

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 8 COAL MINING
PART 9 PERMIT APPLICATIONS - MINIMUM REQUIREMENTS FOR RECLAMATION AND OPERATIONS PLAN

19.8.9.1 ISSUING AGENCY: New Mexico Coal Surface Mining Commission.
[19.8.9.1 NMAC- N, 9-29-2000]

19.8.9.2 SCOPE: All persons subject to the New Mexico Surface Mining Act, NMSA 1978, Sections 69-25A-1 et. Seq. (1979).
[19.8.9.2 NMAC- N, 9-29-2000]

19.8.9.3 STATUTORY AUTHORITY: NMSA 1978, Sections 69-25A-1 et. seq. (1979).
[19.8.9.3 NMAC- N, 9-29-2000]

19.8.9.4 DURATION: Permanent.
[19.8.9.4 NMAC- N, 9-29-2000]

19.8.9.5 EFFECTIVE DATE: November 29, 1997, unless a later date is cited at the end of a section.
[19.8.9.5 NMAC- N, 9-29-2000]

19.8.9.6 OBJECTIVE: The objective of Parts 1 - 35 of Chapter 8 is to establish regulations to implement the New Mexico Surface Mining Act as directed in NMSA 1978, Section 69-25A-5 (1979). These regulations are intended to ensure proper reclamation through permitting for operations subject to the New Mexico Surface Mining Act, in accordance with provisions and standards outlined in the New Mexico Surface Mining Act.
[19.8.9.6 NMAC - N, 9-29-2000; A, 1-15-2002]

19.8.9.7 DEFINITIONS: [RESERVED]
[19.8.9.7 NMAC- N, 9-29-2000]
[Definitions for this part can be found in 19.8.1.7 NMAC.]

19.8.9.8 - 19.8.9.899 [RESERVED]
[19.8.9.8 - 19.8.9.899 NMAC - N, 9-29-2000]

19.8.9.900 OPERATION PLAN: GENERAL REQUIREMENTS: 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 such facilities is necessary for postmining land use as specified in 19.8.20.2075 NMAC:

- (1) dams, embankments, and other impoundments;
- (2) overburden and topdressing 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.

[11-29-97; A, 12-15-99; 19.8.9.900 NMAC - Rn, 19 NMAC 8.2.9.900, 9-29-2000]

19.8.9.901 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 19.8.19 through 19.8.28 NMAC.

B. Each application shall contain a compliance plan for each existing structure which does not meet the performance standards of 19.8.19 through 19.8.28 NMAC and which is 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 19.8.19 through 19.8.28 NMAC;
- (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 19.8.19 through 19.8.28 NMAC 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 reconstruction or modification.

[11-29-97; 19.8.9.901 NMAC - Rn, 19 NMAC 8.2.9.901, 9-29-2000]

19.8.9.902 OPERATION PLAN: BLASTING: Each application shall contain a blasting plan for the proposed permit area, explaining how the applicant intends to comply with the requirements of 19.8.20.2028 through 2033 NMAC and including the following:

- A.** types and approximate amounts of explosive to be used for each type of blasting operation to be conducted;
- B.** description of procedures and plans for recording and retention of information on the following during blasting:
 - (1) drilling patterns, including size, number, depths, and spacing of holes;
 - (2) charge and packing of holes;
 - (3) types of fuses and detonation controls; and
 - (4) sequence and timing of firing holes;
- C.** description of blasting warning and site access control equipment and procedures;
- D.** description of types, capabilities, sensitivities, and locations of use of any blast monitoring equipment and procedures proposed to be used;
- E.** description of plans for recording and reporting to the director the results of preblasting surveys, if required; and
- F.** description of unavoidable hazardous conditions for which deviations from the blasting schedule will be needed under Paragraph (3) of Subsection A of 19.8.20.2030 NMAC.

