PROPOSED 2013 RULE CHANGES

SUBSURFACE MINERAL EXPLORATION AND DEVELOPMENT
CHAPTER 43-02-02

43-02-02-01. Definitions. The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-12~~.1~~, except:

1. "Barrel" means forty-two United States gallons [158.99 liters] measured at sixty degrees Fahrenheit [15.56 degrees Celcius] and fourteen and seventy-three hundredths pounds per square-inch absolute [1034.19 grams per square centimeter].

2. "Bottom hole or subsurface pressure" means the pressure in pounds per square inch gauge under conditions existing at or near the producing horizon.

3. "Certified or registered mail" means any form of service by the United States postal service, federal express, Pitney Bowes, and any other commercial, nationwide delivery service that provides the mailer with a document showing the date of delivery or refusal to accept delivery.

~~1.~~4. "Completion" means when the well is capable of producing subsurface minerals through wellhead equipment from the ultimate producing zone after casing has been run.

~~2.~~5. "Deep well" means any ~~hole drilled below one thousand feet [304.8 meters]~~ well to explore for, develop, or produce subsurface minerals which is drilled into rocks older than the Greenhorn Formation or which encounters brackish or saline formation waters.

6. "Department" means the department of mineral resources of the industrial commission.

~~3.~~7. "Deposit" means an underground concentration containing a common accumulation of subsurface minerals.

8. "Director" means the director of the department of mineral resources of the industrial commission.

9. "Exception location" means a location which does not conform to the general spacing requirements established by the rules or orders of the commission but which has been specifically approved by the commission.

~~4.~~10."Field" means the general area underlaid by a concentration of subsurface minerals.

Field also includes the geological formation containing such subsurface minerals.

~~5.~~11."Log or well log" means a systematic, detailed, and correct record of formations encountered in the drilling of a well, and includes commercial electrical logs and similar records.

~~6.~~12."Nonhydrocarbon gas" means all naturally occurring gaseous elements and compounds except hydrocarbons and carbon dioxide as regulated under North Dakota Century Code chapter 38-08.

13. "Occupied dwelling" means a residence which is lived in by a person at least six months throughout a calendar year.

~~7.~~14."Operator" means any person or persons who, duly authorized, is in charge of the development of a lease or the operation of a producing property.

~~8. "Owner" means any person who has the right to drill into and produce from a mineral-bearing formation and to appropriate the subsurface minerals the person produces therefrom either for that person or others or for that person and others.~~

~~9. Producer" means the owner of a well or wells capable of producing subsurface minerals.~~

~~10.~~ 15."Product" means any commodity made from any subsurface mineral.

16. "Recomplete" means the subsequent completion of a well in a different pool.

17. "Reservoir" means a pool or common source of supply.

18. "Saltwater handling facility" means and includes any container such as a pit, tank, or pool, whether covered or uncovered, used for the handling, storage, disposal of deleterious substances obtained, or used, in connection with the drilling or operation of wells.

~~11.~~ 19."Shallow well" means any ~~hole drilled to a total depth of less than one thousand feet [304.8 meters]~~ well drilled into rocks younger than the Belle Fourche Formation which does not encounter saline or brackish formation waters for the purpose of developing or producing subsurface minerals.

20. "Shut-in pressure" means the pressure noted at the wellhead when the well is completely shut in, not to be confused with bottom hole pressure.

~~12.~~ 21."Testhole" means any hole drilled to a total depth of less than one thousand feet [304.8 meters] for the purpose of gathering information on subsurface minerals.

~~13.~~ 22."Waste" means ~~and includes~~ (a) physical waste, (b) operations which cause or tend to cause unnecessary or excessive surface loss, ~~and~~ or (c) operations that do not recover all of the mineral being mined that is technically and economically possible.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-02 is amended as follows:

43-02-02-02. Scope of chapter. This chapter ~~is of statewide application and has been~~ contains general rules of statewide application which have been adopted by the industrial commission to conserve the natural resources of North Dakota, to prevent waste, and to provide for operation in a manner as to protect correlative rights of all owners of subsurface minerals. Special rules, pool rules, field rules, and regulations and orders have been and will be issued when required and shall prevail as against ~~this chapter~~ general rules, regulations, and orders if in conflict therewith. However, wherever this chapter does not conflict with special rules heretofore or hereafter adopted, this chapter will apply in each case. The commission may grant exceptions to this chapter, after due notice and hearing, when such exceptions will result in the prevention of waste and operation in a manner to protect correlative rights.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-03 is repealed:

43-02-02-03. Promulgation of rules, regulations, or orders. ~~No rule, regulation, or order, including change, renewal, or exception thereof, shall, in the absence of an emergency, be made by the commission, except after a public hearing on at least ten days' notice given in the manner and form as may be prescribed by law. The public hearing shall be held at such time, place, and in such manner as may be prescribed by the commission, and any person having any interest in the subject matter of the hearing shall be entitled to be heard.~~ Repealed effective _____.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-04 is repealed:

43-02-02-04. Emergency rule, regulation, or order. ~~In the event an emergency is found to exist by the commission which in its judgment requires the making, revoking, changing, amending, modifying, altering, enlarging, renewing, or extending of a rule, regulation, or order~~

~~without first having a hearing, such emergency rule, regulation, and order shall have the same validity as if a hearing with respect to the same had been held after due notice. The emergency rule, regulation, or order permitted by this section shall remain in force no longer than fifteen days from its effective date, and in any event, it shall expire when the rule, regulation, or order made after due notice and hearing with respect to the subject matter of such emergency rule, regulation, or order becomes effective.~~ Repealed effective _____.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

Section 43-02-02-05 is amended as follows:

43-02-02-05. Enforcement of laws, rules, and regulations dealing with exploration, development, and production of subsurface minerals. The commission, its agents, representatives, and employees are charged with the duty and obligation of enforcing all rules and statutes of ~~the state of~~ North Dakota relating to the exploration, development, and production of subsurface minerals. However, it shall be the responsibility of all owners or operators to obtain information pertaining to the regulation of subsurface minerals before operations have begun. ~~As a matter of practice, operators shall take precautions to prevent waste and damage to mineral-bearing formations, and shall take such action as may be needed to avoid, minimize, or repair soil erosion, and to avoid pollution of air, surface water, and ground water.~~

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-5.1 is created as follows:

43-02-02-05.1. Waste prohibited. All operators, contractors, drillers, carriers, gas distributors, service companies, pipe pulling and salvaging contractors, or other persons shall at all times conduct their operations in the mining, drilling, equipping, operating, producing, plugging, and site reclamation of subsurface minerals in a manner that will prevent waste.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-06 is amended as follows:

43-02-02-06. United States government leases. The commission recognizes that all persons drilling and producing on United States government land ~~or United States minerals~~ shall comply with the ~~federal~~ United States government regulations. Such persons shall also comply with all applicable state rules and regulations ~~which are not in conflict with federal regulations~~.

Copies of the sundry notices ~~and~~, reports on wells, and ~~the well log~~ well data required by this chapter of the wells on United States government land ~~or minerals~~ shall be furnished to the state geologist at no expense to the state geologist. Federal forms may be used when filing such notices and reports except for reporting the plugging and abandonment of a well. In such instance, the plugging record (form 7-sm) must be filed with the state geologist.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02-07. Forms upon request. Forms for written notices, requests, and reports required by the commission will be furnished upon request. These forms shall be of such nature as prescribed by the commission to cover proposed work and to report the results of completed work.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-08 is amended as follows:

43-02-02-08. Authority to cooperate with other agencies. The commission may from time to time enter into arrangements with state and federal government agencies, ~~committees from industry~~ industry committees, and individuals with respect to special projects, services, and studies relating to subsurface minerals.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-09 is amended as follows:

43-02-02-09. Organization reports. Every person acting as principal or agent for another or independently engaged in the drilling for, or ~~any operation pertaining to,~~ in the production, storage, transportation, refining, reclaiming, treating, marketing, or processing of subsurface minerals in ~~the state of~~ North Dakota shall immediately file with the state geologist the name under which ~~the business is being conducted or operated, the~~ such business is being conducted and operated; and name and post-office address of such person, the business or businesses in which the person is engaged~~,~~; the plan of organization, and in case of a corporation, the law under which it is chartered~~, the names under which it is chartered,~~ and the names and post-office addresses of any ~~officials thereof~~ person acting as trustee, together with the names and post-office addresses of any officials on an organization report (form 2-sm). In each case where ~~the~~ such business is conducted under an assumed name, ~~the reports~~ such organization report shall show the names and post-office addresses of all owners in addition to the other information required. A new organization report shall be filed ~~whenever~~ when and if there is a change in any of

the information ~~required on the report~~ contained in the original report.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-9.1 is created as follows:

43-02-02-9.1. Reservoir surveys. By special order of the commission, periodic surveys may be made of the reservoirs in the state containing subsurface minerals. These surveys will be thorough and complete and shall be made using methods approved by the director. The condition of the reservoirs containing subsurface minerals and the practices and methods employed by the operators shall be investigated. The produced volume and source of subsurface mineral, reservoir pressure of the reservoir as an average, the areas of regional or differential pressure, and producing characteristics of the field as a whole and the individual wells within the field shall be specifically included.

All operators of mineral wells are required to permit and assist the agents of the commission in making any and all special tests that may be required by the commission on any or all wells.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-10 is amended as follows:

43-02-02-10. Record of permits and official well names. The state geologist shall maintain an official permit list ~~in which shall be entered:~~ and a record of official well names. The official permit list to include: (1) the name of the permitholder; (2) the permit number; (3) the date the permit was issued; and (4) the location of the permit. The record of official well names, to be known as the well-name register, shall include: (1) the name and location of each well; (2) the well file number; (3) the name of the operator, or the operator's agent; and (4) any subsequent name or names assigned to the well and approved by the director.

The last name assigned to a well in the well-name register shall be the official name of the well, and the one by which it shall be known and referred to.

The director may, at the director's discretion, grant or refuse an application to change the official name. The application shall be accompanied by a fee of twenty-five dollars, which fee is established to cover the expense of recording the change. If the application is refused, the fee shall be refunded.

