSM Eastern Technical Service Center, U.S. Department of the Interior, Building 10, Parkway Center, Pittsburgh, Pa.; and at the OSM Western Technical Service Center, U.S. Department of the Interior, Brooks Tower, 1020 15th Street, Denver, Colo. This incorporation by reference was approved by the Director of the Federal Register on October 26, 1983. This document is incorporated as it exists on the date of the approval, and a notice of any change in it will be published in the Federal Register.

(b) Baseline information. The application shall include the following baseline hydrologic information, and any additional information required by the regulatory authority.

(1) Ground-water information. The location and ownership for the permit and adjacent areas of existing wells, springs, and other ground-water resources, seasonal quality and quantity of ground water, and usage. Water quality descriptions shall include, at a minimum, total dissolved solids or specific conductance corrected to 25[degrees]C,

pH, total iron, and total manganese. Ground-water quantity descriptions shall include, at a minimum, approximate rates of discharge or usage and depth to the water in the coal seam, and each water-bearing stratum above and potentially impacted stratum below the coal seam.

(2) Surface-water information. The name, location, ownership, and description of all surface-water bodies such as streams, lakes, and impoundments, the location of any discharge into any surface-water body in the proposed permit and adjacent areas, and information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage. Water quality descriptions shall include, at a minimum, baseline information on total suspended solids, total dissolved solids or specific conductance corrected to 25[degrees]C, pH, total iron, and total manganese. Baseline acidity and alkalinity information shall be provided if there is a potential for acid drainage from the proposed mining operation. Water quantity descriptions shall include, at a minimum, baseline information on seasonal flow rates.

(3) Supplemental information. If the determination of the probable hydrologic consequences (PHC) required by paragraph (f) of this section indicates that adverse impacts on or off the proposed permit area may occur to the hydrologic balance, or that acid-forming or toxic-forming material is present that may result in the contamination of ground-water or surface-water supplies, then information supplemental to that required under paragraphs (b) (1) and (2) of this section shall be provided to evaluate such probable hydrologic consequences and to plan remedial and reclamation activities. Such supplemental information may be based upon drilling, aquifer tests, hydrogeologic analysis of the water-bearing strata, flood flows, or analysis of other water quality or quantity characteristics.

(c) Baseline cumulative impact area information. (1) Hydrologic and geologic information for the cumulative impact area necessary to assess the probable cumulative hydrologic impacts of the proposed operation and all anticipated mining on surface- and ground-water systems as required by paragraph (g) of this section shall be provided to the regulatory authority if available from appropriate Federal or State agencies.

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

(3) The permit shall not be approved until the necessary hydrologic and geologic information is available to the regulatory authority.

(d) Modeling. The use of modeling techniques, interpolation or statistical techniques may be included as part of the permit application, but actual surface- and ground-water information may be required by the regulatory authority for each site even when such techniques are used.

(e) Alternative water source information. If the PHC determination required by paragraph (f) of this section indicates that the proposed mining operation may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose, then the

application shall contain information on water availability and alternative water sources, including the suitability of alternative water sources for existing premining uses and approved postmining land uses.

(f) Probable hydrologic consequences determination. (1) The application shall contain a determination of the probable hydrologic consequences (PHC) of the proposed operation upon the quality and quantity of surface and ground water under seasonal flow conditions for the proposed permit and adjacent areas.

(2) The PHC determination shall be based on baseline hydrologic, geologic and other information collected for the permit application and may include data statistically representative of the site.

(3) The PHC determination shall include findings on:

(i) Whether adverse impacts may occur to the hydrologic balance;

(ii) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground water supplies;

(iii) Whether the proposed operation may proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose; and

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

(A) Sediment yields from the disturbed area; (B) acidity, total suspended and dissolved solids, and other important water quality parameters of local impact; (C) flooding or streamflow alteration; (D) ground water and surface water availability; and (E) other characteristics as required by the regulatory authority.

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

(g) Cumulative hydrologic impact assessment. (1) The regulatory authority shall provide an assessment of the probable cumulative hydrologic impacts (CHIA) of the proposed operation and all anticipated mining upon surface- and ground-water systems in the cumulative impact area. The CHIA shall be sufficient to determine, for purposes of permit approval, whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The regulatory authority may allow the applicant to submit data and analyses relevant to the CHIA with the permit application.