[11-29-97; 19.8.9.902 NMAC - Rn, 19 NMAC 8.2.9.902, 9-29-2000]

19.8.9.903 OPERATION PLAN: MAPS AND PLANS: Each application shall contain maps and plans of the proposed permit area and adjacent areas as follows:

- A.** the maps and plans shall show the underground mining activities to be conducted, if any, the lands proposed to be affected throughout the surface coal mining operations and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under 19.8.8.812 and 813 NMAC;
- B.** the following shall be shown for the proposed permit area unless specifically required for the adjacent area by the director:
 - (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 19.8.14 NMAC;
 - (4) each coal storage, cleaning and loading area;
 - (5) each topdressing, 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, if any;
 - (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;
- (11) location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with 19.8.9.909 NMAC, and fill area for the disposal of excess spoil in accordance with 19.8.9.914 NMAC;
- (12) each profile, at cross-sections specified by the director of the anticipated final surface configuration to be achieved for the affected areas;
- (13) location of each water monitoring point;
- (14) location of each facility that will remain on the proposed permit area as a permanent feature after the completion of surface coal mining operations; and
- (15) in addition to the above, underground mines shall indicate the location of each subsidence monitoring point.

C. Maps, plans, and cross-sections required under Paragraphs (4), (5), (6), (10) and (11) of Subsection B of 19.8.9.903 NMAC shall be prepared by, or under the direction of and certified by a qualified professional geologist or registered professional engineer, with assistance from experts in related fields such as land surveying, reclamation or mined land rehabilitation, except that:

- (1) maps, plans and cross-sections for sedimentation ponds may only be prepared by a qualified registered professional engineer; and
- (2) spoil disposal facilities, maps, plans, and cross-sections may only be prepared by a qualified registered professional engineer.

[11-29-97; 19.8.9.903 NMAC - Rn, 19 NMAC 8.2.9.903, 9-29-2000]

19.8.9.904 AIR POLLUTION CONTROL PLAN:

A. For all surface coal mining operations with projected production rates exceeding 1,000,000 tons of coal per year, 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 (2) of Subsection A of 19.8.9.904 NMAC to comply with federal and state air quality standards; and
- (2) a plan for fugitive dust control practices as required under 19.8.20.2050 NMAC.

B. For all other surface coal mining operations the application shall contain an air pollution control plan which includes the following:

- (1) an air quality monitoring program, if required by the director, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under Paragraph (2) of Subsection B of 19.8.9.904 NMAC to comply with applicable federal and state air quality standards; and
- (2) a plan for fugitive dust control practices, as required under 19.8.20.2050 NMAC.

[11-29-97; 19.8.9.904 NMAC - Rn, 19 NMAC 8.2.9.904, 9-29-2000]

19.8.9.905 FISH AND WILDLIFE PLAN:

A. Each application shall contain a fish and wildlife plan, consistent with 19.8.20.2051 NMAC which provides:

- (1) a statement of how the plan will minimize disturbances and adverse impacts on fish and wildlife and related environmental values during surface coal mining and reclamation operations, and how enhancement of these resources will be achieved, where practicable; the plan shall cover the permit and adjacent areas as determined by the director pursuant to Subsection C of 19.8.8.809 NMAC;

(2) if the applicant states that it will not be practicable, in accordance with Paragraph (1) of Subsection A of 19.8.9.905 NMAC, to achieve a condition which clearly shows a trend toward enhancement of fish and wildlife resources at the time revegetation has been successfully completed under 19.8.20.2060 through 2066 NMAC, a statement explaining why it is not practicable to achieve such a condition shall be submitted to the director;

B. a statement, describing the methods, if any, the applicant will utilize to protect or enhance the following, if they are to be affected by surface coal mining operations:

- (1) threatened or endangered species of plants or animals which are indigenous to the state listed under the Endangered Species Act of 1973 as amended, and the Wildlife Conservation Act, Sections 17-3-37 et. seq. NMSA 1978, the Habitat Protection Act, Sections 17-6-1 et. seq. NMSA 1978, and the laws relating to the protection of native New Mexico plants including Sections 76-8-1 through 76-8-4 NMSA 1978; and their critical habitats;