~~1. The name of the permitholder.~~

~~2. The permit number.~~

~~3. The date the permit was issued.~~

~~4. The location of the permit.~~

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-10.1 is created as follows:

43-02-02-10.1. Access to records. The commission, director, and their representatives shall have access to all well records wherever located. All owners, operators, drilling contractors, drillers, service companies, or other persons engaged in drilling, completing, producing, or servicing wells shall permit the commission, director, and their representatives to come upon any lease, property, well, or drilling rig operated or controlled by them, complying with state safety rules and to inspect the records and operation of such wells, and to have access at all times to any and all records of wells. If requested, copies of such records must be filed with the commission. The confidentiality of any data submitted which is confidential pursuant to subsection 1(b) of North Dakota Century Code section 38-12-02 and section 43-02-02-22 must be maintained.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-11 is amended as follows:

43-02-02-11. Bond. Before any person receives a permit to explore for or produce subsurface minerals, the person shall submit to the commission and obtain its approval of a surety bond or cash bond. An alternate form of security may be approved by the commission after notice and hearing, as provided by law. The operator of a well or facility shall be the principal on the bond covering such activity. Each such surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

1. ~~For~~ Bond amounts and limitations for projects that involve drill holes~~, the amount of the bond shall be commensurate with the number of wells, the type of project, and the environmental risk. The amount of a bond will be determined by a formula that assigns reclamation costs based upon the number of drill sites, the depths of the holes, and the anticipated surface restoration costs.~~:

    a. For wells drilled to a total depth of less than two thousand feet [609.6 meters] the amount of the bond shall be commensurate with the number of wells, the

type of project, and the environmental risk. The amount of a bond will be determined by a formula that assigns reclamation costs based upon the number of drill sites, the depths of the holes, and the anticipated surface restoration costs.

b. For wells drilled to a total depth of two thousand feet [609.6 meters] or more the bond shall be in the amount of fifty thousand dollars and applicable to one well only.

When the principal on the bond is drilling or operating a number of wells within the state or proposes to do so, the principal may submit a bond conditioned as provided by law. A well with an approved temporary abandoned status shall have the same status as an exploratory, mineral, or injection well. The commission may, after notice and hearing, require higher bond amounts than those required by this section. Such additional amounts for bonds must be related to the economic value of the well or wells and the expected cost of plugging and well site reclamation, as determined by the commission.

~~2. For surface mining facilities, the amount of the bond will be five thousand dollars per acre [.40 hectare].~~

2. ~~Liability on the bond is conditioned on~~ Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-12, and all administrative ~~and the~~ rules and orders of the commission, and continues until any of the following occurs:

   a. The testholes or wells have been satisfactorily plugged ~~as provided in this chapter, the sites restored and approved by the state geologist,~~ which shall include practical reclamation of the well site and appurtenances; and all logs, plugging records, and other pertinent data required by statute or rules and orders of the commission are filed and approved.

   b. The mined lands or lands disturbed by any method of exploration or production of subsurface minerals have been restored and approved by the director.

   c. The liability on the bond has been transferred to another bond and such transfer is approved by the commission. ~~The transferee of any well or the operator of any well is responsible for the plugging of any such well and for that purpose shall submit a new bond or produce the written consent of the surety of the original or prior plugging bond that the latter's responsibility shall continue. The original or prior bond may not be released as to the plugging responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such well. All liability on bonds continues until the plugging of such well. All liability on bonds continues until the plugging of such well or wells and the restoration of the surface is completed and approved.~~

3. Transfer of property under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in a well, extraction facility, or surface mining facility and the principal desires to be released from the bond covering the well or facility, such as producers, not ready for plugging, the principal must proceed as follows:

   a. The principal must notify the director, in writing, of all proposed transfers of property at least thirty days before the closing date of the transfer. The director may, for good cause, waive this requirement.

      The principal shall submit to the commission a form 15-sm reciting that a certain property, or properties, describing each by quarter-quarter, section, township, and range, is to be transferred to a certain transferee, naming such transferee, for the purpose of ownership or operation. The date of assignment or transfer must be stated and the form signed by a party duly authorized to sign on behalf of the principal.

      On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and accepts such transfer and the responsibility of such property under the transferee's one-well bond, surface mining facility bond, or extraction facility bond." Such acceptance must be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

   b. When the commission has passed upon the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of well plugging and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if the well is in violation of a statute, rule, or order.

   c. The transferee (new operator) of any extraction facility, surface mining facility, or injection well shall be responsible for the plugging and site reclamation of any such property. For that purpose the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such well. The original or prior bond shall not be released as to the plugging and reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such well. All liability on bonds shall continue until the plugging and site reclamation of such property is completed and approved.

4. Bond Termination. The commission shall, in writing, advise the principal and any sureties on any bond as to whether the plugging and reclamation is approved. If

approved, liability under such bond may be formally terminated upon receipt of a written request by the principal. The request must be signed by an officer of the principal or a person authorized to sign for the principal.

5. Director's authority. The director is vested with the power to act for the commission as to all matters within this section, except requests for alternative forms of security, which may only be approved by the commission.

The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; if a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

~~The commission shall advise the surety and the principal when liability on a surety bond is terminated.~~

~~The director is vested with the power to act for the commission as to all matters within this section.~~

History: Amended effective August 1, 1986; May 1, 2004. October 1, 2008.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-11.1 is created as follows:

43-02-02-11.1. Designation and responsibilities of operator. The principal on the bond covering a well is the operator of the well. The operator is responsible for compliance with all laws relating to the well and well site. A dispute over designation of the operator of a well may be addressed by the commission. In doing so, the factors the commission may consider include those set forth in subsection one of North Dakota Administrative Code section43-02-02-12.1.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-12 is amended as follows:

43-02-02-12. Application for permit to drill and recomplete ~~Permit required~~. A permit shall be required prior to commencement of operations for the exploration or evaluation of subsurface minerals. The application for a permit to drill (form 1-sm) shall be filed with the director, together with a permit fee of one hundred dollars. In extenuating circumstances, verbal approval may be given for site preparation by the director. No drilling activity shall commence until such application is approved and a permit to drill is issued by the director. The application

must be accompanied by the bond pursuant to section 43-02-02-11 or the applicant must have previously filed such bond with the commission, otherwise the application is incomplete. An incomplete application received by the commission has no standing and will not be deemed filed until it is completed. ~~The state geologist may grant a permit for one year upon receipt of a permit application on a form provided by the commission, the furnishing of a bond as provided in section 43-02-02-11, and the payment of a fee of one hundred dollars for each permit.~~

~~1.~~ A permit shall be required for each deep well not included in an approved mining plan~~, and the application for such permit shall be accompanied by a plat prepared by a qualified person showing the exact location and elevation of the well~~.

~~2.~~ A permit shall be required for each testhole drilling program exploring for subsurface minerals. The area to be explored shall be outlined on the application and the permit shall be valid only in the area so outlined.

The application for permit to drill shall be accompanied by an accurate plat certified by a registered surveyor showing the location of the proposed well with reference to true north and the nearest lines of a governmental section. The plat shall also include latitude and longitude of the proposed well location to the nearest tenth of a second. Information to be included in such application shall be: the proposed depth to which the well will be drilled; estimated depth to the top of important markers; estimated depth to the top of objective horizons; the proposed mud program; the proposed casing program, including size and weight; the depth at which each casing string is to be set; the proposed pad layout, including cut and fill diagrams; and the proposed amount of cement to be used, including the estimated top of the cement.

Prior to the commencement of recompletion operations or drilling horizontally, an application for permit shall be filed with the director. Included in such application shall be the notice of intention (form 4-sm) to reenter a well by drilling horizontally, deepening, or plugging back to any source of supply other than the producing horizon in an existing well. Such notice shall include the name and file number and exact location of the well, the approximate date operations will begin, the proposed procedure, the estimated completed total depth, the anticipated hydrogen sulfide content in produced gas from the proposed source of supply, the weight and grade of all casing currently installed in the well unless waived by the director, the casing program to be followed, and the original total depth with a permit fee of fifty dollars. The director may deny any application if it is determined, in accordance with the latest version of ANSI/NACE MR0175/ISO 15156, that the casing currently installed in the well would be subject to sulfide stress cracking.

The applicant shall provide any additional information requested by the director, in addition to that specifically required by this section. The director may impose such terms and conditions on the permits issued under this section as the state geologist deems necessary.

The ~~state geologist~~ director ~~may~~ shall deny an application for a permit under this section if the ~~drilling of a well or other exploration operation~~ proposal would violate correlative rights or would cause, or tend to cause, waste~~, damage to the environment, damage to mineral-bearing~~

~~formations, or damage to nonmineral resources~~. The director shall state in writing to the applicant the reason for the denial of the permit. The applicant may appeal the decision of the ~~state geologist~~ director to the commission.

A permit to drill automatically expires one year after the date it was issued, unless the well is drilling or has been drilled below surface casing. A permit to recomplete or to drill horizontally automatically expires one year after the date it was issued, unless such project has commenced.

History: Amended effective May 1, 2004.
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

Section 43-02-02-12.1 is created as follows:

43-02-02-12.1. Revocation and limitation of drilling permits.

1. After notice and hearing, the commission may revoke a drilling, recompletion, or reentry permit or limit its duration. The commission may act upon its own motion or upon the application of an owner in the spacing or drilling unit. In deciding whether to revoke or limit a permit, the factors that the commission may consider include:

   a. The technical ability of the permitholder and other owners to drill and complete the well.

   b. The experience of the permitholder and other owners in drilling and completing similar wells.

   c. The number of wells in the area operated by the permitholder and other owners.

   d. Whether drainage of the spacing or drilling unit has occurred or is likely to occur in the immediate future and whether the permitholder has committed to drill a well in a timely fashion.

   e. Contractual obligations such as an expiring lease.

   f. The amount of ownership the permitholder and other owners hold in the spacing or drilling unit. If the permitholder is the majority owner in the unit or if its interest when combined with that of its supporters is a majority of the ownership, it is presumed that the permitholder should retain the permit. This presumption, even if not rebutted, does not prohibit the commission from limiting the duration of the permit. However, if the amount of the interest owned by the owner seeking revocation or limitation and its supporters are a majority of the ownership, the commission will presume that the permit should be revoked.

2. The commission may suspend a permit that is the subject of a revocation or limitation proceeding. A permit will not be suspended or revoked after operations have commenced.

3. If the commission revokes a permit upon the application of an owner and issues a permit to that owner or to another owner who supported revocation, the commission may limit the duration of such permit. The commission may also, if the parties fail to agree, order the owner acquiring the permit to pay reasonable costs incurred by the former permitholder and the conditions under which payment is to be made. The costs for which reimbursement may be ordered may include those involving survey of the well site, title search of surface and mineral title, and preparation of an opinion of mineral ownership.

4. If the commission declines to revoke a permit or limit the time within which it must be exercised, it may include a term in its order restricting the ability of the permitholder to renew the permit or to acquire another permit within the same spacing or drilling unit.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-12.2 is created as follows:

43-02-02-12.2. Design and construction of surface facilities. The operator shall submit plans and specifications to the director before constructing the following surface facilities:

1. Process or recovery plants and satellite facilities;

2. Ponds and impoundments;

3. Pipelines;

4. Well houses or transfer stations;

5. Fuel storage areas;

6. Any haul roads that will be used for more than six months;

7. Byproduct disposals areas; and

8. Any other facility that may contain substances that could impact human health or degrade the environment if spilled, discharged, or released.