(2) An application for a permit revision shall be reviewed by the regulatory authority to determine whether a new or updated CHIA shall be required.

(h) Hydrologic reclamation plan. The application shall include a plan, with maps and descriptions, indicating how the relevant

requirements of part 816, including Secs. 816.41 to 816.43, will be met. The plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbances to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; to meet applicable Federal and State water quality laws and regulations; and to protect the rights of present water users. The plan shall include the measures to be taken to: Avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water-treatment facilities when needed; control drainage; restore approximate premining recharge capacity and protect or replace rights of present water users. The plan shall specifically address and potential adverse hydrologic consequences identified in the PHC determination prepared under paragraph (f) of this section and shall include preventive and remedial measures.

(i) Ground-water monitoring plan. (1) The application shall include a ground-water monitoring plan based upon the PHC determination required under paragraph (f) of this section and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in paragraph (h) of this section. It shall identify the quantity and quality parameters to be monitored, sampling frequency, and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, total dissolved solids or specific conductance corrected to 25[degrees]C, pH, total iron, total manganese, and water levels shall be monitored and data submitted to the regulatory authority at least every 3 months for each monitoring location. The regulatory authority may require additional monitoring.

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

(j) Surface-water monitoring plan. (1) The application shall include a surface-water monitoring plan based upon the PHC determination required under paragraph (f) of this section and the analysis of all baseline hydrologic, geologic, and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved postmined land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (h) of this section as well as the effluent limitations found at 40 CFR part 434.

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

(i) At all monitoring locations in the surface-water bodies such as streams, lakes, and impoundments, that are potentially impacted or into which water will be discharged and at upstream monitoring locations the total dissolved solids or specific conductance corrected to 25 [degrees]C, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.

(ii) For point-source discharges, monitoring shall be conducted in accordance with 40 CFR parts 122, 123 and 434 and as required by the National Pollutant Discharge Elimination System permitting authority.

(3) The monitoring reports shall be submitted to the regulatory authority every 3 months. The regulatory authority may require additional monitoring.

[48 FR 43985, Sept. 26, 1983, as amended at 53 FR 36400, Sept. 19, 1988]

30 CFR Sec. 780.22 Geologic information.

(a) General. Each application shall include geologic information in sufficient detail to assist in determining--

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

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

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

(b) Geologic information shall include, at a minimum the following:

(1) A description of the geology of the proposed permit and adjacent areas down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. The description shall include the areal and structural geology of the permit and adjacent areas, and other parameters which influence the required reclamation and the occurrence, availability, movement, quantity, and quality of potentially impacted surface and ground waters. It shall be based on--

(i) The cross sections, maps and plans required by Sec. 779.25 of this chapter;

(ii) The information obtained under paragraphs (b)(2) and (c) of this section; and

(iii) Geologic literature and practices.

(2) Analyses of samples collected from test borings; drill cores; or fresh, unweathered, uncontaminated samples from rock outcrops from the permit area, down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest seam to be mined which may be adversely impacted by mining. The analyses shall result in the following:

(i) Logs showing the lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring;

(ii) Chemical analyses identifying those strata that may contain acid- or toxic-forming or alkalinity-producing materials and to determine their content except that the regulatory authority may find that the analysis for alkalinity-producing materials is unnecessary; and

(iii) Chemical analyses of the coal seam for acid- or toxic-forming materials, including the total sulfur and pyretic sulfur, except that the regulatory authority may find that the analysis of pyritic sulfur content is unnecessary.

(c) If determined to be necessary to protect the hydrologic balance or to meet the performance standards of this chapter, the regulatory authority may require the collection, analysis, and description of geologic information in addition to that required by paragraph (b) of this section.

(d) An applicant may request the regulatory authority to waive in whole or in part the requirements of paragraph (b)(2) of this section. The waiver may be granted only if the regulatory authority finds in writing that the collection and analysis of such data is unnecessary because other equivalent information is available to the regulatory authority in a satisfactory form.

[48 FR 43987, Sept. 26, 1983]

30 CFR Sec. 780.23 Reclamation plan: Land use information.

(a) The plan shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:

(1) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within 5 years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described. In the case of previously mined land, the use of the land prior to any mining shall also be described to the extent such information is available.