- (2) species such as eagles, migratory birds or other animals protected by state or federal law and their habitats; or other species identified through the consultation process pursuant to 19.8.8.809 NMAC; or
- (3) habitats of unusually high value for fish and wildlife, such as wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, reproduction and nursery areas, and wintering areas. [11-29-97; 19.8.9.905 NMAC - Rn, 19 NMAC 8.2.9.905, 9-29-2000]

19.8.9.906 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 Sections 69-25A-19 and 69-25A-20 NMSA 1978 of the act and 19.8.1 through 19.8.35 NMAC. The plan shall include, at a minimum, all information required under 19.8.9.906 through 918 NMAC.
- 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 19.8.14 NMAC;
 - (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 19.8.20.2054 through 2059 NMAC;
 - (4) a plan for removal, storage, protection and redistribution of topsoil, subsoil, and other material suitable for topsoil to meet the requirements of 19.8.20.2004 through 2008 NMAC;
 - (5) a plan for revegetation as required in 19.8.20.2060 through 2066 NMAC, including, but not limited to, descriptions of the:
 - (a) schedule of revegetation;
 - (b) species and amounts per acre of seeds and seedlings to be used;
 - (c) methods to be used in planting and seeding;
 - (d) mulching techniques;
 - (e) irrigation, if appropriate, and pest and disease control measures, if any;
 - (f) measures proposed to be used to determine the success of revegetation, as required in 19.8.20.2065 NMAC, and
 - (g) a soil testing plan for evaluation of the results of topdressing handling and reclamation procedures related to revegetation.
 - (6) a description of measures to be used to maximize the use and conservation of the coal resource as required in 19.8.20.2027 NMAC;
 - (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 19.8.20.2046 and 2056 NMAC, 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 19.8.20.2001 through 2003 NMAC; and
 - (9) a description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. Sec. 7401 et seq.), the Clean Water Act (33 U.S.C. Sec. 1251 et seq.), and all applicable air and water quality laws and regulations and health and safety standards. [11-29-97; 19.8.9.906 NMAC - Rn, 19 NMAC 8.2.9.906, 9-29-2000; A, 1-15-2002]

19.8.9.907 RECLAMATION PLAN: PROTECTION OF HYDROLOGIC BALANCE:

- A.** Each plan shall contain a detailed description, with appropriate maps and cross section drawings, of the measures to be taken during and after the proposed surface coal mining operations, in accordance with 19.8.20 NMAC, to ensure the protection of:
 - (1) the quality of surface and ground water systems, both within the proposed permit and adjacent areas, from the adverse effects of the proposed surface coal mining operations;
 - (2) the rights of present users of surface and ground water;
 - (3) the quantity of surface and ground water both within the proposed permit area and adjacent area from adverse effects of the proposed surface coal mining operations, or to provide alternative sources of water in accordance with 19.8.8.806 and 19.8.20.2022 NMAC, where the protection of quantity cannot be ensured; and

(4) water quality by locating openings for underground mines in accordance with 19.8.20.2026 NMAC.

B. The description shall include:

(1) a plan for the control, in accordance with 19.8.20 NMAC, of surface and ground water drainage into, through and out of the proposed permit area;

(2) a plan for the treatment, where required under 19.8.19 through 19.8.28 NMAC and 19.8 NMAC, of surface and ground water drainage from the area to be disturbed by the proposed operations, and proposed quantitative limits on pollutants in discharges subject to 19.8.20.2010 NMAC according to the more stringent of the following:

(a) 19.8.19 through 19.8.28 NMAC and 19.8 NMAC;

(b) other applicable state and federal laws;

(3) for surface mining activities, a plan for the restoration of the approximate recharge capacity of the permit and adjacent areas in accordance with 19.8.20.2019 NMAC; and

(4) a plan for the collection, recording, and reporting of ground and surface water quality and quantity data, according to 19.8.20.2020 NMAC and based on the determination required under Subsection C of 19.8.9.907 NMAC 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 surface and ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in Subsection A of 19.8.9.907 NMAC; 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;

(a) ground-water monitoring plan; 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 director every 3 months for each monitoring location; the director may require additional monitoring when necessary;

(b) surface water monitoring plan; 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; the monitoring reports shall be submitted to the director every 3 months; the director may require additional monitoring when necessary.