History:

General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

Section 43-02-02-12.3 is created as follows:

43-02-02-12.3. Construction quality assurance plan.

1. The operator shall develop, for the department's approval, a construction quality assurance plan that addresses all aspects of constructing surface facilities. The plan must include the following:

   a. A description of the responsibilities and authorities of key personnel, including the personnel's level of experience and training;

   b. A description of the required level of experience, training, and duties of the contractor, the contractor's employees, and the quality assurance inspectors;

   c. A description of the testing protocols for every major phase of construction, including the frequency of inspections, field testing, and sampling for laboratory testing;

   d. The sampling and field testing procedures and the equipment to be used;

   e. The calibration of field testing equipment;

   f. The laboratory procedures to be used; and

   g. A description of the documentation to be maintained.

2. The operator shall submit the construction quality assurance plan at the same time the plans and specifications required in section 43-02-02-12.2 are submitted.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-12.4 is created as follows:

43-02-02-12.4. Pipeline design and construction requirements.

1. Topsoil must be removed before the installation of underground pipelines and replaced after pipelines are installed.

2. Pipeline systems must be constructed with materials that have the strength, thickness, and chemical properties that prevent failure due to pressure gradients, physical contact with the waste or fluids to which the pipes are exposed, climatic conditions, stress of installation, seismic, and stress of daily operation.

3. Design and construction requirements for wellfield pipelines and pipelines between the wellfield and processing and satellite facilities must include an early detection and shutdown capability in the event of pressure drop or loss of flow; this may include automatic motor-operated valves with pressure transmitters and manually operated valves or devices.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-12.5 is created as follows:

43-02-02-12.5. Disposal of liquid waste. All liquid waste streams must be:

1. Disposed of in a permitted class I or V underground injection control disposal well under a state department of health underground injection control program permit in accordance with North Dakota Administrative Code chapter 33-25-01;

2. Land applied under a solid waste permit in accordance with North Dakota Administrative Code chapter 33-20-09; or

3. Treated, if necessary, and discharged under a North Dakota pollution discharge elimination system surface water discharge permit in accordance with North Dakota Administrative Code chapter 33-16-01.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-13 is amended as follows:

43-02-02-13. Well location. All well locations must be approved by the commission, after notification and hearing. No well drilled for solution mining of subsurface minerals shall be located closer than five hundred feet [152.4 meters] from the boundary line of property owned or leased by the operator except by order of the commission. ~~However, a well may be drilled three hundred feet [91.44 meters] from such boundary if the operator submits geological and other technical data to the commission which indicates that waste would occur and that correlative rights will not be violated.~~ The term boundary line as used herein is understood to mean the boundary of

a contiguous set of properties either owned or leased by the operator.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-13.1 is created as follows:

43-02-02-13.1. Exception location. An operator may apply for an exception to drill at a distance less than five hundred feet [152.4 meters] from the boundary line of a property owned or leased by the operator if the operator submits geological and other technical data to the commission which indicates that waste would occur and that correlative rights will not be violated.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-13.2 is created as follows:

43-02-02-13.2. Deviation tests and directional surveys. When any well is drilled or deepened, tests to determine the deviation from the vertical shall be taken at least every one thousand feet [304.8 meters]. The director is authorized to waive the deviation test for a shallow gas well if the necessity therefor can be demonstrated to the director's satisfaction. When the deviation from the vertical exceeds five degrees at any point, the director may require that the hole be straightened. Directional surveys may be required by the director, whenever, in the director's judgment, the location of the bottom of the well is in doubt.

A directional survey shall be made and filed with the state geologist on any well utilizing a whipstock or any method of deviating the well bore. The obligation to run the directional survey may be waived by the director when a well bore is deviated to sidetrack junk in the hole, straighten a crooked hole, control a blowout, or if the necessity therefor can be demonstrated to the director's satisfaction. The survey contractor shall file with the state geologist free of charge one certified electronic copy of all surveys, in a form approved by the director, within thirty days of attaining total depth. Such survey shall be in reference to true north. The director may require the directional survey to be filed immediately after completion if the survey is needed to conduct the operation of the director's office in a timely manner. Special permits may be obtained to drill directionally in a predetermined direction as provided above, from the director.

If the director denies a request for a permit to directionally drill, the director shall advise the applicant immediately of the reasons for denial. The decision of the director may be appealed to the commission.

History:
General Authority: NDCC 38-12-02

Law Implemented: NDCC 38-12-02

Section 43-02-02-14 is amended as follows:

43-02-02-14. Sign on wells. ~~Every exploratory deep well~~ Every well associated with the exploration or mining of subsurface minerals shall be identified by a sign~~,~~ posted on the derrick or not more than twenty feet [6.10 meters] from ~~such well, and such signs~~ the well. The sign shall be of durable construction and the lettering thereon shall be kept in a legible condition and shall be large enough to be legible under normal conditions at a distance of fifty feet [15.24 meters]. The wells on each lease or property shall be numbered in ~~a nonrepetitive, logical sequence~~ nonrepetitive sequence, unless some other system of numbering was adopted by the owner prior to the adoption of this chapter. Each sign ~~will~~ must show the well name and number ~~of the well, the name of the lease (which shall be different or distinctive for each lease), the name of the lessee, owner, or operator, permit number,~~ (which shall be different or distinctive for each well), the name of the operator, file number, and the location by quarter-quarter ~~section~~, section, township, and range. ~~Where wells producing subsurface minerals are closely spaced on the surface, this requirement shall be satisfied by one general sign giving the name of the lease, the name of the lessee, owner, or operator, permit number, and the location by quarter-quarter section, section, township, and range, provided this sign is visible from the individual wells. In this case, a sign showing the number of the well will be posted on each well.~~

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-14.1 is created as follows:

43-02-02-14.1. Site Construction. In the construction of a drill site, access road, and all associated facilities, topsoil shall be removed, stockpiled, and stabilized or otherwise reserved for use when the area is reclaimed. "Topsoil" means the suitable plant growth material on the surface; however, in no event shall this be deemed to be more than the top eight inches [20.32 centimeters] of soil. Soil stabilization additives and materials to be used on site, access roads or associated facilities must have approval from the director before application.

When necessary to prevent pollution of the land surface and freshwaters, the director may require the drill site to be sloped and diked.

Well sites and associated facilities shall not be located in, or hazardously near, bodies of water, nor shall they block natural drainages. Sites and associated facilities shall be designed to divert surface drainage from entering the site.

Well sites and associated facilities or appropriate parts thereof shall be fenced if required by the director.

Within six months after completion of a well, the portion of the well site not used for well operations shall be reclaimed, unless waived by the director. Well sites and all associated facilities shall be stabilized to prevent erosion.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15 is repealed.

43-02-02-15. Pits for drilling fluid and drill cuttings. ~~In order to assure a supply of proper material or mud-laden fluid to confine oil, gas, water, or any subsurface mineral to their native strata during the drilling of any well, each operator shall provide, before drilling is commenced, a pit of sufficient size to contain said material or fluid, and the accumulation of drill cuttings. Such pits located in permeable material shall be lined in a manner approved by the state geologist.~~ Repealed effective .

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15.1 is created as follows:

43-02-02-15.1. Fencing, screening, and netting of drilling and reserve pits. All open pits and ponds which contain saltwater must be fenced. All pits and ponds which contain oil must be fenced, screened, and netted.

This is not to be construed as requiring the fencing, screening, or netting of a drilling pit or reserve pit used solely for drilling, completing, recompleting, or plugging unless such pit is not reclaimed within ninety days after completion of drilling operations.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15.2 is created as follows:

43-02-02-15.2. Disposal of waste material. All waste material associated with exploration or production of a subsurface mineral through deep wells must be properly disposed of in an authorized facility.

All waste material recovered from spills, leaks, and undesirable events shall immediately be disposed of in an authorized facility, although the remediation of such material may be allowed on-site if approved by the director.

This is not to be construed as requiring the offsite disposal of drilling mud or drill cuttings associated with the drilling of a shallow well. However, water remaining in a drilling or reserve pit used in the drilling and completion operations of a deep well is to be removed from the pit and disposed of in an authorized disposal well or used in a manner approved by the director. The disposition or use of the water must be included on the sundry notice (form 4-sm) reporting the plan of reclamation pursuant to sections 43-02-02-15.4 and 43-02-02-15.5.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15.3 is created as follows:

43-02-02-15.3 Earthen pits and open receptacles. Except as otherwise provided in sections 43-02-02-15.4 and 43-02-02-15.5, no saltwater, drilling mud, crude oil, waste oil, or other waste shall be stored in earthen pits or open receptacles except in an emergency and upon approval by the director.

A lined earthen pit or open receptacle may be temporarily used to retain oil, water, cement, solids or fluids generated in well completion servicing or plugging operations. A pit or receptacle used for this purpose must be sufficiently impermeable to provide adequate temporary containment of the oil, water, or fluids. The contents of the pit or receptacle must be removed within seventy-two hours after operations have ceased and must be disposed of at an authorized facility in accordance with section 43-02-02-15.2. Within thirty days after operations have ceased, the earthen pit shall be reclaimed and the open receptacle shall be removed. The director may grant an extension of the thirty day time period for no more than one year for good cause.

The director may permit pits or receptacles used solely for the purpose of flaring casinghead gas. A pit or receptacle used for this purpose must be sufficiently impermeable to provide adequate temporary containment of fluids. Permission for such pit or receptacle shall be conditioned on locating the pit not less than one hundred fifty feet [45.72 meters] from the vicinity of wells and tanks and keeping it free of any saltwater, crude oil, waste oil, or other waste. Saltwater, drilling mud, crude oil, waste oil, or other waste shall be removed from the pit or receptacle within twenty-four hours after being discovered and must be disposed of at an authorized facility in accordance with section 43-02-02-15.2.

The director may permit pits used solely for storage of freshwater used in completion and well servicing operations. Permits for freshwater pits shall be valid for a period of one year but may be re-authorized upon application. Freshwater pits shall be lined and no pit constructed for this purpose shall be wholly or partially constructed of fill dirt unless approved by the director. The

director may approve chemical treatment to municipal drinking water standards upon application. The freshwater pit shall have signage on all sides accessible to vehicular traffic clearly identifying the usage as freshwater only.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15.4 is created as follows:

43-02-02-15.4. Drilling pits. A pit may be utilized to bury drill cuttings and solids generated during well and completion operations, providing the pit can be constructed, used and reclaimed in a manner that will prevent pollution of the land surface and freshwaters. In special circumstances, the director may prohibit construction of a cuttings pit or may impose more stringent pit construction and reclamation requirements. Reserve and circulation of mud system through deep well earthen pits are prohibited unless a waiver is granted by the director. All pits shall be inspected by an authorized representative of the director prior to lining and use. Under no circumstances shall pits be used for disposal, dumping, or storage of fluids, wastes, and debris other than drill cuttings and solids recovered while drilling and completing the well.

