CHAPTER 69-05.2-09
PERMIT APPLICATIONS - PERMIT AREA - REQUIREMENTS FOR OPERATION AND RECLAMATION PLANS

Section
69-05.2-09-01 Permit Applications - Operation Plans - General Requirements
69-05.2-09-02 Permit Applications - Operation Plans - Maps and Plans
69-05.2-09-03 Permit Applications - Operation Plans - Existing Structures
69-05.2-09-04 Permit Applications - Operation Plans - Blasting
69-05.2-09-05 Permit Applications - Operation Plans - Air Pollution Control
69-05.2-09-06 Permit Applications - Operation Plans - Transportation Facilities
69-05.2-09-07 Permit Applications - Operation Plans - Relocation or Use of Public Roads
69-05.2-09-08 Permit Applications - Operation Plans - Protection of Public Parks
69-05.2-09-09 Permit Applications - Operation Plans - Surface Water Management - Ponds, Impoundments, Banks, Dams, Embankments, and Diversions
69-05.2-09-10 Permit Applications - Operation Plans - Surface Mining Near Underground Mining
69-05.2-09-11 Permit Applications - Reclamation Plans - General Requirements
69-05.2-09-12 Permit Applications - Operation and Reclamation Plans - Surface and Ground Water Monitoring for Protection of the Hydrologic Balance
69-05.2-09-13 Permit Applications - Reclamation Plans - Postmining Land Use
69-05.2-09-14 Permit Applications - Reclamation Plans - Disposal of Initial Pit Spoil and Other Excess Spoil
69-05.2-09-15 Permit Applications - Operation and Reclamation Plans - Prime Farmlands
69-05.2-09-16 Permit Applications - Operation and Reclamation Plans - Alluvial Valley Floors
69-05.2-09-17 Permit Applications - Operation and Reclamation Plans - Fish and Wildlife Resources Protection and Enhancement Plan
69-05.2-09-18 Permit Applications - Operations and Reclamation Plans - Auger Mining
69-05.2-09-19 Permit Applications - Operations and Reclamation Plans - Coal Preparation Plants not Located Within the Permit Area of a Mine

69-05.2-09-01. Permit applications - Operation plans - General requirements.

Each application must contain a detailed description of the proposed mining operations, including:

1. A narrative of mining procedures and engineering techniques, anticipated annual and total coal production, and major equipment.

2. A plan stating the anticipated or actual starting and termination date of each phase of mining activities and the amount of land to be affected for each phase over the life of the permit.

3. A narrative for each operations plan explaining the plan in detail and the construction, modification, use, and maintenance of each mine facility, water and air pollution control facilities or structures, transportation and coal handling facilities, and other structures required for implementing the plans.

4. A plan for each support facility to be constructed, used, or maintained within the permit area, including maps, appropriate cross sections, design drawings, and specifications of each facility sufficient to demonstrate compliance with section 69-05.2-24-08 or 69-05.2-24-09 as applicable.

5. If coal removal areas are proposed within five hundred feet [152.40 meters] of any farm building, the applicant must provide documentation showing compliance or plans to comply with North Dakota Century Code section 38-18-07.

History: Effective August 1, 1980; amended effective May 1, 1990; May 1, 1992; June 1, 1994; March 1, 2004.

General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14, 38-18-07

69-05.2-09-02. Permit applications - Operation plans - Maps and plans.

Each application must contain an appropriate combination of 1:4,800 scale topographic maps, planimetric maps, and plans of the proposed permit and adjacent areas showing:

1. Scale, date, permit boundaries, company name, legal subdivision boundaries, and legend.

2. Lands to be affected throughout the operation and any change in a facility or feature caused by the operations, if the existing facility or feature was shown under chapter 69-05.2-08.

3. The boundaries of areas to be affected during the permit term according to the sequence of mining and reclamation operations and a description of size and timing of operations for each coal removal subarea.

