Wyoming Administrative Rules

Environmental Quality, Dept. of

Land Quality - Non Coal

Chapter 2: Regular Noncoal Mine Permit Applications

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Chapter 2

Regular Noncoal Mine Permit Applications

Section 1. General Requirements.

- (a) All applications shall be filed in a format required by the Administrator and shall include, at a minimum, all information required by the Act and all the applicable information required under Section 2 of this Chapter.
- (b) Information set forth in the application shall be current, presented clearly and concisely, and supported or authenticated, when appropriate, by references to technical material, persons, or public or private organizations which were used, consulted, or were responsible for collecting and analyzing the data.
- (c) Maps submitted with the application shall be, or be the equivalent of, a U.S. Geological Survey topographic map at a scale determined by the Administrator, but in no event smaller than 1:24,000. All maps shall contain a title relative to the subject matter of the map, a map number, legend, and show the limits of the permit area.
- (d) Applicants may reference materials. If used in the application, referenced materials shall either be provided to the Division or be readily available to the Division. Relevant portions of referenced materials shall be presented briefly and concisely in the application by photocopying or abstracting and with explicit citations.
- (e) The applicant may consult with the local conservation district during preparation of the reclamation plan for conformance with technical standards and specifications which may have been adopted by the local conservation district for mined land reclamation.
- (f) The applicant shall consult with both the Wyoming Game and Fish Department and the U. S. Fish and Wildlife Service prior to submission of the permit application. The Administrator shall also consult with both wildlife agencies during permit application review. The Administrator shall review recommendations from the wildlife agencies and may reject recommendations that are outside the scope of the Act. Those recommendations accepted by the Administrator shall be presented to the applicant for their review and comment. Those recommended mitigation plans from the wildlife agencies resulting from review and comment and accepted by the Administrator shall be incorporated into the permit application.

Section 2. General Application Content Requirements.

- (a) In addition to that information required by W.S. § 35-11-406(a), each application for a mining permit shall contain:
- (i) A description of the lands to be affected within the permit area, how these lands will be affected, for what purpose these areas will be used during the course of the mining

operation, and a time schedule for affecting these lands. This description shall include:

(A) The major past and present uses of the proposed permit area and adjacent lands. Previous uses of affected lands must be ranked on an individual basis according to the overall economic or social value of the land use to the landowner, community, or area in which these lands are found. The Administrator of the Land Quality Division shall bear the responsibility of making the final decision on the ranking of land uses in a particular area. This decision must be based on information concerning the economy, historical use of the area, and the needs and desires of the landowner. The Land Quality Advisory Board may be consulted for suggestions or recommendations on the ranking of land uses in a given area.

(B) Vegetative cover.

- (I) Grasses, forbs, trees and shrubs the description shall include the common and scientific names of the predominating species and their estimated abundance within the proposed permit area. If trees are present within the proposed permit area, then the description shall include an estimate of the range of their heights and diameters.
- (II) Noxious weeds if any weeds or other plants listed by the local Weed and Pest Control District as harmful are present within the proposed permit area, the description shall include a list of their names, either common or scientific, and their abundance.
- (III) Endangered or Threatened Species. If any State or Federally listed endangered or threatened plant species are known to exist within the permit area or in adjacent areas, their location shall be described and an evaluation provided on potential habitats within the permit area or in adjacent areas.
- (C) Annual precipitation the operator shall submit an estimated total annual precipitation for the proposed permit area. Data from the nearest official weather reporting station may be used. Operations more than 50 miles from an official weather station that are permanently staffed may be required to keep precipitation records.
- (D) Average wind direction and velocity the operator shall submit the average wind direction and velocity recorded at the nearest official weather station or as measured at the site.

(E) Indigenous wildlife.

- (I) The operator shall submit a list of the indigenous vertebrate wildlife species in the permit area by common and scientific names. Special attention shall be paid to the possible presence of wildlife on or adjacent to the proposed permit area which are listed on the "Threatened or Endangered Species List."
 - (F) Overburden, topsoil, subsoil, mineral seams or other deposits.
 - (I) Overburden the operator shall submit a description

including the thickness, geological nature (rock type, orientation, etc.), the presence of toxic, acid-forming, or vegetative-retarding substances, or any other factor that will influence the mining or reclamation activities.

- (II) Topsoil the operator shall submit a description of the thickness and nature of the topsoil, if any, over the proposed affected lands. A soils survey and soil analyses conducted in accordance with standard methods acceptable to the Administrator, may be required to show variations in topsoil depth and suitability.
- (III) Subsoil the nature, thickness and distribution of the subsoil, if any, shall be described over the proposed affected lands. Detailed analyses of the subsoil may be required, if there is reason to suspect it may be of better quality for revegetation than the topsoil, or if it is to function as a topsoil supplement in reclamation efforts. If the subsoil is suspected of containing substances that might cause pollution or hinder reclamation, analyses will provide a basis for determining how to handle this material during reclamation.
- (IV) Mineral seams or other deposits the operator shall submit a description of the mineral seams in the proposed permit area, including, but not limited to, their depth, thickness, orientation (strike and dip), and rock or mineral type. Maps or geologic cross-sections may be used to illustrate the description of the mineral seams.