Drill cuttings and solids must be stabilized in a manner approved by the director prior to placement in a cuttings pit. Any liquid accumulating in the cuttings pit shall be promptly removed. The pit shall be diked in a manner to prevent surface water from running into the pit.

During the drilling of a deep well, a small lined pit can be authorized by the director for the temporary containment of incidental fluids such as trench water and rig wash, if emptied and covered prior to the rig leaving the site.

Pits shall not be located in, or hazardously near, bodies of water, nor shall they block natural drainages. No pit shall be wholly or partially constructed of fill dirt unless approved by the director.

When required by the director, the drilling pit or appropriate parts thereof shall be fenced.

Within thirty days after the completion of drilling a deep well or expiration of a drilling permit, whichever occurs first, drilling pits shall be reclaimed. The director may grant an extension of the thirty day time period of no more than one year for good cause. Prior to reclaiming the pit, the operator or the operator's agent shall file a sundry notice (form 4-sm) with the director and obtain approval of a pit reclamation plan. Verbal approval to reclaim the pit may be given. The notice shall include, but not be limited to:

1. The name and address of the reclamation contractor;

2. The name and address of the surface owner;

3. The location and name of the disposal site for the pit water when applicable; and,

4. A description of the proposed work, including details on treatment and disposition of the drilling waste.

Any water or oil accumulated in the pit must be removed prior to reclamation. Drilling waste from a deep well shall be encapsulated in the pit and covered with at least four feet [1.22 meters] of backfill and topsoil. The surface shall be sloped, when practicable, to promote surface drainage away from the reclaimed pit area.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-15.5 is created as follows:

43-02-02-15.5. Reserve pit for drilling mud and drill cuttings from shallow wells. For wells drilled to a strata or formation, including lignite or coal strata or seam, located above the depth of five thousand feet [1524 meters] below the surface, or located more than five thousand feet [1524 meters] below the surface but above the top of the Rierdon Formation, a container or reserve pit of sufficient size to contain said material or fluid, and the accumulation of drill cuttings may be utilized to contain solids and fluids used and generated during well drilling and completion operations, providing the pit can be constructed, used and reclaimed in a manner that will prevent pollution of the land surface and freshwaters. A reserve pit may be allowed by an order of the commission after notice and hearing for wells drilled within a specified field and pool more than five thousand feet [1524 meters] below the surface and below the top of the Rierdon Formation provided the proposed well or wells utilize a low sodium content water based mud system and the reserve pit can be constructed, used, and reclaimed in a manner that will prevent pollution of the land surface and freshwaters. In special circumstances, based on site conditions, the director or authorized representative may prohibit construction of a reserve pit or may impose more stringent pit construction and reclamation requirements, including reserve pits previously authorized by a commission order within a specified field or pool. Under no circumstances shall reserve pits be used for disposal, dumping, or storage of fluids, wastes, and debris other than drill cuttings and fluids used or recovered while drilling and completing the well.

Reserved pits shall not be located in, or hazardously near, bodies of water, nor shall they block natural drainages. No reserve pit shall be wholly or partially constructed in fill dirt unless approved by the director.

Within thirty days after the completion of a shallow well, or prior to drilling below the surface casing shoe on any other well, the reserve pit shall be reclaimed. The director may grant an extension of the thirty day time period of no more than one year for good cause. Prior to reclaiming the pit, the operator, or the operator's agent, shall file a sundry notice (form 4-sm) with the director

and obtain approval of a pit reclamation plan. Verbal approval to reclaim the pit may be given. The notice shall include, but not be limited to:

1. The name and address of the reclamation contractor;

2. The name and address of the surface owner;

3. The location and name of the disposal site for the pit water; and

4. A description of the proposed work, including details on treatment and disposition of the drilling waste.

All pit water must be removed prior to reclamation. Drilling waste should be encapsulated in the pit and covered with at least four feet [1.22 meters] of backfill and topsoil. The surface shall be sloped, when practicable, to promote surface drainage away from the reclaimed pit area.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-16 is amended as follows:

43-02-02-16. Sealing off strata. During the drilling and operation of any well for subsurface minerals, all mineral-bearing and water strata above the producing horizon shall be sealed or separated where necessary in order to prevent their contents from passing into other strata.

All fresh waters and waters of present or probable value for domestic, commercial, or stock purposes shall be confined to their respective strata and shall be adequately protected by methods approved by the commission. Special precautions shall be taken in drilling and ~~abandoning~~ plugging wells to guard against any loss of artesian water from the strata in which it occurs, and the contamination of artesian water by objectionable water or subsurface minerals.

All water shall be shut off and excluded from the various subsurface mineral-bearing strata which are penetrated. Water shutoffs shall ordinarily be made by cementing casing or landing casing with or without the use of mud-laden fluid.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-17 is amended as follows:

43-02-02-17. Casing and tubing requirements. All wells drilled for subsurface

minerals below the base of the Fox Hills Formation shall be completed with strings of casing which shall be properly cemented at sufficient depths to adequately ~~to~~ protect ~~the subsurface mineral-bearing strata to be produced~~ and isolate all formations containing water, subsurface minerals, oil, or gas or any combination of these; protect the pipe through salt sections encountered; and isolate the uppermost sand of the Dakota group.

Drilling of the surface hole shall be with freshwater-based drilling mud or other method approved by the director which will protect all freshwater-bearing strata. The surface casing shall consist of new or reconditioned pipe that has been previously tested to one thousand pounds per square inch [6900 kilopascals]. The surface casing shall be set and cemented at a point not less than fifty feet [15.24 meters] below the base of the Fox Hills Formation. Sufficient cement shall be used on surface casing to fill the annular space ~~back of~~ behind the casing to the bottom of the cellar, if any, or to the surface of the ground. If the annulus space is not adequately filled with cement, the director shall be notified immediately. The operator shall diligently perform work after obtaining approval from the director. All strings of surface casing shall stand cemented under pressure for at least twelve hours before drilling the plug or initiating tests. The term "under pressure" as used herein ~~will~~ shall be complied with if one float valve is used or if pressure is otherwise held. Cementing shall be by the pump and plug method~~,~~ or other methods approved by the ~~commission~~ director. The director is authorized to require an accurate gauge be maintained on the surface casing of any well, not properly plugged and abandoned, to detect any buildup of pressure caused by the migration of fluids.

Surface casing strings must stand under pressure until the tail cement has reached a compressive strength of at least five hundred pounds per square inch [3450 kilopascals]. All filler cements utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within twenty-four hours and at least three hundred fifty pounds per square inch [2415 kilopascals] within seventy-two hours. All compressive strengths on surface casing cement shall be calculated at a temperature of eighty degrees Fahrenheit [26.67 degrees Celsius].

Unless otherwise specified by the director, production or intermediate casing strings shall consist of new or reconditioned pipe that has been previously tested to two thousand pounds per square inch [13800 kilopascals]. Such strings must stand under pressure until the tail cement has reached a compressive strength of at least five hundred pounds per square inch [3450 kilopascals]. All filler cements utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within twenty-four hours and at least five hundred pounds per square inch [3450 kilopascals] within seventy-two hours, although in any horizontal well performing a single stage cement job from a measured depth of greater than thirteen thousand feet [3962.4 meters], the filler cement utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within forty-eight hours and at least five hundred pounds per square inch [3450 kilopascals] within ninety-six hours. All compressive strengths on production or intermediate casing cement shall be calculated at a temperature found in the Mowry Formation using a gradient of 1.2 degrees Fahrenheit per one hundred feet [30.48 meters] of depth plus eighty degrees Fahrenheit [26.67 degrees Celsius].

After cementing, each casing string shall be tested by application of pump pressure of at least one thousand five hundred pounds per square inch [10350 kilopascals]. If, at the end of thirty minutes, this pressure has dropped one hundred fifty pounds per square inch [1035 kilopascals] or more, the casing shall be repaired after receiving approval from the director. Thereafter, the casing shall again be tested in the same manner. Further work shall not proceed until a satisfactory test has been obtained. The casing in a horizontal well may be tested by use of a mechanical tool set near the casing shoe after the horizontal section has been drilled.

All ~~production~~ flowing wells ~~shall~~ must be equipped with tubing ~~and packer and the annulus pressure must be monitored to detect leaks or breaks in the casing or tubing, unless the entire casing string is cemented to surface when initially set in place~~. A tubing packer must also be utilized unless a waiver is obtained by demonstrating the casing will not be subjected to excessive pressure or corrosion. The packer must be set as near the producing interval as practicable, but in all cases must be above the perforations.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-18 is amended as follows:

43-02-02-18. Defective casing or cementing. In any well that appears to have defective casing~~, be faultily cemented, or have corroded casing which will permit or may create underground waste or pollution, the operator shall proceed with diligence to use the appropriate method and means to eliminate such hazard. If waste cannot be eliminated, the well shall be properly plugged and abandoned.~~ or cementing, the operator shall report the defect to the state geologist on a sundry notice (form 4-sm). Prior to attempting remedial work on any casing, the operator must obtain approval from the director and proceed with diligence to conduct tests, as approved or required by the director, to properly evaluate the condition of the well bore and correct the defect. The director is authorized to require a pressure test to verify casing integrity if its competence is questionable. The director may allow the well bore condition to remain if correlative rights can be protected without endangering potable waters. The well shall be properly plugged if requested by the director.

Any well with open perforations above a packer shall be deemed to have defective casing.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-18.1 is created as follows:

43-02-02-18.1. Perforating, fracturing, and chemically treating wells. During treatment operations, the director may prescribe pretreatment casing pressure testing as well as other

operational requirements designed to protect wellhead and casing strings. If damage results to the casing or the casing seat from perforating, fracturing, or chemically treating a well, the operator shall immediately notify the director and proceed with diligence to use the appropriate method and means for rectifying such damage, pursuant to section 43-02-02-18. If perforating, fracturing, or chemical treating results in irreparable damage which threatens the mechanical integrity of the well, the commission may require the operator to plug the well.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-19 is amended as follows:

43-02-02-19. Blowout prevention. ~~When drilling on lands valuable or potentially valuable for oil and gas, drilling equipment shall be equipped with blowout control devices before penetrating any formation, strata, or zone that might contain oil and gas.~~ In all drilling operations, proper and necessary precautions shall be taken for keeping the well under control, including the use of a blowout preventer and high pressure fittings attached to properly cemented casing strings adequate to withstand anticipated pressures. During the course of drilling, the pipe rams shall be functionally operated at least once every twenty-four-hour period. The blind rams shall be functionally operated each trip out of the well bore. The blowout preventer shall be pressure tested at installation on the wellhead, after modification of any equipment, and every thirty days thereafter. The director may postpone such pressure test if the necessity can be demonstrated to the director's satisfaction. All tests shall be noted in the driller's record.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-03-20 is amended as follows:

43-02-02-20. Safety regulation. ~~When coming out of the hole with drill pipe, drilling fluid shall be circulated until equalized and subsequently drilling fluid level shall be maintained at a height sufficient to control subsurface pressures. During the course of drilling, blowout preventers shall be tested at least once every twenty-four-hour period, and the test noted in driller's record.~~ Any rubbish or debris that might constitute a fire hazard shall be removed to a distance of at least one hundred fifty feet [45.72 meters] from the vicinity of wells and tanks. All waste shall be burned or disposed of in such manner as to avoid creating a fire hazard. All vegetation must be removed to a safe distance from any production equipment to eliminate a fire hazard.

