TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 8 COAL MINING
PART 8 PERMIT APPLICATIONS - MINIMUM REQUIREMENTS FOR INFORMATION ON ENVIRONMENTAL RESOURCES

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

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

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

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

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

19.8.8.6 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.
[19.8.8.6 NMAC - N, 9-29-2000; A, 1-15-2002]

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

19.8.8.8 - 19.8.8.799 [RESERVED]
[19.8.8.8 - 19.8.8.799 - N, 9-29-2000]

19.8.8.800 GENERAL REQUIREMENTS: Each permit application shall include a description of the existing, premining environmental resources as set forth in this part. All data information shall comply with 19.8.5.505 NMAC. All information required under this part shall be used for the permit application evaluation.
[11-29-97; 19.8.8.800 NMAC - Rn, 19 NMAC 8.2.8.800, 9-29-2000]

19.8.8.801 GENERAL ENVIRONMENTAL RESOURCES INFORMATION: Each application shall describe and identify:

A. the size, sequence, and timing of the subareas of the lands subject to surface coal mining operations over the estimated life of those operations for which it is anticipated that individual permits for mining will be sought.

B. Cultural and historical resources.

(1) the nature of cultural and historic resources listed or eligible for listing on the national register of historic places and known archeological features within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, data of state and local archeological, historical, and cultural preservation agencies.

(2) The director may require the applicant to identify and evaluate important historic and archeological resources that may be listed or eligible for listing on the national register of historic places, through:

(a) collection of additional information;

(b) conduct of field investigations; or

(c) other appropriate analyses.

[11-29-97; 19.8.8.801 NMAC - Rn, 19 NMAC 8.2.8.801, 9-29-2000; A, 1-15-2002; A, 12-31-2007]

19.8.8.802 DESCRIPTION OF HYDROLOGY AND GEOLOGY: GENERAL REQUIREMENTS:

A. Each application shall contain a description of the geology, and water quality and quantity of all lands within the proposed permit area and the adjacent area. The description shall include information on the characteristics of all surface and ground waters within the permit and adjacent area, and any water, which will flow into or receive discharges of water from the permit area. The description shall be prepared according to 19.8.8.802 through 806 NMAC and conform to the following:

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

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

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

B. The use of modeling techniques may be included as part of the permit application, but the same surface and ground water information may be required for each site as when models are not used.

[11-29-97; 19.8.8.802 NMAC - Rn, 19 NMAC 8.2.8.802, 9-29-2000; A, 1-15-2002]

19.8.8.803 GEOLOGY DESCRIPTION:

A. The description shall include a general statement of the geology within the proposed permit area accompanied by appropriate maps and cross-sections down to and including the first aquifer to be affected below the lowest coal seam to be mined.

B. Sampling requirements.

(1) Test borings or core samples from the proposed permit area shall be collected and analyzed down to and including the stratum immediately below the lowest coal seam to be mined to provide the following data in the description:

(a) location of subsurface water, if encountered;

(b) logs of drill holes showing the lithologic characteristics and thickness of each stratum and each coal seam;

(c) physical properties of each stratum within the overburden including compaction, erodibility, and if this material is to be used as topdressing, potential soil texture;

(d) for surface mining activities, chemical analyses of a composite sample of each stratum within the overburden and the stratum immediately below the lowest coal seam to be mined and for underground mining activities, chemical analyses of the stratum immediately above and below the coal seams to be mined to identify at a minimum, those horizons which contain potential acid-forming, toxic-forming, or alkalinity producing materials and a composite sample from each stratum shall be analyzed for the following parameters:

Aluminum (Al)	Cyanide (CN)	
Arsenic (As)	Fluoride	Silver (Ag)
Barium (Ba)	Iron (Fe)	Sulfate (SO4)
Boron (B)	Lead (Pb)	Uranium (U)
Cadmium (Cd)	Manganese (Mn)	Vanadium (V)
Chromium(Cr)	Mercury (Hg)	Zinc (Zn)
Cobalt (Co)	Molybdenum (Mo)	Radioactivity
Copper (Cu)	Nickel (Ni)	Radium Ra226
		Selenium (Se)
		Radium Ra228

(e) If this material is to be considered for use as topdressing, analyses for the parameters necessary for plant growth shall be performed, in addition to those listed above, and shall include at a minimum the following:

Calcium (Ca)	Sodium (Na)
Chloride	Carbonate (CO3)
Magnesium (Mg)	Bicarbonate (HCO3)
Phosphorous (P)	Nitrate (NO3)
Potassium (K)	Sodium Adsorption Ratio (Adjusted) (SAR)
pH	

(f) A demonstration of the suitability of topsoil substitutes or supplements in Subsection E of 19.8.20.2005 NMAC shall be based upon analysis of the thickness of soil horizons and/or geologic strata, total depth, texture, percent coarse fragments, pH, and areal extent of the different kinds of soils. Analyses of additional parameters or additional data may be required by the director.