(G) Surface waters.

- (I) The operator shall list and describe the name and location for the present surface waters in and adjacent to the proposed permit area. The list shall include, but not be limited to, rivers, creeks, lakes, reservoirs, springs and marshes. Streams shall be classified as ephemeral, intermittent or perennial.
- (II) The operator shall submit a description of the immediate drainage area which includes the proposed permit area. Surface water use shall be identified as to domestic, municipal, industrial, agricultural, and wildlife.

(H) Groundwater.

The operator shall submit an estimate of the depth and quantity of any groundwater existing in the proposed permit area down to and including the strata immediately below the lowest mineral seam to be mined. The operator may be required to conduct test drilling and monitoring in order to determine the exact depth, quantity and quality of groundwater in geological formations affected by the mining operations. Such drilling will require permits from the State Engineer's Office.

(I) Water rights.

(I) The operator shall list by name and owner all known adjudicated and permitted water rights on the proposed permit area and adjacent lands.

- (II) The operator shall submit a list by name and owner of all existing water wells on the proposed permit area and adjacent lands, including all wells filed with the State Engineer's Office three miles or less from the proposed permit area. A survey of the premining water levels in the above wells may be required.
- (J) A description of any significant artifacts, fossil or other article of cultural, historical, archaeological or paleontological value. Upon recommendation by a qualified archaeologist or a qualified paleontologist, the Administrator may require an evaluation of the proposed permit area prior to the time that a permit or license is issued.
- (b) In addition to that information required by W.S. § 35-11-406(b), each application for a mining permit shall contain:
- (i) A description of the mining operation proposed to be conducted during the life of the mine, including:
- (A) A narrative description of the type and method of mining, the number of acres that will be affected annually, overburden and mineral removal and transport, anticipated annual and total production by tonnage, and the major equipment to be used for all aspects of the operations.
- (B) A map showing the estimated orderly progression of mining and reclamation on all proposed affected lands.
- (ii) A time schedule for each major step in the reclamation which coordinates the operator's reclamation plan with the mining plan in such a manner so as to facilitate reclamation at the earliest possible time consistent with Chapter 3, Section 2(k) and the orderly development of the mining property.
- (iii) A plan whereby the operator will reclaim the affected lands to the proposed postmining land use in accordance with Chapter 3, Section 2(a) which shall include:
- (A) A plan for topsoil and subsoil removal, storage, protection, and replacement; and for handling and disposal of all toxic, acid-forming, or otherwise hazardous materials, in accordance with Chapter 3, Section 2(c). This shall include a description with location maps and, where appropriate, typical topographic profiles of the mine facility area, mineral stockpiles, spoil piles, and topsoil and subsoil stockpiles. The location, and where required, the capacity of each stockpile shall be described and shown on a map. The application shall also explain how the topsoil will be replaced on the affected land during reclamation, including a description of the thickness of topsoil to be replaced and procedures that will be followed to protect the topsoil from excessive compaction and wind and water erosion until vegetation has become adequately established.
- (B) A plan for backfilling, grading and contouring of all affected lands in accordance with Chapter 3, Section 2(b). The plan shall include:

- (I) A description of the reclaimed land surface with contour maps or cross-sections that show the final surface configuration of the affected lands;
- (II) Where terraces or benches are proposed, detailed drawings shall be provided which show dimension and design of the terraces, check dams, any erosion prevention techniques and slopes of the terraces and their interval;
- (III) Where permanent water impoundments are proposed, contour maps and cross-sections which show slope conditions around the impoundment and the anticipated high and low postmining water level. The plan shall contain a description of erosion control techniques and such other design criteria and water quality and quantity conditions to comply with Chapter 3, Section 2(g);
- (IV) Maps and descriptions necessary to demonstrate that the slopes of the reclaimed land surface do not exceed the approximate premining slopes; and
- (V) Procedures for assuring stability of the reclaimed land surface.
- (VI) Applications for disposal of inert material as backfill, shall be subject to the following requirements:
- (1.) Applications for disposal of inert material as backfill shall be considered a significant permit revision and will be processed in accordance Noncoal Chapter 7.
- (2.) On-site stockpiling of inert materials shall not be allowed prior to the use of the materials as final backfill. Inert materials shall not be processed at the mining operation, only final products may be used as backfill.
- (3.) Inert materials shall be approved by the Administrator prior to being used as backfill.
 - (4.) Approved backfill locations shall include:
- a. Inert materials shall only be used as backfill on privately owned land with surface owner's consent;
- b. Inert materials shall only be placed in the end walls or the final pit voids that are not located in drainages or impoundments;
- c. The inert backfill material shall be placed in a lift not to exceed ten feet and covered by a minimum lift of at least fifteen feet of suitable backfill material in accordance with Chapter 3, Section 2(b) of these rules in order to minimize potential future surface subsidence. Multiple lifts are permitted. The approved materials shall be placed a minimum of twenty feet above the pre-mining potentiometric surface of the native

aquifer and a minimum of twenty feet below the final regraded spoils surface. The pit shall not be saturated. If the mined pit is dry, the disposal shall be above the confining layer; and