4. Pit layout and proposed sequence of mining operations, crop line, spoil placement areas, final graded spoil line, highwall areas to be backsloped, and areas for stockpiling suitable plant growth material or other suitable strata.

5. Location of proposed surface water management structures and identification of permanent water impoundments or stream channel alignments.

6. Location of coal processing waste dams and embankments under section 69-05.2-09-09, and fill areas for the disposal of initial cut and other excess spoil under section 69-05.2-09-14 and North Dakota Century Code section 38-14.1-24.

7. Buildings, utility corridors, proposed and existing haul roads, mine railways, and other support facilities.

8. Each coal storage, cleaning and loading area, and each coal waste and noncoal waste storage area. For noncoal wastes that will be disposed of in the proposed permit area, the applicant must provide a description of any wastes listed under subdivision i of subsection 2 of section 33-20-02.1-01 and any other wastes requiring a permit from the state department of health. The location of any such disposal areas must be shown on a map of the permit area.

9. Each explosive storage and handling facility.

10. Each air pollution collection and control facility.

11. Each habitat area to be used to protect and enhance fish and wildlife and related environmental values.

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

13. Each bond area, scheduled according to the proposed sequence of operations. Include the bond or guarantee amount for each area.

14. If an applicant proposes to remine or otherwise disturb lands that were affected by coal mining activities prior to January 1, 1970:

    a. Detailed maps and other available information that clearly depicts the boundaries of the site that was previously affected by mining activities before January 1, 1970. This includes the identification of any sinkholes and other features that are the result of any past underground coal mining activities.

b. The applicant must identify and describe potential environmental and safety problems related to prior mining activity at the site and those that could be reasonably anticipated to occur. This identification must be based on a due diligence investigation which includes visual observations at the site, a record review of past mining at the site, and any necessary environmental sampling tailored to the current condition of the site.

c. With regard to potential environmental and safety problems referred to in subdivision b, a description of the mitigative measures that will be taken to ensure that the applicable reclamation requirements can be met.

Maps and plans required under subsections 5, 6, and 12 must be prepared by, or under the direction of, and certified by a qualified registered professional engineer, a qualified registered land surveyor, or qualified professional geologist with assistance from experts in related fields. However, maps, plans, and cross sections submitted according to section 69-05.2-09-09 may only be prepared by, or under the direction of, and certified by a qualified registered professional engineer or qualified registered land surveyor.

History: Effective August 1, 1980; amended effective June 1, 1983; June 1, 1986; May 1, 1990; June 1, 1997; April 1, 2011.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-03. Permit applications - Operation plans - Existing structures.

1. Each application must contain a description of each existing structure in the proposed permit or adjacent permit areas used to support the surface coal mining and reclamation operation. The description must include:

   a. Location.

   b. Current condition.

   c. Approximate beginning and ending construction dates.

   d. A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards and design requirements of this article and North Dakota Century Code section 38-14.1-24.

2. The applicant shall modify or reconstruct a nonconforming structure to meet the design standards of this article after approval of the compliance plan required in subsection 3.

3. Each application must contain a compliance plan for each structure to be modified or reconstructed and include:

   a. Specifications to meet the design and performance standards of this article and North Dakota Century Code section 38-14.1-24.

   b. A construction schedule showing dates for beginning and completing interim steps and final reconstruction.

   c. Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards are met.

   d. A showing that the risk to the environment or to public health or safety is not significant during modification or reconstruction.

4. A structure which meets the performance standards of this article and North Dakota Century Code section 38-14.1-24 but does not meet the design requirements of this article may be

exempted from those design requirements. The commission may grant this exemption as part of the application process after obtaining the information required by this section and making the finding required by section 69-05.2-10-04.

History: Effective August 1, 1980; amended effective May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-04. Permit applications - Operation plans - Blasting.