The director may require remote operated or automatic shutdown equipment be installed on, or shut in for no more than forty days, any well that is likely to cause a serious threat of pollution or injury to the public health of safety.

No well shall be drilled or production or injection equipment installed less than five hundred feet [152.40 meters] from an occupied dwelling unless agreed to in writing by the owner of the dwelling or authorized by order of the commission.

Subsurface pressure must be controlled during all drilling, completion, and well-servicing operations with appropriate fluid weight and pressure control equipment.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-20.1 is created as follows:

43-02-02-20.1. Pulling string of casing. When removing casing strings from any subsurface mineral or injection well, the space above the casing stub shall be kept and left full of fluid with adequate gel strength and specific gravity, cement, or combination thereof, to seal off all freshwater and saltwater strata and any strata bearing oil or gas not producing. No casing shall be removed without the prior approval of the director.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-21 is amended as follows:

43-02-02-21. Well and lease equipment. Wellhead and lease equipment with a working pressure at least equivalent to the calculated or known pressure to which the equipment may be subjected shall be installed and maintained ~~in first-class condition so that tests may be made easily~~. Valves shall be installed and maintained in good working order to permit pressure readings to be obtained on both casing and tubing.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-21.1 is created as follows:

43-02-02-21.1. Notification of fires, leaks, spills, or blowouts. All persons controlling or operating any well, pipeline, receiving tank, storage tank, or production facility into which subsurface minerals or water is produced, received, stored, processed, or through which subsurface minerals or water is injected, piped, or transported, shall verbally notify the director within twenty-four hours after discovery of any fire, leak, spill, blowout, or release of fluid. If any such incident occurs or travels offsite of a facility, the persons, as named above, responsible

for proper notification shall within a reasonable time also notify the surface owners upon whose land the incident occurred or traveled. Notification requirements prescribed by this section shall not apply to any leak, spill, or release of fluid that is less than one barrel total volume and remains onsite of a facility. The verbal notification must be followed by a written report within ten days after cleanup of the incident, unless deemed unnecessary by the director. Such report must include the following information: the operator and description of the facility, the legal description of the location of the incident, date of occurrence, date of cleanup, amount and type of each fluid involved, amount of each fluid recovered, steps taken to remedy the situation, cause of the accident, and action taken to prevent reoccurrence. The signature, title, and telephone number of the company representative must be included on such report. The persons, as named above, responsible for proper notification shall, within a reasonable time, also provide a copy of the written report to the surface owners upon whose land the incident occurred or traveled.

The commission, however, may impose more stringent spill reporting requirements if warranted because of proximity to sensitive areas, past spill performance, or careless operating practices as determined by the director.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-21.2 is created as follows:

43-02-02-21.2. Leak and spill cleanup. At no time shall any spill or leak be allowed to flow over, pool, or rest on the surface of the land or infiltrate soil. Discharge fluids must be properly removed and may not be allowed to remain standing within or outside of diked areas. Operators must respond with appropriate resources to contain and clean up spills.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-22 is amended as follows:

43-02-02-22. Well log, ~~C~~completion, and workover report and basic data ~~collected~~. ~~Within thirty days after the completion of any well drilled for subsurface minerals, or the completion of an exploration program for subsurface minerals, a completion report shall be filed with the state geologist, on a form prescribed by the commission.~~ After the plugging of a well, a plugging record (form 7-sm) shall be filed with the state geologist. After the completion of a well, recompletion of a well in a different pool, or drilling horizontally in an existing pool, a completion report (form 6-sm) shall be filed with the state geologist. In no case shall subsurface minerals be transported from the lease prior to the filing of a completion report unless approved by the director. The operator shall cause to be run an open hole electrical, radioactivity, or other

similar log, or combination of open hole logs, of the operator's choice, from which formation tops and porosity zones can be determined. The operator shall run a gamma ray log from total depth to ground level elevation of the well bore. Prior to completing the well, the operator shall run a log from which the presence and quality of bonding of cement can be determined in every well in which production or intermediate casing has been set. The obligation to log may be waived or postponed by the director if the necessity therefore can be demonstrated to the director's satisfaction. Waiver will be contingent upon such terms and conditions as the director deems appropriate. All logs run shall be available to the director at the well site prior to proceeding with plugging or completion operations. All logs run shall be submitted to the state geologist free of charge. Logs shall be submitted as one digital TIFF (Tagged Image File Format) copy and one digital LAS (Log ASCII) formatted copy, or a format approved by the director. In addition, operators shall file two copies of drill stem test reports and charts, formation water analyses, core analyses, geologic reports, and noninterpretive lithologic logs or sample descriptions if compiled by the operator.

All information, except the operator name, well name, location, spacing or drilling unit description, spud date, rig contractor, and any production runs, furnished to the state geologist on recompletions or reentries, shall be kept confidential for a period of one year if requested by the operator and such period may be further extended upon approval by the commission. The one year period shall commence on the expiration date of the permit. The confidentiality period will become void if the operator engages in a wholesale release of the confidential information in a wide public form. Any information furnished to the state geologist prior to approval of the recompletion or reentry shall remain public.

Approval must be obtained on a sundry notice (form 4-sm) from the director prior to perforating or recompleting a well in a pool other than the pool in which the well is currently permitted.

After the completion of any remedial work, or attempted remedial work such as plugging back or drilling deeper, acidizing, shooting, formation fracturing, squeezing operations, setting liner, perforating, reperforating, or other similar operations not specifically covered herein, a report on the operation shall be filed on a sundry notice (form 4-sm) with the state geologist. The report shall present a detailed account of all work done and the date of such work; the daily production of subsurface minerals and water both prior to and after the operation; the shots per foot, size, and depth of perforations; the quantity of sand, crude, chemical, or other materials employed in the operation; and any other pertinent information or operations which affect the original status of the well and are not specifically covered herein.

Upon the installation of pumping equipment on a flowing well, or change in type of pumping equipment designed to increase productivity in a well, the operator shall submit a sundry notice (form 4-sm) of such installation. The notice shall include all pertinent information on the pump and its operation including the date of such installation, and the daily production of the well prior to and after the pump has been installed.

All forms, reports, logs, and other information required by this section shall be submitted

within thirty days after the completion of such work, although a completion report shall be filed immediately after the completion or recompletion of a well in a pool or reservoir not then covered by an order of the commission.

The following basic data ~~developed~~ collected by the operator shall be delivered, free of charge, to the state geologist~~, if requested,~~ within six months of the expiration date of the permit:

1. Washed and packaged sample cuts, core chips, or whole cores ~~minus~~ except those portions of cores used for necessary testing or analysis in which case the results of testing, the analysis and the description of missing portions shall be submitted to the state geologist upon request.

2. Sample logs, radioactivity logs, resistivity logs, or other types of electrical or mechanical logs.

3. Elevation and location information on the data collection points.

4. Other pertinent information as may be requested by the ~~state geologist~~ director.

When requested by the operator, the data submitted shall be confidential for a period of one year commencing on the expiration date of the permit. Such period may be further extended upon approval of the commission.

Data ~~on a particular stratum~~ restricted to ~~that~~ a particular stratigraphic interval containing the actual ore~~, which is~~ being explored, developed, or mined, shall be confidential as long as the operator is exploring, developing, or producing from that particular stratum ~~within the general area being explored, developed, or mined by the operator~~. The general area, as used herein, shall be defined jointly by the state geologist and the operator. Definition of the stratigraphic interval will be made by the state geologist. Data from the stratigraphic interval will, at the discretion of the state geologist, be retained in the North Dakota office of the operator during the period of confidentiality. The industrial commission and the state geologist shall have access to all confidential data.

The director may release such confidential completion and production data to health care professionals, emergency responders, and state, federal, or tribal environmental and public health regulators if the state geologist deems it necessary to protect the public's health, safety, and welfare.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-22.1 is repealed:

~~**43-02-02-22.1. Determination of well potential.** After the completion or recompletion of~~

~~a nonhydrocarbon gas well, the operator shall conduct tests to determine the daily open flow potential of the well. The test results together with an analysis of the gas must be reported to the state geologist within thirty days after completion of the well.~~

~~Operators shall conduct tests to determine the daily open flow potential volumes of gas wells from which gas is being used or marketed in accordance with an order of the commission or at the request of the state geologist. Test procedures must be those commonly used in the industry unless otherwise approved by the state geologist.~~ Repealed effective .

History: Effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-22.2 is created as follows:

43-02-02-22.2. Subsurface pressure tests. The operator shall conduct a subsurface pressure test on the discovery well of any new pool discovered and shall report the results to the director within thirty days after the completion of such discovery well. Drill stem test pressures are acceptable. After the discovery of a new pool, each operator shall make additional subsurface pressure tests as directed by the director or provided for in field rules. All tests shall be made by a person qualified by both training and experience to make such tests and with an approved subsurface pressure instrument. All wells shall remain completely shut in for at least forty-eight hours prior to the test. The subsurface determination shall be obtained as close as possible to the midpoint of the productive interval of the reservoir. The report of the reservoir pressure test shall be filed on form 9a-sm.

The director may shut in any well for failure to make such test until such time as a satisfactory test has been made or satisfactory explanation given.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-22.3 is created as follows:

43-02-02-22.3. Commingling of minerals from pools. Except as directed by the commission after notice and hearing, each pool shall be produced as a single common reservoir without commingling in the well bore of fluids from different pools. After fluids from different pools have been brought to surface, such fluids may be commingled provided that the amount of production from each pool is determined by a method approved by the director.