C. The description shall include a determination of the probable hydrologic consequences of the proposed surface coal mining operations on the cumulative impact area and shall address all proposed mining activities associated with the permit area for which a permit is sought, not just those expected to occur during the term of the permit. This determination shall include findings on:

(1) whether adverse impacts may occur to the hydrologic balance;

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

(3) 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;

(4) what impact the proposed operation will have on:

(a) sediment yield from the disturbed area;

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

(c) flooding or streamflow alteration;

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

(e) other characteristics as required by the director;

(5) a plan that specifically addresses any potential adverse hydrologic consequences identified under Subsection C of 19.8.9.907 NMAC and shall include preventive and remedial measures to be taken during mining and reclamation operations through bond release to minimize disturbance to the hydrologic balance within the cumulative impact area.

D. 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.

E. Each plan for underground mining shall contain a detailed description, with appropriate drawings, of permanent entry seals and down-slope barriers designed to ensure stability under anticipated hydraulic heads developed while promoting mine inundation after mine closure for the proposed permit areas. [11-29-97; 19.8.9.907 NMAC - Rn, 19 NMAC 8.2.9.907, 9-29-2000]

19.8.9.908 RECLAMATION PLAN: POSTMINING LAND USES:

A. Each plan shall contain a detailed description of the proposed use, following reclamation of the land within the proposed permit area for surface mining activities or for underground mining activities, the areas to be affected within the proposed permit area by surface operations or facilities, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:

(1) 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;

(2) for surface mining activities, where range or grazing is the proposed postmining use, the detailed management plans to be implemented;

(3) where a land use different from the pre-mining land use is proposed, all materials needed for approval of the alternative use under 19.8.20.2075 NMAC; and

(4) the consideration which has been given to making all of the proposed surface coal mining operations consistent with surface owner plans and applicable state and local land use plans and programs.

B. 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 for surface mining activities or for underground mining activities, the areas to be affected within the proposed permit area by surface operations or facilities, and the state and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation, unless such owners and agencies fail to make such comments within 30 days.

[11-29-97; A, 12-15-99; 19.8.9.908 NMAC- Rn, 19 NMAC 8.2.9.908, 9-29-2000]

19.8.9.909 RECLAMATION PLAN: PONDS, IMPOUNDMENTS, BANKS, DAMS AND EMBANKMENTS:

A. General. Each application shall include a general plan for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area.

(1) Each general plan shall:

(a) be prepared by, or under the direction of, and certified by a registered professional engineer, with assistance from experts in related fields such as land surveying, reclamation or mined land rehabilitation;

(b) contain a description, map, and cross section of the structure and its location;

(c) contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;

(d) 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

(e) 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 director; the director shall have approved, in writing, the detailed design plan for a structure before construction of the structure begins.

(2) Each detailed design plan for a structure that meets the U.S. natural resources conservation service class B or C criteria for dams in NRCS technical release No. 60 (210-VI-TR60, Oct. 1985), "earth dams and reservoirs", or meets or exceeds the size or other criteria of the mine safety and health administration, 30 CFR 77.216(a) shall:

(a) 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, reclamation or mined land rehabilitation;

(b) include any geotechnical investigation, design, and construction requirements for the structure;

(c) describe the operation and maintenance requirements for each structure; and

(d) describe the timetable and plans to remove each structure, if appropriate.

(3) Each detailed design plan for a structure that does not equal or exceed the size or other criteria in Paragraph (2) of Subsection A of 19.8.9.909 NMAC shall:

(a) be prepared by, or under the direction of, and certified by a qualified registered professional engineer or registered land surveyor except that all coal processing waste dams and embankments covered by 19.8.20.2047 through 2049 NMAC shall be certified by qualified registered professional engineer;

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

(c) describe the operation and maintenance requirements for each structure; and

(d) describe the timetable and plans to remove each structure, if appropriate.