Each application must contain a blasting plan explaining how the applicant intends to comply with chapter 69-05.2-17 and subsection 4 of North Dakota Century Code section 38-14.1-14 and including:

1. Types and approximate amounts of explosives for each type of blasting operation. The plan must identify the maximum amount of explosives to be detonated within any eight millisecond period and the maximum allowable limit on ground vibration for all structures not listed in subsection 7 of section 69-05.2-17-05.

2. Procedures and plans for recording and retaining information on:

   a. Drilling patterns, including size, number, depths, and spacing of holes.

   b. Charge and packing of holes.

   c. Types of fuses and detonation controls.

   d. Sequence and timing of firing holes.

3. Blasting warning and site access control equipment and procedures.

4. Types, capabilities, sensitivities, and locations of blast monitoring equipment and procedures.

5. Plans for recording and reporting results of preblasting surveys, if required.

6. The public notice content, procedure for changing the public notice, and a listing of landowners, government agencies, and other interested parties that will receive the notices.

7. Unavoidable hazardous conditions needing deviations from the blasting schedule and a general procedure outlining implementation of an emergency blasting process.

8. A map showing areas in which:

   a. Blasting is prohibited under section 69-05.2-17-05.

   b. The maximum permissible weight of explosives to be detonated is established by subsection 7 of section 69-05.2-17-05. The map must show the maximum weight of explosives at intervals not exceeding four hundred feet [121.92 meters] and continue until the maximum amount specified in subsection 1.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-05. Permit applications - Operation plans - Air pollution control.

The applicant shall specify the measures to comply with the air pollution control requirements of the state department of health and any other measures necessary to effectively control wind erosion and attendant air pollution.

History: Effective August 1, 1980; amended effective May 1, 1990; June 1, 1997.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-06. Permit applications - Operation plans - Transportation facilities.

1. Each application must contain a detailed description of each road, conveyor, or rail system to be constructed, used, or maintained. Appropriate maps, descriptions, profiles, and cross sections must be included to show:

   a. Locations.

   b. Specifications for each road width, gradient, surfacing material, cut, fill embankment, culvert, bridge, drainage ditch, low-water crossing, and drainage structure.

   c. Plans for stabilizing road cut and fill embankments, ditches, drains, and other side slopes.

   d. Specifications for each road to be located in the channel of an intermittent or perennial stream under subsection 4 of section 69-05.2-24-01.

   e. Specifications for each ford of intermittent or perennial streams to be used as a temporary route under subsection 4 of section 69-05.2-24-03.

   f. Measures to obtain commission approval for altering or relocating a natural drainageway under subdivision e of subsection 5 of section 69-05.2-24-03.

   g. Specifications for each low-water crossing of intermittent or perennial streams to provide maximum protection of the stream under subdivision f of subsection 5 of section 69-05.2-24-03.

   h. Plans to remove and reclaim each road not retained under the proposed postmining land use, and a schedule for removal and reclamation.

2. The plans and drawings of each primary road must be prepared by, or under the direction of and certified by, a qualified registered professional engineer with experience in the design and construction of roads. The certification must state that the plans and drawings meet the requirements of this article, current and prudent engineering practices, and any design criteria established by the commission.

History: Effective August 1, 1980; amended effective May 1, 1990; May 1, 1992.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-07. Permit applications - Operation plans - Relocation or use of public roads.

Each application must describe, with appropriate maps and cross sections, measures to ensure the interests of landowners and the public are protected if the applicant plans to:

1. Conduct surface mining activities within one hundred feet [30.48 meters] of the right-of-way line of any public road, except where mine access or haul roads join that right of way; or

2. Relocate a public road.

History: Effective August 1, 1980; amended effective May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-08. Permit applications - Operation plans - Protection of public parks.

For public parks or places listed on the national register of historic places that may be adversely affected by the proposed operations, each plan must describe the measures to be used:

1. To prevent adverse impacts; or

2. If valid existing rights exist or joint agency approval is to be obtained under section 69-05.2-04-01, to minimize adverse impacts.