History:
General Authority: NDCC 38-12-02

Law Implemented: NDCC 38-12-02

Section 43-02-02-23 is amended as follows:

43-02-02-23. Notice of intention to ~~abandon~~ plug well. ~~Notice of intention to abandon any well shall be filed with the state geologist by the~~ The operator or the operator's agent shall file a notice of intention (form 4-sm) to plug with the state geologist, and obtain the approval of the director, prior to the commencement of plugging or plug-back operations. The~~, on a form prescribed by the commission, which~~ notice shall state the name and location of the well~~, and~~ the name of the operator, and the method of plugging, which must include a detailed statement of proposed work. In the case of ~~abandonment of any well~~ a recently completed test well that has not had production casing in the hole, the operator may commence plugging by giving reasonable notice to, and securing verbal approval ~~from~~ of, the ~~office of the state geologist~~ director as to the ~~time~~ method of plugging, and the time plugging operations are to begin. Within thirty days after the plugging of any well, the owner or operator thereof shall file a plugging record (form 7-sm), and, if requested, a copy of the cementer's trip ticket or job receipt, with the state geologist setting forth in detail the method used in plugging the well. This section shall not apply to testholes.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-24 is amended as follows:

43-02-02-24. Method of plugging. ~~Before any well or testhole is abandoned, it~~ All wells shall be plugged in a manner which will confine permanently all subsurface minerals, oil, gas, and water in the separate strata originally containing them. This operation shall be accomplished by the use of mud-laden fluid, cement, and plugs, used singly or in combination as may be approved by the ~~state geologist~~ director. ~~Casing~~ All casing strings shall be cut off at least three feet [~~.91 meters~~ 91.44 centimeters] below the ~~surface of the ground~~ final surface contour, and a cap shall be welded. Core or stratigraphic test holes drilled to or below sands containing freshwater shall be plugged in accordance with the applicable provisions recited above. After plugging, the site must be reclaimed pursuant to section 43-02-02-14.1. ~~The top plug in any hole shall be set at least three feet [.91 meters] below ground level, and the land surface shall be restored as nearly as possible to its original condition.~~

~~A well may be abandoned temporarily upon approval of the state geologist. In such event, casing may not be pulled and a plug must be placed at the top of the casing, in such manner as to prevent the intrusion of any foreign matter into the well.~~

~~When drilling or production operations have been suspended for six months, wells must be plugged and abandoned in accordance with regulations of the commission unless a permit for temporary abandonment has been obtained from the state geologist.~~

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-24.1 is created as follows:

43-02-02-24.1. Abandonment of wells – suspension of drilling.

1. The removal of production equipment or the failure to produce subsurface minerals, or the failure to produce water from the source well, for one year constitutes abandonment of the well. The removal of injection equipment or the failure to use an injection well for one year constitutes abandonment of the well. The failure to plug a stratigraphic test hole of reaching total depth within one year constitutes abandonment of the well. An abandoned well must be plugged and its site must be reclaimed pursuant to sections 43-02-02-24 and 43-02-02-24.2.

2. The director may waive the requirement to plug and reclaim an abandoned well for one year by giving the well temporarily abandoned status. This status may only be given to wells that are to be used for purposes related to the production of subsurface minerals. If a well is given temporarily abandoned status, the well's perforations must be isolated, the integrity of its casing must be proven, and its casing must be sealed at the surface, all in a manner approved by the director. The director may extend a well's temporarily abandoned status beyond one year. A fee of one hundred dollars shall be submitted for each application to extend the temporary abandonment status of any well.

3. In addition to the waiver in subsection two, the director may also waive the duty to plug and reclaim an abandoned well for good cause as determined by the director. If the director exercises this discretion, the director shall set a date or circumstance upon which the waiver expires.

4. The director may approve suspension of the drilling of a well. If suspension is approved, a plug must be placed at the top of the casing to prevent any foreign matter from getting into the well. When drilling has been suspended for thirty days, the well, unless otherwise authorized by the director, must be plugged and its site reclaimed pursuant to sections 43-02-02-24 and 43-02-02-24.2.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-24.2 is created as follows:

43-02-02-24.2. Reclamation of surface.

1. Within a reasonable time, but not more than one year, after a well is plugged, or if a permit expires, has been cancelled or revoked, the well site, access road, and other associated facilities constructed for the well shall be reclaimed as closely as practicable to original condition. Prior to site reclamation, the operator or the operator's agent shall file a sundry notice (form 4-sm) with the director and obtain approval of a reclamation plan. The operator or operator's agent shall provide a copy of the proposed reclamation plan to the surface owner at least ten days prior to commencing the work unless waived by the surface owner. Verbal approval to reclaim the site may be given. The notice shall include, but not be limited to:

   a. The name and address of the reclamation contractor;

   b. The name and address of the surface owner and the date when a copy of the proposed reclamation plan was provided to the surface owner;

   c. A description of the proposed work, including topsoil redistribution and reclamation plans for the access road and other facilities; and

   d. Reseeding plans, if applicable.

   The commission will mail a copy of the approved notice to the surface owner.

   All production equipment, waste and debris shall be removed from the site. Flow lines shall be purged in a manner approved by the director. Flow lines shall be removed if buried less than three feet [91.44 centimeters] below final contour.

2. Gravel or other surfacing material shall be removed, stabilized soil shall be remediated, and the well site, access road, and other associated facilities constructed for the well shall be reshaped as near as is practicable to original contour.

3. The stockpiled topsoil shall be evenly distributed over the disturbed area, and where applicable the area revegetated with native species or according to the reasonable specifications of the appropriate government land manager or surface owner.

4. Within thirty days after completing any reclamation, the operator shall file a sundry notice with the director reporting the work performed.

5. The director, with the consent of the appropriate government land manager or surface owner, may waive the requirement of reclamation of the site and access road after a well is plugged.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02-25. Wells to be used for freshwater. Repealed effective August 1, 1986.

Section 43-02-02-25.1 is created as follows:

43-02-02-25.1. Conversion of mineral wells to freshwater wells. Any person desiring to convert a mineral well to a freshwater well shall file an application for approval with the commission. The application must include the following:

1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.

2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

3. The procedure which will be followed in converting the mineral well to a freshwater well.

4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-26 is amended as follows:

43-02-02-26. Liability. The owner and operator of any well, core hole, or stratigraphic test hole, whether cased or uncased, shall be liable and responsible for the plugging and site reclamation ~~thereof~~ in accordance with the rules and regulations of the commission.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-27 is repealed:

43-02-02-27. Earthen pits. ~~All earthen pits used during the drilling of a well shall be filled and leveled within a reasonable time after the completion of the well. Earthen pits, except those necessary for the drilling of a well, shall not be used for any purpose without the prior approval of~~

~~the state geologist~~ Repealed effective _____.

General Authority: ~~NDCC 38-12-02~~
Law Implemented: ~~NDCC 38-12-02~~

Section 43-02-02-28 is amended as follows:

43-02-02-28. Preservation of cores and samples. Sample cuttings of formations, taken at regular intervals~~,~~ in all wells drilled for subsurface minerals or geological information in North Dakota, shall be washed and packaged in standard sample envelopes which in turn must be placed in proper order in a standard sample box; carefully identified as to operator, well name, ~~and~~ location, ~~and~~ depth of sample, and shall be ~~shipped~~ sent free of cost to the state geologist~~, if requested~~ within thirty days after completion of drilling operations.

The operator of any well drilled for subsurface minerals in North Dakota ~~shall~~, during the drilling of~~,~~ or immediately following the completion of~~,~~ any ~~given~~ well, shall inform ~~advise~~ the state geologist~~,~~ or the state geologist's representative~~,~~ of all intervals that are to be cored, or have been cored. All cores taken shall be preserved and forwarded to the state geologist, free of cost, within ninety days after completion of drilling operations, unless specifically exempted by the state geologist. If ~~the state geologist does not desire the core~~ an exemption is granted, the operator shall advise the state geologist of the final disposition of the core.

This section does not prohibit the operator from taking such samples of the core as the operator may desire for identification and testing. The operator shall furnish the state geologist with the results of identification ~~or~~ and testing procedure.

History: Amended effective October 1, 1990.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-29 is amended as follows:

43-02-02-29. Mining plan. Before conducting any mining or production operations, the operator shall submit to the state geologist for approval a mining plan which shall show in detail the proposed development or mining operations to be conducted. Mining plans shall be consistent with and responsive to the requirements of not only this chapter but also statutes and rules for the protection of nonmineral resources, and for the reclamation of the surface of the lands affected by the operations. No operations shall be conducted except under an approved plan. Those portions of a mining plan which the director finds to contain information which is proprietary to a specific company's mining methods shall be retained at that company's office located nearest the mining site, and shall be approved by the ~~state geologist~~ director and open to inspection by the ~~state geologist~~ director and the industrial commission at all times. ~~In the event of disagreement as to what constitutes proprietary information, it shall be resolved by the company, the state geologist, and the industrial commission.~~ All portions of the mining plan which provide for the protection of

natural resources, other than the mineral being mined, and for the reclamation of the surface shall be filed in the office of the state geologist.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-30 is amended as follows:

43-02-02-30. Report of production. The operator of each and every well or mine shall, on or before the tenth day of the second month ~~following~~ succeeding the month in which production occurs, file with the state geologist ~~a sworn statement showing~~ the amount of production made by each such well or mine ~~during the month~~ upon form 5-sm or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included. Wells for which reports of production are not received by the close of business on the tenth day of the month may be shut in for a period not to exceed thirty days. The director shall notify, by certified mail, the operator and authorized transporter of the shut-in period for such wells. The term "mine" includes ~~the case where~~ multiple closely spaced wells are used to mine a deposit, and in such case production will be reported from the mine rather than from each individual well. "Multiple closely spaced wells" means where more than one well is used to produce subsurface minerals in each eighty-acre [32.37-hectare] subdivision of the mine.