B. Sedimentation ponds. Sedimentation ponds, whether temporary or permanent, shall be designed in compliance with the requirements of 19.8.20.2014 NMAC. Any sedimentation pond or earthen structure which will remain on the proposed permit area as a permanent water impoundment shall also be designed to comply with the requirements of 19.8.20.2017 NMAC. Each plan shall, at a minimum, comply with the requirements of the mine safety and health administration, 30 CFR 77.216-1 and 77.216-2, and the state engineer and shall be submitted to the director as part of the permit application.

C. For impoundments not included in Paragraph (2) of Subsection A of 19.8.9.909 NMAC, the director 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 Paragraph (3) of Subsection E of 19.8.20.2017 NMAC.

D. Coal processing waste banks. Coal processing waste banks shall be designed to comply with the requirements of 19.8.20.2039 through 2042 NMAC.

E. Coal processing waste dams and embankments. Coal processing waste dams and embankments shall be designed to comply with the requirements of 19.8.20.2047 through 2049 NMAC. Each plan shall be submitted to the director as a part of the permit application, and shall comply with the requirements of the mine safety and health administration, 30 CFR 77.216-1 and 77.216-2 and the state engineer 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;

(5) if the structure meets the class B or C criteria for dams in TR-60 or meets the size or other criteria of 30 CFR Sec. 77.216(a), each plan under Subsections B, C and E of 19.8.9.909 NMAC shall include a stability analysis of the structure; the stability analysis shall be performed by a registered professional engineer and 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.

[11-29-97; A, 12-15-99; 19.8.9.909 NMAC - Rn, 19 NMAC 8.2.9.909, 9-29-2000]

19.8.9.910 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 19.8.20.2038.

[11-29-97; 19.8.9.910 NMAC - Rn, 19 NMAC 8.2.9.910, 9-29-2000]

19.8.9.911 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 19.8.20.2011 and 2012 NMAC.

[11-29-97; 19.8.9.911 NMAC - Rn, 19 NMAC 8.2.9.911, 9-29-2000]

19.8.9.912 PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES:

A. Proposed operations that may have an adverse effect on any publicly owned parks or any places listed on the national register of historic places shall include a plan:

- (1) describing the measures to be used to prevent or alleviate adverse impacts, or
- (2) designed to minimize adverse impacts when valid existing rights exist or joint agency approval is to be obtained under Subsection E of 19.8.2.202 NMAC.

B. The director may require the applicant to prevent or alleviate impacts to any 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.

[11-29-97; 19.8.9.912 NMAC - Rn, 19 NMAC 8.2.9.912, 9-29-2000; A, 1-15-2001]

19.8.9.913 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 Subsection D of 19.8.2.202 NMAC, the applicant seeks to have the director approve:

A. conducting the proposed surface coal mining operations 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.

[11-29-97; 19.8.9.913 NMAC - Rn, 19 NMAC 8.2.9.913, 9-29-2000]

19.8.9.914 DISPOSAL OF EXCESS SPOIL FROM SURFACE MINING ACTIVITIES:

A. For surface mining activities, 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 19.8.20.2034 through 2037 NMAC. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.

B. Each such 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 Subsection I of 19.8.20.2034 NMAC, 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 (5) of Subsection B of 19.8.9.914 NMAC.

[11-29-97; 19.8.9.914 NMAC - Rn, 19 NMAC 8.2.9.914, 9-29-2000]

19.8.9.915 DISPOSAL OF UNDERGROUND DEVELOPMENT WASTE: Each plan shall contain descriptions, including appropriate maps and cross section drawings of the proposed disposal methods and sites for placing underground development waste and excess spoil generated at surface areas affected by surface operations and facilities, according to 19.8.20.2034 through 2037 NMAC. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance and removal, if appropriate, of the structures and be prepared according to 19.8.9.914 NMAC.