History: Effective August 1, 1980; amended effective June 1, 1983; June 1, 1986; May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-09. Permit applications - Operation plans - Surface water management - Ponds, impoundments, banks, dams, embankments, and diversions.

1. Each application must include a surface water management plan describing each water management structure intended to meet the requirements of chapter 69-05.2-16. Each plan must:

   a. Identify and show on a map of appropriate scale the locations of proposed ponds, impoundments, and diversions, whether temporary or permanent, and include:

      (1) Each watershed boundary within the permit and adjacent areas.

      (2) Proposed disturbance boundaries within each watershed and the area of each watershed.

   b. Provide the following preliminary information for each pond or impoundment:

      (1) The purpose of the structure.

      (2) A typical cross section of the proposed structure.

      (3) The name and size in acres [hectares] of the watershed affecting the structure.

      (4) Other preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure.

   c. If underground mining operations occurred in the area, include a survey describing the potential effect of subsidence on the structure from the past underground mining activities.

   d. Include a schedule of the approximate construction dates for each structure and, if appropriate, a timetable to remove each structure.

   e. Include a statement that detailed design plans, as required in subsection 2, will be submitted to the commission, provided that:

      (1) Detailed design plans for structures scheduled for construction within the first year of the permit term must be submitted with the application.

      (2) Detailed design plans for a structure must be approved by the commission prior to construction.

   f. Identify the location of proposed temporary coal processing waste disposal areas, along with design specifications to meet the requirements in section 69-05.2-19-03.

g. Identify the location of proposed coal processing waste dams and embankments along with design specifications to meet the requirements in chapter 69-05.2-20. The plan must include the results of a geotechnical investigation of each proposed coal dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment and the impounded material. The geotechnical investigation must be planned and supervised by an engineer or engineering geologist, as follows:

(1) Determine the number, location, and depth of borings and test pits using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions.

(2) Consider the character of the overburden, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site.

(3) Identify springs, seepage, and ground water flow observed or anticipated during wet periods in the proposed dam or embankment area.

(4) Consider the possibility of mudflows or other landslides into the dam, embankment, or impounded material.

h. Include a statement that the plan has been prepared by, or under the direction of, and certified by a qualified registered professional engineer or qualified registered land surveyor experienced in the design of impoundments. The plans must be certified as meeting the requirements of this article using current, prudent engineering practices and any design requirements established by the commission.

2. The application must contain detailed design plans for each structure identified in paragraph 1 of subdivision e of subsection 1. These plans must:

a. Meet all applicable requirements of sections 69-05.2-16-06, 69-05.2-16-07, 69-05.2-16-08, 69-05.2-16-09, 69-05.2-16-10, and 69-05.2-16-12.

b. Identify by watershed each mining activity along with an estimate of the affected area associated with each disturbance type.

c. Provide the total runoff and peak discharge rates attributable to the storm or storms for which the structure is designed, including supporting calculations. The plan should specify baseflow, if appropriate.

d. The estimated sediment yield of the contributing watershed, calculated according to subsection 2 of section 69-05.2-16-09, and sediment storage capacity of the structure.

e. Provide, at an appropriate scale, detailed dimensional drawings of the impounding structure including a plan view and cross sections of the length and width of the impounding structure, showing all zones, foundation improvements, drainage provisions, spillways, outlets, instrument locations, and slope protection. The plans must also show the measurement of the minimum vertical distance between the top of the impounding structure and the reservoir surface at present and under design storm conditions, permanent pool level, and other pertinent information.

f. Include graphs showing elevation - area - capacity curves to the top of the embankment.

g. Describe the spillway features and include stage discharge curves and calculations used in their determination.

h. If an impoundment meets the size or other criteria of subsection 17 or 18 of section 69-05.2-16-09, include a stability analysis of the structure. The stability analysis must include strength parameters, pore pressures, and long-term seepage conditions. The plan must 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.

i. Demonstrate that detention time criteria of section 69-05.2-16-09 can be met, if applicable.