- d. The proposed backfill disposal location shall be mapped and a legal description of the location shall be provided. The proposed location shall also comply with Chapter 4, Section 4 of the Solid and Hazardous Waste Division Rules.
 - (5.) Monitoring and reporting requirements.
- a. Backfill disposal location maps and groundwater monitoring locations shall be updated annually in the required annual report;
- b. The groundwater monitoring plan required by Section 2(b)(iii)(D) of this Chapter shall include monitoring wells to be installed and monitored in accordance with the Chapter 4, Section 8(b)(i)(A) through (C) and 8(b)(iv)(A) of the Solid Waste Rules. The monitoring results shall be reported in the annual report; and
- c. The groundwater and vegetation monitoring shall continue until final bond release and shall at a minimum continue for five years after final reclamation. Groundwater constituents to be monitored shall be based on the type of material used as backfill.
- d. If the monitoring data demonstrates any groundwater contamination associated with the disposed backfill materials, the Administrator may require the operator to characterize the nature and extent of the release, conduct an assessment of corrective measures, and institute corrective action remedies approved by the Administrator.
 - (6.) Final surface reclamation requirements.
- a. The final reclamation surface must blend with the surrounding mine reclamation and have a permanent vegetative cover in accordance with Chapter 3, Section 2 (c) and (d) of these rules;
- b. Final reclamation must drain properly and not impound water in accordance with the Chapter 3, Section 2(c)(iv) requirements;
- c. The backfill site shall be released by the Division in accordance with the approved reclamation plan; and
- d. Upon final reclamation, a disclosure must be placed on the real property deed for the described lands prior to final bond release.
- (7.) The operator shall remit fees quarterly to the Department in the amount of ten percent of any revenues collected by the operator for the disposal of inert materials.

- (C) A plan to assure revegetation of all affected land in accordance with Chapter 3, Section 2(d). The plan shall include the method and schedule of revegetation, including but not limited to species of plants, seeding rates, seeding techniques, mulching requirements or other erosion control techniques, and seeding times to be used in a given area for reclamation purposes. The plan shall also reflect reclamation recommendations accepted by the Administrator through consultation with the Wyoming Department of Agriculture if the applicant is proposing to reclaim an area to croplands.
- (D) Descriptions, including maps and cross-sections, of the surface water diversion systems which meet the requirements of Chapter 3, Sections 2(e) and (f). Monitoring of surface and groundwater conditions may be required during the course of the operation based on the existing water conditions and the nature of the proposed operation. If so required, the application shall include a description of the location, construction, maintenance, and removal, where necessary, of such monitoring stations.
- (E) Where a permanent water impoundment is proposed as final reclamation, the application shall include:
- (I) Written consent from the surface landowner if different than the mineral owner;
 - (II) A description of the proposed use of the impoundment;
- (III) A statement of the source, quality and quantity of water available for impoundment and a statement regarding its suitability for recreational, irrigation, livestock or wildlife watering. If, upon review of this information, water quality and quantity are not reasonably demonstrated to be suitable for the postmining use, the applicant shall be so notified in writing and shall be allowed to submit further documentation in support of the proposed impoundment to reasonably satisfy the Administrator. If the applicant is unable to demonstrate to the satisfaction of the Administrator that the water quality and quantity will be suitable for the postmining land use, the applicant shall provide an alternate plan;
- (IV) The operator may be required to monitor surface and groundwater in order to determine that upon completion of the operation, the water quality and quantity will be consistent with the approved postmining use; and
- (V) A description of the construction of the impoundment so as to meet the requirements of Chapter 3, Section 2(g).
- (F) A plan to assure proper design, construction, operation, monitoring, maintenance and reclamation of any tailings impoundments, tailings disposal areas, heap leaching facilities and spent ore disposal areas utilizing best technology currently available in accordance with the Act and these regulations.
- (G) A classification and description, including maps and cross-sections, if appropriate, of all roads (except exempted roads), other transportation facilities,

shipping areas and rights-of-way to be built or utilized during the operation. The classification shall designate the road as either a haul road, access road, or light-use road. The description shall include:

- (I) Legal ownership if the operator includes roads or spur lines within the permit area but does not possess the mineral rights or the right-to-mine for these lands, the legal land description shall then be listed in the application as a separate subsection in Appendix "C." The heading of the subsection shall make it clear that the right-to-mine is not claimed on the described lands. Surface owners shall be listed for all lands crossed by spur lines and roads.
- (II) All information necessary to show compliance with the requirements of Chapter 3, Section 2(i).
- (H) A plan for the disposal of buildings and structures erected, used or modified by the applicant in accordance with the requirements of Chapter 3, Section 2(j).
- (I) A plan for the management and disposal within the proposed permit area of industrial solid wastes generated by the operation (such as, but not limited to, grease, lubricants, paints, flammable liquids, garbage, trash, discarded mining machinery, lumber and other combustible materials) in accordance with Chapter 3, Section 2(c) and with those provisions of the Solid Waste Management Rules and Regulations deemed appropriate by the Administrator.