[11-29-97; 19.8.9.915 NMAC - Rn, 19 NMAC 8.2.9.915, 9-29-2000]

19.8.9.916 TRANSPORTATION FACILITIES: Each application for a permit to conduct surface coal mining and reclamation operations shall contain plans and drawings for each road, conveyor, or rail system to be constructed, used or maintained within the proposed permit area. Plans and drawings shall include a map, appropriate cross sections, and the following:

- A.** specifications for road widths, road gradients, road surfaces, road cuts, fill embankments, culverts, bridges, drainage ditches, drainage structures and low-water crossings;
- B.** a description of measures to be taken to obtain approval of the director for alteration or relocation of a natural drainage way under Paragraph (1) of Subsection E of 19.8.20.2076 or Paragraph (5) of Subsection C of 19.8.20.2077 NMAC;
- C.** drawings and specifications for roads proposed to be located in channels of intermittent or perennial streams; this includes each ford or low water crossing of intermittent and perennial streams;
- D.** plans and schedules for the removal and reclamation of each road not proposed for retention as part of the post-mining land use;
- E.** plans and drawings for each primary road shall be prepared by, or under the direction of, and certified by a registered professional engineer or a qualified registered professional land surveyor, experienced in the design and construction of roads, as meeting all program requirements and current, prudent engineering practices. [11-29-97; A, 12-15-99; 19.8.9.916 NMAC - Rn, 19 NMAC 8.2.9.916, 8/31/2000; A, 12-31-2007]

19.8.9.917 RETURN OF COAL PROCESSING WASTE TO ABANDONED UNDERGROUND WORKINGS:

- A.** Each plan shall describe the design, operation and maintenance of any proposed coal processing waste disposal facility, including flow diagrams and any other necessary drawings and maps, for the approval of the director and the mine safety and health administration under 19.8.20.2045 NMAC.
- B.** Each plan shall describe the source and quality of waste to be stored, 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.
- C.** The applicant shall describe the source of the hydraulic transport mediums, method of dewatering the placed backfill, retention of water underground, treatment of water if released to surface streams, and the effect on the hydrologic regime.
- D.** 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.
- E.** The requirements of Subsections A, B, C and D of 19.8.9.917 NMAC shall also apply to pneumatic backfilling operations, except where the operations are exempted by the director from requirements specifying hydrologic monitoring. [11-29-97; 19.8.9.917 NMAC - Rn, 19 NMAC 8.2.9.917, 9-29-2000; A, 12-31-2007]

19.8.9.918 SUBSIDENCE INFORMATION AND CONTROL PLAN:

- A.** An application for an underground coal mine shall include the following information:
 - (1) a topographic map of the permit and adjacent areas at a scale of 1:12,000 or larger, as required by the director, 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 drinking, domestic, and residential water supplies that could be contaminated, diminished, or interrupted by subsidence;
 - (2) a narrative indicating whether subsidence, if it occurred, could cause material damage to or diminish the value or reasonably foreseeable use of such structures or renewable resource lands or could contaminate, diminish, or interrupt drinking, domestic, or residential water supplies;
 - (3) a survey of the condition of all non-commercial buildings or occupied residential dwellings and associated structures, including a photograph of the exterior of each prior to mining and the name and address of the owner or owners, that may be materially damaged or for which the reasonably foreseeable use may be diminished by subsidence, within the area encompassed by the applicable angle of draw;
 - (4) a survey of the quantity and quality of all drinking, domestic, and residential water supplies within the permit area and adjacent area that could be contaminated, diminished, or interrupted by subsidence;
 - (5) if the applicant cannot complete the surveys required in Paragraphs (3) and (4) of Subsection A of 19.8.9.918 NMAC because the owner or owners will not allow access, the applicant will notify the owner, in writing, of the effect that denial of access will have as described in Subsection C of 19.8.20.2069 NMAC; and

(6) the applicant must pay for any technical assessment or engineering evaluation used to determine the pre-mining condition or value of such non-commercial buildings or occupied residential dwellings and structures related thereto and the quantity and quality of drinking, domestic, or residential water supplies; the applicant must provide copies of the survey and any technical assessment or engineering evaluation to the property owner or owners and regulatory authority.