j. Describe any geotechnical investigations, design, and construction requirements of the structure including compaction procedures and testing, including any direct connections of the impoundment basin to ground water flow in the area.

k. If an impoundment meets the size or other criteria of subsection 17 of section 69-05.2-16-09, include a copy of the plan sent to the district manager of the United States mine safety and health administration.

l. Describe proposed structure operations, maintenance and, if appropriate, a timetable for removal and reclamation plans.

m. Provide detailed design specifications for diversions, including maps, cross sections, and longitudinal profiles which illustrate existing ground surface and proposed grade of all stream channel diversions and other diversions to be constructed within the permit area or feeding into the contributing drainage of an impoundment.

n. Include additional information as necessary to enable the commission to completely evaluate the structure.

History: Effective August 1, 1980; amended effective June 1, 1983; June 1, 1986; May 1, 1990; May 1, 1992; January 1, 1993; May 1, 1999.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-10. Permit applications - Operation plans - Surface mining near underground mining.

The application must contain a description of measures needed to comply with section 69-05.2-13-06 if mining activities will occur within five hundred feet [152.04 meters] of an underground mine.

History: Effective August 1, 1980; amended effective May 1, 1990; January 1, 1993.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-11. Permit applications - Reclamation plans - General requirements.

Each application must contain a reclamation plan for affected lands, showing how the applicant will comply with chapters 69-05.2-13 through 69-05.2-26. The plan must, at a minimum, include:

1. A discussion of how the scheduling of each reclamation phase meets the requirements for contemporaneous reclamation in subsection 14 of North Dakota Century Code section 38-14.1-24 and section 69-05.2-21-01.

2. A detailed reclamation cost estimate and supporting calculations.

3. Postmining topographic and area slope maps drawn to the specifications in subsection 3 of section 69-05.2-08-02, and a plan for backfilling, soil stabilization, compacting, and grading. The plan must provide cross sections and volumetric calculations or other information to show the final topography can be achieved.

4. A plan for the removal, reshaping, and final reclamation of each facility identified and discussed in this chapter.

5. A plan for the removal, storage, and redistribution of suitable plant growth material and other suitable strata to meet the requirements of chapter 69-05.2-15. This plan must provide the volumes, by ownership, of topsoil and subsoil available in all areas to be disturbed. These volumes must be determined from the soil survey required by section 69-05.2-08-10.

6. A revegetation plan to meet the requirements of chapter 69-05.2-22. The plan must include:

   a. A revegetation schedule.

   b. Seed and seedling species and amounts per acre [0.40 hectare].

   c. Planting and seeding methods.

   d. Mulching techniques.

   e. Irrigation, if appropriate, and any pest and disease control measures.

   f. General management plans until final bond release.

   g. Methods to determine the success of revegetation required in section 69-05.2-22-07.

   h. A soil testing plan for evaluating the results of suitable plant growth material handling and reclamation procedures related to revegetation.

7. Measures to ensure that all debris, toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with sections 69-05.2-19-04 and 69-05.2-21-03 and a description of the contingency plans developed to preclude their sustained combustion.

8. A description, including appropriate cross sections and maps, of measures to manage mine openings, and to plug, case, or manage exploration holes, other boreholes, wells, and other openings within the permit area, under chapter 69-05.2-14.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990; January 1, 1993.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-12. Permit applications - Operation and reclamation plans - Surface and ground water monitoring for protection of the hydrologic balance.

1. The description required by subdivision i of subsection 2 of North Dakota Century Code section 38-14.1-14 must cover the proposed permit, and adjacent areas and include:

   a. Appropriate maps and technical drawings.

   b. A discussion of the control of surface and ground water drainage into, through, and out of the permit area under the surface water management requirements of section 69-05.2-09-09 and its relation to the monitoring requirements of this section.

c. A plan for the treatment, where required, of surface and ground water drainage from the disturbed area, and proposed quantitative limits on pollutants in discharges subject to section 69-05.2-16-04, according to the more stringent of:

(1) North Dakota Century Code section 38-14.1-24 and this article; or

(2) Other applicable state laws.

d. A plan for restoring the approximate recharge capacity of the permit area required in section 69-05.2-16-15.

e. A plan, based on the probable hydrologic consequences (PHC) determination, for the collection, recording, and reporting of ground and surface water quality and quantity data, according to sections 69-05.2-16-05, 69-05.2-16-13, and 69-05.2-16-14.