(2) A narrative of land capability and productivity, which analyzes the land-use description under paragraph (a) of this section in conjunction with other environmental resources information. The narrative shall provide analyses of:

(i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover, and the hydrology of the proposed permit area; and

(ii) The productivity of the proposed permit area before mining, expressed as average yield of food, fiber, forage, or wood products from such 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 resource or agricultural agencies.

(b) Each plan shall contain a detailed description of the proposed use, following reclamation, of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use of existing land use policies and plans. This description shall explain:

(1) How the proposed post mining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and

(2) Where a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under 30 CFR 816.133.

(3) The consideration which has been given to making all of the proposed surface mining activities consistent with surface owner plans and applicable State and local land use plans and programs.

(c) The description shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the State and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

[59 FR 27937, May 27, 1994]

30 CFR Sec. 780.25 Reclamation plan: Situation structures, impoundments, banks, dams, and embankments.

(a) General. Each application shall include a general plan and a detailed design plan for each proposed siltation structure, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area.

(1) Each general plan shall --

(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture;

(ii) Contain a description, map, and cross section of the structure and its location;

(iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;

(iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred; and

(v) Contain a certification statement which includes a schedule setting forth the dates that any detailed design plans for structures that are not submitted with the general plan will be submitted to the regulatory authority. The regulatory authority shall have approved, in writing, the detailed design plan for a structure before construction of the structure begins.

(2) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," Technical Release No. 60 (TR-60) shall comply with the requirements of this section for structures that meet or exceed the size of other criteria of the Mine Safety and Health Administration (MSHA). The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, order No. PB 87-157509/AS. Copies can be inspected at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, Room 660, 800 North Capitol Street, Washington, DC or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, Sec. 77.216(a) of this chapter shall:

(i) Be prepared by, or under the direction of, and certified by a qualified registered professional engineer with assistance from experts in related fields such as geology, land surveying, and landscape architecture;

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

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

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

(3) Each detailed design plan for structures not included in paragraph (a)(2) of this section shall:

(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor, except that all coal

processing waste dams and embankments covered by Secs. 816.81-816.84 of this chapter shall be certified by a qualified, registered, professional engineer;

(ii) Include any design and construction requirements for the structure, including any required geotechnical information;

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

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

(b) Siltation structures. Siltation structures shall be designed in compliance with the requirements of Sec. 816.46 of this chapter.

(c) Permanent and temporary impoundments. (1) Permanent and temporary impoundments shall be designed to comply with the requirements of Sec. 816.49 of this chapter.

(2) Each plan for an impoundment meeting the size or other criteria of the Mine Safety and Health Administration shall comply with the requirements of Secs. 77.216-1 and 77.216-2 of this title. The plan required to be submitted to the District Manager of MSHA under Sec. 77.216 of this title shall be submitted to the regulatory authority as part of the permit application in accordance with paragraph (a) of this section.

(3) For impoundments not included in paragraph (a)(2) of this section, the regulatory authority may establish through the State program approval process, engineering design standards that ensure stability comparable to a 1.3 minimum static safety factor in lieu of engineering tests to establish compliance with the minimum static safety factor of 1.3 specified in Sec. 816.49(a)(4)(ii) of this chapter.

(d) Coal processing waste banks. Coal processing waste banks shall be designed to comply with the requirements of 30 CFR 816.81--816.84.

(e) Coal processing waste dams and embankments. Coal processing waste dams and embankments shall be designed to comply with the requirements of 30 CFR 816.81--816.84. Each plan shall comply with the requirements of the Mine Safety and Health Administration, 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:

(1) 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.

(2) 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.

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

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

(f) If the structure meets the Class B or C criteria for dams in TR-60 or meets the size or other criteria of Sec. 77.216(a) of this chapter, each plan under paragraphs (b), (c), and (e) of this section shall include a stability analysis of the structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

[44 FR 15357, Mar. 13, 1979, as amended at 45 FR 51550, Aug. 4, 1980; 48 FR 44780, Sept. 30, 1983; 50 FR 16199, Apr. 24, 1985; 53 FR 43605, Oct. 27, 1988; 59 FR 53028, Oct. 20, 1994]

30 CFR Sec. 780.27 Reclamation plan: Surface mining near underground mining.

For surface mining activities within the proposed permit area to be conducted within 500 feet of an underground mine, the application shall describe the measures to be used to comply with 30 CFR 816.79.