B. If the survey conducted under Subsection A of 19.8.9.918 NMAC shows that no structures, or drinking, domestic, or residential water supplies, or renewable resource lands exist, or that no material damage or diminution in value or reasonably foreseeable use of such structures or lands, and no contamination, diminution, or interruption of such water supplies would occur as a result of mine subsidence, and if the regulatory authority agrees with this conclusion, no further information need be provided under this section.

C. If the survey 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 regulatory authority determines that damage, diminution in value or foreseeable use, or contamination, diminution, or interruption could occur, the application must include a subsidence control plan that contains the following information:

(1) 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;

(2) a map of the underground workings 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 (4), (5) and (7) of Subsection C of 19.8.9.918 NMAC will be taken to prevent or minimize subsidence and subsidence-related damage; and, when applicable, to correct subsidence-related material damage;

(3) 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;

(4) 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 19.8.20.2069 NMAC;

(5) 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, such as, but not limited to:

(a) backstowing or backfilling of voids;

(b) leaving support pillars of coal;

(c) leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving coal in place; and

(d) taking measures on the surface to prevent or minimize material damage or diminution in value of the surface;

(6) a description of the anticipated effects of planned subsidence, if any;

(7) 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 non-commercial buildings and occupied residential dwellings and structures related thereto; or the written consent of the owner or owners 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;

(8) a description of the measures to be taken in accordance with 19.8.20.2069 NMAC to replace adversely affected protected water supplies or to mitigate or remedy any subsidence-related material damage to the land and protected structures; and

(9) other information specified by the director as necessary to demonstrate that the operation will be conducted in accordance with 19.8.20.2067, 2068, 2069 and 2070 NMAC.

D. The operator shall submit a detailed plan of the underground workings. The detailed plan shall include maps and descriptions, as appropriate, of significant features of the underground mine, including the size, configuration, and approximate location of pillars and entries, extraction ratios, measures taken to prevent or minimize subsidence and related damage, areas of full extraction, and other information required by the regulatory authority. The detailed plan shall be provided and updated consistent with a schedule approved by the director. Upon request of the operator, information submitted with the detailed plan may be held as confidential, in accordance with the requirements of 19.8.11.1104 NMAC.

[11-29-97; 19.8.9.918 NMAC - Rn, 19 NMAC 8.2.9.918 & A, 9-29-2000]

19.8.9.919 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 19.8.20.2078 and 2079 NMAC for each facility. [11-29-97; A, 12-15-99; 19.8.9.919 NMAC - Rn, 19 NMAC 8.2.9.919, 9-29-2000]

HISTORY OF 19.8.9 NMAC:

Pre-NMAC History:

The material in Part 9 was derived from that previously filed with the State Records Center and Archives under: SB 73-1 Regulations of the State of New Mexico Coal Surfacing Commission, filed 1-10-73 and its amendment filed 8-4-76

SB 78-1 (Rule 78-1) Regulations of the State of New Mexico Coal Surfacing Commission, filed 8-31-78

SB 79-1 (Rule 79-1) New Mexico Coal Surfacing Regulations, filed 7-11-79

CSMC Rule 80-1 (Rule 80-1) Surface Coal Mining Regulations, filed 9-24-80; and all amendments to CSMC Rule 80-1, filed 7-29-82, 11-10-83, 3-5-84, 7-19-84, filed 8-6-84, 8-23-84, 3-28-89, 6-15-90, 9-18-90, 2-15-91, 5-8-91, 8-26-91, 10-4-91, 7-28-92, 1-25-93, 11-1-94, 3-10-95, 4-12-95, 12-21-95.

Other History:

Renumbered CSMC Rule 80-1, Surface Coal Mining Regulations, filed 9-24-80 to 19 NMAC 8.2, Coal Surface Mining, filed 11-13-97.

Renumbered 19 NMAC 8.2 Subpart 9 Permit Application - Minimum Requirements for Reclamation and Operations Plan, filed 11-13-97, to 19.8.9 NMAC Permit Application - Minimum Requirements for Reclamation and Operations Plan, effective 09-29-2000.