2. The determination required by subdivision o of subsection 1 of North Dakota Century Code section 38-14.1-14 must include a hydrologic reclamation plan that specifically addresses any potential adverse impacts identified in the probable hydrologic consequences determination and contains preventive and remedial measures for those impacts.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-13. Permit applications - Reclamation plans - Postmining land use.

1. Each reclamation plan must contain a postmining land use map and detailed description of the postmining land use explaining:

a. How the postmining land use will be achieved and the support activities needed.

b. The detailed management plan for native grassland or tame pastureland during the liability period including any plans for livestock grazing prior to final bond release.

2. If land use changes are proposed, the description must be accompanied by materials needed for alternate land use approval under chapter 69-05.2-23.

3. The applicant shall submit a copy of the surface owner's preference statement and comments by the state and local authorities who would have to initiate, implement, approve, or authorize the land use following reclamation.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-14. Permit applications - Reclamation plans - Disposal of initial pit spoil and other excess spoil.

1. Each application must contain descriptions, maps, and cross-section drawings of the disposal site and spoil disposal area design according to chapter 69-05.2-18. These plans must describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.

2. Each application must contain the results of a geotechnical investigation of the disposal site including:

a. The character of bedrock and any adverse geologic conditions in the disposal area.

b. Springs, seepage, and ground water flow observed or anticipated in the disposal site during wet periods.

c. The potential effects of subsidence of the subsurface strata due to past and future mining operations.

d. A stability analysis including strength parameters, pore pressures, and long-term seepage conditions, and a description of all engineering design assumptions, calculations and alternatives considered in selecting the design specifications and methods. The commission may waive the stability analysis after analyzing the results of the geotechnical investigation if:

(1) No adverse geologic conditions exist in the disposal area.

(2) There are no springs, and there is no seepage or ground water flow in the disposal site area.

(3) There is no potential for subsidence of subsurface strata due to past and future mining operations.

(4) The slope of the disposal area does not exceed twenty percent.

History: Effective August 1, 1980; amended effective May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-15. Permit applications - Operation and reclamation plans - Prime farmlands.

If appropriate, the applicant shall submit a mining and restoration plan for prime farmland containing:

1. The cooperative soil survey that identified the prime farmland, soil mapping units, and representative soil profile descriptions. The plan must include soil horizon depths, pH, and range of soil densities for each prime farmland soil mapping unit.

2. The method and equipment for removing, storing, and respreading suitable plant growth materials.

3. Locations for separate stockpiling and plans for soil stabilization before redistribution.

4. The postmining topographic map showing the prime farmland respread areas.

5. Applicable documentation that supports the use of other suitable strata, instead of the A, B, or C soil horizon, to obtain equivalent or higher levels of productivity as nonmined prime farmlands in the surrounding area under equivalent management levels.

6. Plans for seeding or cropping the area and conservation practices. Proper adjustments for seasons must be proposed so that final graded land is not exposed to erosion when vegetation or conservation practices cannot be established or implemented.

7. Available agricultural school studies or other scientific data for areas with comparable soils, climate, and management (including water management) that affirmatively demonstrate achievement of postmining productivity equal to or greater than premining productivity.

8. If a reclaimed cropland tract will contain a mixture of prime and nonprime farmlands and commission approval of a single yield standard for the entire tract is requested as allowed by subdivision l of subsection 4 of section 69-05.2-22-07, a detailed description and comparison of the soil mapping units and acreages occurring in the prime and nonprime parcels must be

provided. The comparison must include the appropriate yield calculations for the prime and nonprime parcels as well as the single yield standard that is proposed.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990; May 1, 2001.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-16. Permit applications - Operation and reclamation plans - Alluvial valley floors.