30 CFR Sec. 780.29 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 30 CFR 816.43 of this chapter.

[44 FR 15357, Mar. 13, 1979, as amended at 48 FR 43987, Sept. 26, 1983]

30 CFR Sec. 780.31 Protection of publicly owned parks and historic places.

(a) For any publicly owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used

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(1) To prevent adverse impacts, or

(2) If a person has valid existing rights, as determined under Sec. 761.16 of this chapter, or if joint agency approval is to be obtained under Sec. 761.17(d) of this chapter, to minimize adverse impacts.

(b) The regulatory authority may require the applicant to protect historic or archeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.

[52 FR 4262, Feb. 10, 1987; 64 FR 70838, Dec. 17, 1999]

30 CFR Sec. 780.33 Relocation or use of public roads.

Each application shall describe, with appropriate maps and cross-sections, the measures to be used to ensure that the interests of the public and landowners affected are protected if, under 761.14 of this chapter, the applicant seeks to have the regulatory authority approve -

(a) Conducting the proposed surface 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

(b) Relocating a public road.

[44 FR 15357, Mar. 13, 1979; 64 FR 70838, Dec. 17, 1999]

30 CFR Sec. 780.35 Disposal of excess spoil.

(a) Each application shall contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal site and design of the spoil disposal structures according to 30 CFR 816.71--816.74. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.

(b) Except for the disposal of excess spoil on pre existing benches, each application shall contain the results of a geotechnical investigation of the proposed disposal site, including the following:

(1) The character of bedrock and any adverse geologic conditions in the disposal area,

(2) A survey identifying all springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the disposal site;

(3) A survey of the potential effects of subsidence of the subsurface strata due to past and future mining operations;

(4) A technical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and

(5) A stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions. These data shall be accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.

(c) If, under 30 CFR 816.71(d), rock-toe buttresses or key-way cuts are required, the application shall include the following:

(1) The number, location, and depth of borings or test pits which shall be determined with respect to the size of the spoil disposal structure and subsurface conditions; and

(2) Engineering specifications utilized to design the rock-toe buttress or key-way cuts which shall be determined in accordance with paragraph (b)(5) of this section.

[44 FR 15357, Mar. 13, 1979, as amended at 48 FR 44780, Sept. 30, 1983; 56 FR 65635, Dec. 17, 1991]

30 CFR Sec. 780.37 Road systems.

(a) Plans and drawings. Each applicant for a surface coal mining and reclamation permit shall submit plans and drawings for each road, as defined in Sec. 701.5 of this chapter, to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall--

(1) Include a map, appropriate cross sections, design drawings and specifications for road widths, gradients, surfacing materials, cuts, fill embankments, culverts, bridges, drainage ditches, low-water crossings, and drainage structures;

(2) Contain the drawings and specifications of each proposed road that is located in the channel of an intermittent or perennial stream, as necessary for approval of the road by the regulatory authority in accordance with Sec. 816.150(d)(1) of this chapter;

(3) Contain the drawings and specifications for each proposed ford of perennial or intermittent streams that is used as a temporary route, as necessary for approval of the ford by the regulatory authority in accordance with Sec. 816.151(c)(2) of this chapter;

(4) Contain a description of measures to be taken to obtain approval of the regulatory authority for alteration or relocation of a natural stream channel under Sec. 816.151(d)(5) of this chapter;

(5) Contain the drawings and specifications for each low-water crossing of perennial or intermittent stream channels so that the regulatory authority can maximize the protection of the stream in accordance with Sec. 816.151(d)(6) of this chapter; and

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

(b) Primary road certification. The plans and drawings for each primary road shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer, or in any State which authorizes land surveyors to certify the design of primary roads a qualified registered professional land surveyor, with experience in the design and construction of roads, as meeting the requirements of

this chapter; current, prudent engineering practices; and any design criteria established by the regulatory authority.

(c) Standard design plans. The regulatory authority may establish engineering design standards for primary roads through the State program approval process, in lieu of engineering tests, to establish compliance with the minimum static safety factor of 1.3 for all embankments specified in Sec. 816.151(b) of this chapter.

[53 FR 45211, Nov. 8, 1988]

30 CFR Sec. 780.38 Support facilities.

Each applicant for a surface coal mining and reclamation permit shall submit a description, plans, and drawings for each support facility to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall include a map, appropriate cross sections, design drawings, and specifications sufficient to demonstrate compliance with Sec. 816.181 of this chapter for each facility.

[53 FR 45211, Nov. 8, 1988]