Production data submitted to the state geologist shall be kept confidential for a period of one year when so requested by the operator. Such period may be further extended upon approval by the commission.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-31 is amended as follows:

43-02-02-31. Report of water injected. The operator of each and every injection well shall, on or before the tenth day of the second month ~~following~~ succeeding the month in which injection occurs, file with the state geologist ~~a sworn statement showing~~ the amount of liquid injected, the composition of the liquid, and the source thereof upon approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-32 is amended as follows:

43-02-02-32. Pollution by saltwater. All saltwater liquids or brines produced shall be processed, stored, and disposed of without pollution of freshwater supplies. ~~Disposal shall be in accordance with an order of the commission, after hearing.~~ At no time shall saltwater liquids or brines be allowed to flow over the surface of the land or into streams. ~~Pits shall not be constructed within natural surface drainage channels and, before any saltwater liquid or brine is placed in the pit, any pit which is bottomed in permeable materials, such as sand or gravel, shall be lined with an impermeable material. The commission shall have the authority to condemn any pit which does not properly impound such water.~~

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-33 is amended as follows:

43-02-02-33. Investigative powers. Upon receipt of a written complaint from any ~~landowner~~ surface owner or lessee, royalty owner, mineral owner, local, state, or federal official, ~~in the official's official capacity, or any member of the state legislative assembly, in the legislator's official representative capacity, or any other interested party,~~ alleging ~~drilling or production operations which are in~~ a violation of the subsurface mineral conservation statutes or any rule, regulation, or order of the commission, the ~~state geologist~~ director shall ~~immediately cause an investigation of such complaint to be made~~ within a reasonable time reply in writing to the person who submitted the complaint stating that an investigation of such complaint will be made or the reason such investigation will not be made. The person who submitted the complaint may appeal the decision of the director to the commission. The ~~state geologist~~ director may also conduct such investigations on the ~~geologist's~~ director's own initiative or at the direction of the commission. If, after such investigation, the ~~state geologist~~ director affirms that cause for complaint exists, the ~~state geologist~~ director shall ~~cause written notice of~~ report the results of the investigation to ~~be mailed to the operator of the drilling or production operation and shall forthwith notify the commission, in writing, of the investigation~~ the person who submitted the complaint, if any, to the person who was the subject of the complaint and to the commission. The commission shall institute such legal proceedings as, in its discretion, it believes necessary to enjoin further ~~activities resulting in the violation complained of~~ violations.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-34 is amended as follows:

43-02-02-34. Additional information may be required. This chapter shall not be taken or construed to limit or restrict the authority of the ~~industrial~~ commission to require the furnishing

of such additional reports, data, or other information relative to production or products ~~in North Dakota~~ as may appear to be necessary or desirable, either generally or specifically, for the prevention of waste, protection of correlative rights, and the conservation of natural resources ~~of North Dakota~~.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-35 is amended as follows:

43-02-02-35. Books and records to be kept to substantiate reports. All producers within North Dakota shall make and keep appropriate books and records for a period not less than ~~five~~ six years, covering their operations in North Dakota from which they may be able to make and substantiate the reports required by this chapter.

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

Section 43-02-02-36 is repealed:

43-02-02-36. Public hearing. ~~Except as provided for herein, before any rule, regulation, or order shall be made, including revocation, change, renewal, or extension thereof, a public hearing shall be held at the time, place, and manner as may be prescribed by the commission~~ Repealed effective _____.

General Authority: ~~NDCC 38-12-04~~
Law Implemented: ~~NDCC 38-12-04~~

Section 43-02-02-37 is repealed:

43-02-02-37. Institute proceedings. ~~The commission, upon its own motion, and the attorney general, on behalf of the state, and any operator, producer, taker, or other person interested in any common source of supply of subsurface minerals may institute proceedings. The commission shall have jurisdiction to make any and all orders, rules, and regulations authorized by laws of this state~~ Repealed effective _____.

General Authority: ~~NDCC 38-12-04~~
Law Implemented: ~~NDCC 38-12-04~~

43-02-02-38. Application for hearing. In any proceeding instituted upon application, the application shall be signed by the applicant or by the applicant's attorney. An application shall state (1) the name and general description of the common source or sources of supply affected by

the order, rule, or regulation sought, if any, unless same is intended to apply to and affect the entire state, in which event the application shall so state, and such statement shall constitute sufficient description; and (2) briefly the general nature of the order, rule, or regulation sought in the proceedings.

History: Amended effective August 1, 1986.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

Section 43-02-02-39 is amended as follows:

43-02-02-39. Filing application for hearing. When an application is filed, it shall be set for hearing before the commission at such time as will permit ~~ten~~ fifteen days' notice thereof to be given, as provided in section 43-02-02-40.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

Section 43-02-02-40 is amended as follows:

43-02-02-40. ~~Notice of hearings~~ Hearings – complaint proceedings – emergency proceedings – other proceedings. ~~Upon the institution of a proceeding by application, the commission shall give at least ten days' (except in emergency) notice of the time and place of hearing thereon by one publication of such notice in newspapers of general circulation published at Bismarck, North Dakota, and in the county where the land affected or some part thereof is situated, unless in some particular proceeding a longer period of time or a different method of publication is required by law, in which event such period of time and method of publication shall prevail. The notice shall issue in the name of the state and shall be signed by the chairman or secretary of the commission, and shall conform to the other requirements provided by law. In case an emergency is found to exist by the commission which in its judgment requires for the making of a rule, regulation, or order without first having a hearing, such emergency rule, regulation, or order shall have the same validity as if a hearing with respect to the same had been held after notice. The emergency rule, regulation, or order permitted by this section shall remain in force no longer than fifteen days from its effective date, and in any event, it shall expire when the rule, regulation, or order made after due notice and hearing with respect to the subject matter of such emergency rule, regulation, or order becomes effective.~~

1. Except as more specifically provided in North Dakota Century Code section 38-12-04, the rules of procedure established in subsection one of North Dakota Century Code section 28-32-21 apply to proceedings involving a complaint and a specific-named respondent.

2. For proceedings that do not involve a complaint and a specific-named respondent the

commission shall give at least fifteen days' notice (except in emergency) of the time and place of hearing thereon by one publication of such notice in a newspaper of general circulation in Bismarck, North Dakota, and in a newspaper of general circulation in the county where the land affected or some part thereof is situated, unless in some particular proceeding a longer period of time or a different method of publication is required by law, in which event such period of time and method of publication shall prevail. The notice shall issue in the name of the commission and shall conform to the other requirements provided by law.

3. In case an emergency is found to exist by the commission which in its judgment requires the making of a rule or order without first having a hearing, the emergency rule or order shall have the same validity as if a hearing with respect to the same had been held after notice. The emergency rule or order permitted by this section shall remain in force no longer than fifteen days from its effective date, and in any event, it shall expire when the rule or order made after due notice and hearing with respect to the subject matter of such emergency rule or order becomes effective.

4. Any person moving for a continuance of a hearing, and who is granted a continuance, shall submit a twenty-five dollar fee to the commission to pay the cost of republication of notice of the hearing.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

Section 43-02-02-40.1 is created as follows:

43-02-02-40.1. Investigatory hearings. The commission may hold investigatory hearings upon the institution of a proceeding by application or by motion of the commission. Notice of the hearing must be served upon all parties personally or by certified mail at least five days before the hearing.

History:
General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

Section 43-02-02-40.2 is created as follows:

43-02-02-40.2. Official record. The evidence in each case heard by the commission, unless specifically excluded by the hearing officer, includes the certified directional surveys, and all subsurface mineral, oil, water, and gas production records on file with the commission.

Any interested party may submit written comments on or objections to the application prior to the hearing date. Such submissions must be received no later than five p.m. on the last business day prior to the hearing date and may be part of the record in the case if allowed by the hearing examiner.

History:
General Authority: NDCC 28-32-06
Law Implemented: NDCC 28-32-06

Section 43-02-02-40.3 is created as follows:

43-02-02-40.3. Petitions for review of recommended order and oral arguments prohibited. Neither petitions for review of a recommended order nor oral arguments following issuance of a recommended order and pending issuance of a final order are allowed.

History:
General Authority: NDCC 28-32-13
Law Implemented: NDCC 28-32-13

Section 43-02-02-40.4 is created as follows:

43-02-02-40.4. Notice of order by mail. The commission may give notice of an order by mailing the order, and findings and conclusions upon which it is based, to all parties by regular mail provided it files an affidavit of service by mail indicating upon whom the order was served.

History:
General Authority: NDCC 28-32-13
Law Implemented: NDCC 28-32-13

Section 43-02-02-40.5 is created as follows:

43-02-02-40.5. Service and filing. All pleadings, notices, written motions, requests, petitions, briefs, and correspondence to the commission or commission employee from a party (or vice versa) relating to a proceeding after its commencement, must be filed with the director and entered into the commission's official record of the procedure provided the record is open at the time of receipt. All parties shall receive copies upon request of any or all of the evidence in the record of the proceedings. The commission may charge for the actual cost of providing copies of evidence in the record. Unless otherwise provided by law, filing shall be complete when the material is entered into the record of the proceeding.

History:
General Authority: NDCC 28-32-13
Law Implemented: NDCC 28-32-13

Section 43-02-02-41 is amended as follows:

43-02-02-41. Application for rehearing. Within thirty days after the entry of any order or decision of the commission or the ~~state geologist~~ director, any person affected thereby may file with the commission an application for rehearing in respect of any matter determined by the order or decision, setting forth the ~~respect in which~~ reasons the order or decision is believed to be erroneous. The commission shall grant or refuse any such application in whole or in part within fifteen days after it is filed. In the event the rehearing is granted, the commission may enter such new order or decision after rehearing as may be required under the circumstances.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

43-02-02-42. Burden of proof. Repealed effective August 1, 1986.

Section 43-02-02-43 was amended as follows:

43-02-02-43. Designation of examiners. The commission may by motion designate and appoint qualified individuals to serve as examiners. The commission may refer any matter or proceeding to any legally designated and appointed examiner ~~for hearing in accordance with this chapter~~ or examiners.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

43-02-02-44. Matters to be heard by examiner. Repealed effective August 1, 1986.

Section 43-02-02-45 is amended as follows:

43-02-02-45. Powers and duties of examiner. The commission may, by motion, limit the powers and duties of ~~the~~ any examiner in any particular case to such issues or to the performance of such acts as the commission deems expedient~~. However,~~ ; however, subject only to such limitation as may be ordered by the commission, the examiner or examiners to whom any matter or proceeding is referred under this chapter shall have full authority to hold hearings on such matter or proceeding in accordance with and pursuant to this chapter. The examiner shall have the power to regulate all proceedings before the examiner and to perform all acts and take all measures necessary or proper for the efficient and orderly conduct of ~~the~~ such hearing, including ruling on prehearing motions, the swearing of witnesses, ~~and~~ receiving of testimony and exhibits offered in evidence, subject to such objections as may be imposed, and shall cause a complete record of the proceedings to be made and retained.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-04

Law Implemented: NDCC 38-12-04

43-02-02-46. Matters heard by commission. Repealed effective August 1, 1986.

Section 43-02-02-47 is repealed:

43-02-02-47. Examiner shall be disinterested umpire. ~~An examiner conducting a hearing under this chapter shall conduct oneself as a disinterested umpire~~ Repealed effective ___.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

43-02-02-48. Report of examiner. Upon the conclusion of any hearing before an examiner, the examiner shall promptly consider the proceedings in such hearings, and based upon the record of such hearing, the examiner shall prepare a report and recommendations for the disposition of the matter or proceeding by the commission. The report and recommendations shall either be accompanied by a proposed order or shall be in the form of a proposed order, and shall be submitted to the commission.

History: Amended effective August 1, 1986.
General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

43-02-02-49. Commission order from examiner hearing. After receipt of the report and recommendation of the examiner, the commission shall enter its order disposing of the matter or proceeding.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

43-02-02-50. Hearing de novo before commission. Repealed effective August 1, 1986.