(g) If the applicant can demonstrate that the analyses of any particular parameter is of little or no significance in the proposed permit area, then such parameter(s) may be waived upon approval of the director;

(h) analysis of the coal seam, including, but not limited to an analysis of the sulfur, pyrite, and marcasite content.

(i) The applicant shall submit a proposed sampling plan to the director for approval.

(2) If required by the director, test borings or core samplings shall be collected and analyzed to greater depths within the proposed permit area, or for areas outside the proposed permit area to provide for evaluation of the impact of the proposed operations on the hydrologic balance.

(3) An applicant may request that the requirements for a statement of the results of the test borings or core samplings be waived by the director. The waiver may be granted only if the director makes a written determination that the statement is unnecessary because other equivalent information is accessible to him in a satisfactory form.

[11-29-97; 19.8.8.803 NMAC - Rn, 19 NMAC 8.2.8.803, 9-29-2000; A, 12-31-2007]

19.8.8.804 GROUND WATER INFORMATION:

A. The application shall contain a description, including appropriate maps, cross sections, and written statements, of the ground water hydrology for the proposed permit and adjacent areas including:

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

(2) the lithology and thickness of the aquifers;

(3) known uses of the water in the aquifers and water table; and

(4) the quality of subsurface water, if encountered.

B. The application shall contain additional information which describes the recharge, storage, and discharge characteristics of aquifers and the quality and quantity of ground water, according to the parameters and in the detail required by the director.

C. 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.

[11-29-97; 19.8.8.804 NMAC - Rn, 19 NMAC 8.2.8.804, 9-29-2000]

19.8.8.805 SURFACE WATER INFORMATION:

A. Surface water information shall contain appropriate maps, cross-sections, charts and written-statements, including the name of the watershed which will receive water discharges, the water discharge into any surface body of water, and descriptions of surface drainage systems sufficient to identify, in detail, the seasonal variations in water quantity and quality within the proposed permit and adjacent areas.

B. Surface water information shall include:

(1) minimum, maximum, and average discharge conditions which identify critical low flow and peak discharge rates of streams sufficient to identify seasonal variations; and

(2) water quality data to identify the characteristics of surface waters in, discharging into, or which will receive flows from surface or ground water from affected areas within the proposed permit area, sufficient to identify seasonal variations, showing:

(a) total dissolved solids in milligrams per liter;

(b) total suspended solids in milligrams per liter;

(c) acidity;

(d) pH in standard units;

(e) total and dissolved iron in milligrams per liter;

(f) total manganese in milligrams per liter; and

(g) such other information as the director determines is relevant.

(3) 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 requirement of this section shall be conducted according to either methodology listed above when feasible.
[11-29-97; 19.8.8.805 NMAC - Rn, 19 NMAC 8.2.8.805, 9-29-2000]

19.8.8.806 ALTERNATIVE WATER SUPPLY INFORMATION: The application shall identify the extent to which the proposed surface coal mining operations may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit or adjacent areas for domestic, agricultural, industrial, or other legitimate use. If contamination, diminution, or interruption may result, then the description shall identify the alternative sources of water supply that could be developed to replace the existing sources.
[11-29-97; 19.8.8.806 NMAC - Rn, 19 NMAC 8.2.8.806, 9-29-2000]

19.8.8.807 CLIMATOLOGICAL INFORMATION:

A. The application shall contain a statement of the climatological factors that are representative of the proposed permit area, including:

(1) the average monthly and seasonal precipitation;

(2) the average direction and velocity of prevailing winds;

(3) seasonal temperature ranges; and

(4) a plan for collection of climatological data throughout the operator's period of responsibility.

B. The director may request such additional data as deemed necessary to ensure compliance with the requirements of 19.8.5 through 19.8.13 NMAC.
[11-29-97; 19.8.8.807 NMAC - Rn, 19 NMAC 8.2.8.807, 9-29-2000]

19.8.8.808 VEGETATION INFORMATION:

A. The permit application shall contain a map that delineates existing vegetative types and a description of the plant communities within the proposed permit area for surface mining activities, or for underground mining activities the areas to be affected within the permit area by surface operations or facilities, and within any proposed reference area. This description shall include information adequate to predict the potential for re-establishing vegetation and quantitative data for each strata (herb, shrub, tree) which includes but not limited to:

(1) a comprehensive listing of species by plant community;

(2) ground cover, frequency, and constancy values for each species in the herbaceous stratum for each plant community;

(3) ground cover, density, and frequency values for each species in the shrub stratum for each plant community;

(4) foliage cover, basal area, and density of non-timber and timber tree species and volume data for commercial timber producing species;

(5) acreage which shall be determined for each plant community type and presented on the vegetative map, the quantitative data collected for each plant community shall be correlated with slope, aspect, and soil type within that plant community;

(6) animal unit months (AUMs) the area is supporting or the AUMs the area could support; and

(7) a report describing location, soils, and habitat and mitigation measures to be taken for any rare, threatened, or endangered species found within the permit area.