Each application must contain operation and reclamation plans for lands in the permit or adjacent area identified as an alluvial valley floor. The plan must describe the mining and reclamation procedures that will protect or restore the alluvial valley floor characteristics or essential hydrologic functions identified in section 69-05.2-08-14 and meet the performance standards of chapter 69-05.2-25. The applicant shall submit an alluvial valley floor monitoring program under section 69-05.2-25-03 designed to collect sufficient information to demonstrate compliance with the approved plans.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14

69-05.2-09-17. Permit applications - Operation and reclamation plans - Fish and wildlife resources protection and enhancement plan.

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

    a. Be consistent with the requirements of section 69-05.2-13-08.

    b. Apply, at a minimum, to species and habitats identified under section 69-05.2-08-15.

    c. Include protective measures that will be used during active mining. The measures may include establishment of buffer zones, selective location and special design of haul roads and powerlines, and monitoring of surface water quality and quantity.

    d. Include enhancement measures that will be used during the reclamation phase to develop aquatic and terrestrial habitat. The measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and replacement of perches and nest boxes. If the plan does not include enhancement measures, a statement must be given explaining why enhancement is not practicable.

    e. Include monitoring of selected indicator species to assess surface mining effects on fish and wildlife resources. The applicant shall consult with the commission and state game and fish department before selecting the indicator species.

2. Within ten days of the request, the commission will provide the plan to the United States department of the interior, fish and wildlife service regional or field office for their review.

History: Effective August 1, 1980; amended effective June 1, 1983; May 1, 1990; May 1, 1992; January 1, 1993.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14, 38-14.1-24

69-05.2-09-18. Permit applications - Operations and reclamation plans - Auger mining.

If applicable, the applicant shall submit a plan explaining how the applicant intends to comply with section 69-05.2-13-12 and subsection 1.1 of North Dakota Century Code section 38-14.1-24. This plan must contain:

1. A description of the augering methods.

2. A map showing where augering operations will be conducted.

3. A description of how the applicant intends to ensure the long-term stability of the augered area. This description should contain specific engineering designs ensuring that:

   a. Material backfilled into the holes can be compacted to provide sufficient strength to prevent subsidence;

   b. The coal remaining between the auger holes and the overlying overburden is sufficiently strong to prevent subsidence; or

   c. The auger mined area can be collapsed in a controlled manner through the use of explosive or other techniques to eliminate future subsidence.

4. A description of how auger holes will be sealed to prevent pollution of surface and ground water.

History: Effective September 1, 1984; amended effective May 1, 1990.
General Authority: NDCC 38-14.1-03
Law Implemented: NDCC 38-14.1-14, 38-14.1-24

69-05.2-09-19. Permit applications - Operations and reclamation plans - Coal preparation plants not located within the permit area of a mine.

1. This section applies to any person who operates or intends to operate a coal preparation plant in connection with a coal mine but outside the permit area for a specific mine. A permit to operate must be obtained from the commission.

2. In addition to meeting the applicable provisions of chapters 69-05.2-05, 69-05.2-06, 69-05.2-07, 69-05.2-08, and this chapter, any application for a permit for operations covered by this section must contain an operation and reclamation plan for the construction, operation, maintenance, modification, and removal of the preparation plant and associated support facilities. The plan must demonstrate that those operations will be conducted in compliance with section 69-05.2-13-13.

3. No permit will be issued for any operation covered by this section unless the commission finds in writing that, in addition to meeting all other applicable requirements of this article, the operations will be conducted according to the requirements of section 69-05.2-13-13.

History: Effective January 1, 1987; amended effective May 1, 1990; May 1, 1992.
General Authority: NDCC 38-14.2-03
Law Implemented: NDCC 38-14.1-14