(8) The director may request such additional data as deemed necessary to ensure compliance with the requirements of 19.8.20.2060 through 2066 NMAC.

B. If the applicant intends to develop a historic record of pre-mining conditions as a basis for comparison to the postmining revegetation, the applicant shall submit a plan indicating:

(1) a timetable for collecting data and developing the historic record;

(2) the sampling techniques to be used;

(3) the number of samples to be collected; and

(4) location of each permanent sampling point within each vegetative type identified on the map required for this section.

C. Sampling intensity shall be such that the data presents a valid statistical value for the area or population from which the samples were collected.

D. The map or aerial photograph required shall include sufficient adjacent areas to allow evaluation of vegetation as important habitat for fish and wildlife for those species of fish and wildlife identified under

19.8.8.809 NMAC. The map may be prepared by the local soil and water conservation district of the area or other qualified government or private organization.

E. The director may request such additional data as deemed necessary to ensure compliance with the requirements of 19.8.20.2060 through 2066 NMAC.

[11-29-97; 19.8.8.808 NMAC - Rn, 19 NMAC 8.2.8.808, 9-29-2000]

19.8.8.809 FISH AND WILDLIFE RESOURCES INFORMATION:

A. Each application shall include a study of fish and wildlife and their habitats within the proposed permit area and the portions of the adjacent areas where effects on such resources may reasonably be expected to occur.

B. The applicant in consultation with the appropriate state and federal fish and wildlife management, conservation, or land management agencies having responsibilities for fish and wildlife or their habitats, shall propose the level of detail and the areas of such studies, after consideration of:

(1) published data and other information;

(2) site-specific information obtained by the applicant; and

(3) guidance obtained from agencies consulted.

C. The director in consultation with the appropriate agencies will approve or disapprove the level of detail in the study.

[11-29-97; 19.8.8.809 NMAC - Rn, 19 NMAC 8.2.8.809, 9-29-2000]

19.8.8.810 SOIL RESOURCES INFORMATION:

A. The applicant shall provide adequate soil survey information of the permit area for surface mining activities or for underground mining activities the areas to be affected within the permit area by surface operations or facilities consisting of the following:

(1) a map delineating different soils;

(2) soil identification;

(3) soil descriptions; and

(4) present and potential productivity of existing soils.

B. The local soil and water conservation district office may be contacted for available information.

C. Where the applicant proposes to use selected overburden materials as a supplement or as topdressing, the application shall provide results of the analyses, trials, and tests required under Subparagraph (e) of Paragraph (1) of Subsection B of 19.8.8.803 NMAC and 19.8.20.2005 NMAC.

D. The director may request such additional data as deemed necessary to ensure compliance with the requirements of 19.8.20.2004 through 2008 NMAC.

[11-29-97; 19.8.8.810 NMAC - Rn, 19 NMAC 8.2.8.810, 9-29-2000]

19.8.8.811 LAND-USE INFORMATION:

A. The application shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area for surface mining activities or for underground mining activities the area which will be affected within the permit area by surface operations and facilities, 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.

(2) a narrative of land capability and productivity, which analyzes the land-use description under Subsection A of 19.8.8.811 NMAC in conjunction with other environmental resources information required under this part. The narrative shall provide analyses of:

(a) 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; and

(b) the productivity of the proposed permit area for surface mining activities or for underground mining activities, the area proposed to be affected within the permit area by surface operations and facilities before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under proper 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. The application shall state whether the proposed mine plan area has been previously mined, if so, the following, if available:

(1) the type of mining method used;
(2) the coal seams or other mineral strata mined;
(3) the extent of coal or other minerals removed;
(4) the approximate dates of past mining; and
(5) the uses of the land preceding mining.

C. The application shall contain a description of the existing land uses and land use classification under local law, if any, of the proposed permit and adjacent areas.

[11-29-97; 19.8.8.811 NMAC - Rn, 19 NMAC 8.2.8.811, 9-29-2000]

19.8.8.812 MAPS: GENERAL REQUIREMENTS: The permit application shall include maps showing:

A. all boundaries of land and names of present owners of record of those lands, both surface and subsurface, included in the permit area and where available the present owners of record of lands contiguous to the permit area;

B. the boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin surface coal mining operations;

C. the boundaries of all areas proposed to be affected over the estimated total life of the proposed surface coal mining operations, with a description of size, sequence, and timing of the mining of sub-areas for which it is anticipated that additional permits will be sought;

D. the location of all dwellings and structures, and names of present owners of record and residents of those dwellings and structures, on and within one-half mile (2640 feet) of the proposed permit area, with identification of the current use of the buildings;

E. the location of surface and subsurface man-made features within, passing through, or passing over the proposed permit area, including, but not limited to major electric transmission lines, pipelines, and agricultural drainage tile fields;

F. the location, vegetative type, and size of any proposed reference areas for determining the success of revegetation;

G. the locations of water supply intakes for current users of surface water flowing into, out of, and within the permit area and those surface waters which will receive discharges from affected areas in the proposed permit area;

H. each public road located in or within 100 feet of the proposed permit area;

I. the boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing in the national register of historic places and known archaeological sites within the permit or adjacent areas.

J. each cemetery, known grave site, or unmarked burial ground located in or within 100 feet of the proposed permit area;

K. any land within the proposed permit area and adjacent area which is within the boundaries of any units of the national system of trails of the wild scenic rivers system, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act; and

L. other relevant information required by the director.

[11-29-97; 19.8.8.812 NMAC - Rn, 19 NMAC 8.2.8.812, 9-29-2000; A, 12-31-2007]

19.8.8.813 CROSS SECTIONS, MAPS AND PLANS: The application shall include cross sections, maps and plans showing:

A. elevations and locations of test borings and core samplings;

B. elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality if required, in preparation of the application;

C. nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden and the stratum immediately below the lowest coal seam to be mined;

D. all coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;

E. location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;

F. location and extent of sub-surface water, if encountered, within the proposed permit or adjacent area;

G. location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains and irrigation ditches within the proposed permit and adjacent areas;

H. location and extent of existing or previously surface mined areas within the proposed permit area;

I. location and dimensions of existing areas of spoil, waste, and non-coal waste disposal, dams, embankments, other impoundments and water treatment and air pollution control facilities within the proposed permit area;

J. location and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit and adjacent areas;

K. the existing land surface configuration of the proposed permit area on contour maps of a maximum of 5 foot contour intervals;

L. Maps, plans, and cross sections included in a permit application which are required by this section shall be prepared by or under the direction of and certified by a qualified professional geologist or a registered professional engineer, with assistance from experts in related fields such as land surveying reclamation or mined land rehabilitation and shall be updated as required by the director.

[11-29-97; 19.8.8.813 NMAC - Rn, 19 NMAC 8.2.8.813, 9-29-2000]

19.8.8.814 PRIME FARMLAND INVESTIGATION:

A. The applicant shall conduct a pre-application investigation of the proposed permit area to determine whether lands within the area may be prime farmland. The director in consultation with U.S. natural resources conservation service shall determine the nature and extent of the required reconnaissance investigation.

B. Land shall not be considered prime farmland where the applicant can demonstrate one of the following:

(1) the land has not been historically used as cropland;

(2) the slope of the land is 10 percent or greater;

(3) the land is not irrigated or naturally subirrigated, has no developed water supply that is dependable or of adequate quality, and the average annual precipitation is 14 inches or less;

(4) other factors exist, such as a very rocky surface, or the land is frequently flooded during the growing season, more often than once in 2 years, and the flooding has reduced crop yields; or

(5) on the basis of a soil survey of lands within the permit area, there are no soil map units that have been designated prime farmland by the U.S. natural resources conservation service.

C. If the investigation establishes that the lands are not prime farmlands, the applicant shall submit with the permit application a request for a negative determination which shows that the land for which the negative determination is sought meets one of the criteria of Subsection B of 19.8.8.814 NMAC.

D. If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the U.S. natural resources conservation service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed permit area, the applicant shall cause such a survey to be made.

(1) When a soil survey of lands within the proposed permit area contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with 19.8.10.1004 NMAC for such designated land.

(2) When a soil survey for lands within the proposed permit area contains soil map units which have not been designated as prime farmland after review by the U.S. natural resources conservation service; the applicant shall submit a request for negative determination for non-designated land with the permit application establishing compliance with Subsection B of 19.8.8.814 NMAC.

[11-29-97; 19.8.8.814 NMAC - Rn, 19 NMAC 8.2.8.814, 9-29-2000; A, 12-31-2007]

HISTORY OF 19.8.8 NMAC:

Pre-NMAC History:

The material in Part 8 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 Surfacemining 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 Surfacemining Commission, filed 8-31-78
SB 79-1 (Rule 79-1) New Mexico Coal Surfacemining 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:

Renumbering and reformatting CSMC Rule 80-1, Surface Coal Mining Regulations, filed 9-24-80 to 19 NMAC 8.2, Coal Surface Mining, files 11-13-97.
Renumbered 19 NMAC 8.2 Subpart 8 Permit Application - Minimum Requirements for Information on Environmental Resources, filed 11-13-97, to 19.8.8 NMAC Permit Application - Minimum Requirements for Information on Environmental Resources, effective 09-29-2000.