Section 43-02-02-51 is created as follows:

43-02-02-51. Prehearing motion practice. In a matter pending before the commission, all prehearing motions must be served by the moving party upon all parties affected by the motion. Service must be upon a party unless a party is represented by an attorney, in which case service must be upon the attorney. Service must be made by delivering a copy of the motion and all supporting papers in conformance with one of the means of service provided for in rule 5(b) of the North Dakota Rules of Civil Procedure. Proof of service must be made as provided in rule 4 of the North Dakota

Rules of Civil Procedure or by the certificate of an attorney showing that service has been made. Proof of service must accompany the filing of a motion. Any motion filed without proof of service is not properly before the commission.

General Authority: NDCC 38-12-04
Law Implemented: NDCC 38-12-04

PROPOSED 2013 RULE CHANGES

SURFACE MINING (NON COAL)
CHAPTER 43-02-02.3

43-02-02.3-01. Definitions. The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-12, except:

1. "Adjacent area" means land located outside permit area where air, surface or ground water, fish, wildlife, vegetation, or other resources may be adversely impacted by surface mining and reclamation operations.

2. "Certified or registered mail" means any form of service by the United States postal service, federal express, Pitney Bowes, and any other commercial, nationwide delivery service that provides the mailer with a document showing the date of delivery or refusal to accept delivery.

3. "Coal" means a dark-colored compact and earthy organic rock with less than forty percent inorganic components, based on dry material, formed by the accumulation and decomposition of plant material. The term includes consolidated lignite coal, in both oxidized and nonoxidized forms, having less than eight thousand three hundred British thermal units per pound [453.59 grams], moist and mineral matter free, whether or not the material is enriched in a radioactive materials

4. "Department" means the department of mineral resources of the industrial commission.

5. "Deposit" means an underground concentration containing a common accumulation of subsurface minerals.

6. "Director" means the director of the department of mineral resources of the industrial commission.

7. "Disturbed area" means the surface area disturbed by mining and reclamation operations. Areas are classified as "disturbed" until reclamation is complete and the performance bond or other assurance of performance required by North Dakota Century Code chapter 38-12 and this article is released.

8. "Diversion" means a channel, embankment, or other man-made structure constructed to divert water from one area to another.

9. "Geomembrane" means a synthetic, impermeable membrane used in contact with soil or other materials in geotechnical and civil engineering applications to contain liquids.

10. “Impoundment” means a closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water, sediment, or waste.

11. “Large Mining Operations” means mining operations which have a disturbed area of more than ten acres at any time.

12. "Operator" means any person or persons who, duly authorized, is in charge of the development of a lease or the operation of a producing property.

13. “Post-mining land use” means a beneficial use or multiple uses which will be established on a permit area after completion of a mining project.

14. “Small mining operations” means mining operations which have a disturbed area of ten acres or less at any time.

15. “Surface mining” means mining conducted on the land surface including open pit, strip, or auger mining; dredging; quarrying; reworking abandoned dumps and tailing and activities related thereto.

16. “Toxic-forming materials” means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or uses of water.

17. "Waste" means (a) physical waste, (b) operations which cause or tend to cause unnecessary or excessive surface loss, or (c) operations that do not recover all of the mineral being mined that is technically and economically possible.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-02. Scope of chapter. This chapter contains general rules of statewide application which have been adopted by the industrial commission to conserve the natural resources of North Dakota, to prevent waste, and to provide for operation in a manner as to protect correlative rights of all owners of subsurface minerals. Special rules and orders have been and will be issued when required and shall prevail as against general rules, regulations, and orders if in conflict therewith. However, wherever this chapter does not conflict with special rules heretofore or hereafter adopted, this chapter will apply in each case. The commission may grant exceptions to this chapter, after due notice and hearing, when such exceptions will result in the prevention of waste and operation in a manner to protect correlative rights.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-03. Uranium surface mining. Surface mining activities targeting uranium ore from noncoal source rock are regulated under this chapter. Surface mining activities targeting uranium ore from uraniferous lignite deposits are not subject to this section and shall be conducted in accordance with North Dakota Century Code chapter 38-14.1 and North Dakota Administrative Code title 69-05.2 and under the regulatory authority of the Public Service Commission.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-04. Radioactive material. The handling, storage, transportation, and disposal of radioactive material shall be in accordance with United States nuclear regulatory commission requirements and those of the state department of health as set forth in North Dakota Century Code chapters 23-20.1, 23-20.2, and 23-20.5 and in North Dakota Administrative Code titles 33-10, 22-24, and 23-25.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-05. Bond. Before any person receives a permit to explore for or produce subsurface minerals, the person shall submit to the commission and obtain its approval of a surety bond or cash bond. An alternate form of security may be approved by the commission after notice and hearing, as provided by law. The operator of a well or facility shall be the principal on the bond covering the well or facility. Each such surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

1. Bond amounts for surface mining facilities. For surface mining facilities, the amount of the bond will be five thousand dollars per acre [.40 hectare]. The applicant may file either the entire bond for the permit term or an incremental bond schedule and bond required for the first scheduled increment. Increments must be of sufficient size and configuration to provide for efficient reclamation operations.

   When the operator elects to increment the amount of the bond, the operator shall:

   a. Furnish a legal description of each incremental area.

   b. Furnish a schedule when each increment will require bond.

   c. Furnish the estimated costs for the commission to complete the reclamation plan for the initial increment.

d. Provide the estimated cost to complete the reclamation plan for the next increment at least ninety days prior to the expected starting date of mining.

2. Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-12, and all administrative rules and orders of the commission, and continues until any of the following occurs:

a. The testholes or wells have been satisfactorily plugged which shall include practical reclamation of the well site and appurtenances thereto, and all logs, plugging records, and other pertinent data required by statute or rules and orders of the commission are filed and approved.

b. The mined lands or lands disturbed by any method of exploration or production of subsurface minerals have been restored and approved by the director.

c. The liability on the bond has been transferred to another bond and such transfer approved by the commission.

3. Transfer of property under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in a well, extraction facility, or surface mining facility, such as producers not ready for plugging, and the principal desires to be released from the bond covering the well or facility, the principal must proceed as follows:

a. The principal must notify the director in writing of all proposed transfers of property at least thirty days before the closing date of the transfer. The director may, for good cause, waive this requirement.

The principal shall submit to the commission a form 15-sm reciting that a certain property, or properties, describing each by quarter-quarter, section, township, and range, is to be transferred for the purpose of ownership or operation to a certain transferee, naming such transferee. The date of assignment or transfer must be stated and the form signed by a party duly authorized to sign on behalf of the principal.

On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and accepts such transfer and the responsibility of such property under the transferee's one-well bond, surface mining facility bond, or extraction facility bond". Such acceptance must be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

b. When the commission has approved the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of well plugging and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an

officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if the well is in violation of a statute, rule, or order.

c. The transferee (new operator) of any extraction facility, surface mining facility, or injection well shall be responsible for the plugging and site reclamation of any such property. For that purpose, the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such well. The original or prior bond shall not be released as to the plugging and reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such well. All liability on bonds shall continue until the plugging and site reclamation of such property is completed and approved.

4. Bond Termination. The commission shall, in writing, advise the principal and any sureties on any bond as to whether the plugging and reclamation is approved. If approved, liability under such bond may be formally terminated upon receipt of a written request by the principal. The request must be signed by an officer of the principal or a person authorized to sign for the principal.

5. Director's authority. The director is vested with the power to act for the commission as to all matters within this section, except requests for alternative forms of security, which may only be approved by the commission.

6. The director shall periodically review the amount of bond. The director may require adjustments to the amount of bond to reflect inflationary increases or increases in the anticipated costs of reclamation.

The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-06. Designation and responsibilities of operator. The principal on the bond covering a surface mining facility is the operator of the mine. The operator is responsible for compliance with all laws relating to the mine site. A dispute over designation of the operator of a well may be addressed by the commission. In doing so, the factors the commission may consider include those set forth in subsection 1 of section 43-02-02.3-21.

History:

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-07. Permit required. A permit is required prior to commencement of mining.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-08. Submission of permit application. Any person who conducts or expects to conduct mining operations shall file with the department a complete permit application and all required materials. The applicant shall file with the department proof that it submitted a copy of the application to the county recorder in the county in which the proposed permit area is located.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-09. Summary document. The permit application must contain a summary document that describes the main elements of the operation and identifies the major environmental issues involved.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-10. Small mining operation permit requirements. Permit applications for small, non-coal, surface and subsurface mining operations shall address the following:

1. Identification of interests to include:

    a. The name and address of the operator responsible for the mining operations and reclamation of the site.

    b. The name and address of the surface landowners and mineral owners of all land to be affected by the mining operation.

    c. The mine name and the mine safety and health administration identification number.

d. Documents evidencing the operator's right to enter the proposed permit area and conduct mining and reclamation, including a showing that the surface owner will be compensated for loss of agricultural production.

2. Project location description and maps plotted at a scale to accurately identify locational landmarks and operational details, to include:

a. A legal description of the proposed permit area.

b. The general location as shown on a topographic map which gives the location of the following: perennial, intermittent and ephemeral streams; springs and seeps; wetlands, riparian areas, lakes and other water bodies; residences, businesses and other structures; existing and proposed roads; other access routes; support facilities, cemeteries; burial grounds; cultural resources listed on the National Register of Historic Places; electrical transmission and communication lines; pipelines; and oil, gas and water wells on and within a half mile of the permit area.

c. An operations map which identifies:

(1) The area to be disturbed;

(2) The location of any existing or proposed operations including access roads, drill holes, trenches, pits, cuts, or other planned small mining activities; and

(3) Any previous adjacent disturbance for with the operator is not responsible.

3. Operation plan. A brief narrative description of the proposed mining operation. The description must include the following information:

a. A general description of the minerals sought, the methods of extraction, and any processing to be conducted on site. Any chemicals to be used on site must be identified.

b. An estimate of depth to groundwater and total dissolved solids concentration.

c. Estimated width and length of any new roads to be constructed.

d. An estimate of the total number of surface acres to be disturbed by the mining operation.

e. A discussion of plans for saving and replacing topsoil and subsoil from the areas to be affected.

f. The amount of material (including mineral deposit, overburden, waste rock, or core hole material) to be extracted, moved, or proposed to be moved, relating to the mining operation.

g. The locations proposed to be used for stockpiling topsoil, subsoil, overburden, and any other materials, including the mineral to be mined.

h. A description of the plans for any structures that will be used for managing runoff from the disturbed areas and a discussion of other sediment control measures that will be used.

4. Reclamation plan. A reclamation plan must be submitted with the permit application to provide a general description of how the land surface of permit area will be restored as nearly as possible to its original condition following closure. This must include a post-mine topographic map or post-mine cross-sections showing how the disturbed area will conform to the adjacent undisturbed lands. The reclamation plan must discuss the post-mining land uses for the disturbed lands and include plans for replacing any pre-mine water supplies that are adversely affected by mining operations. A detailed reclamation plan may be submitted at the time of application or as a permit modification to the general reclamation plan prior to commencing reclamation operations.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-11. Large mining operation permit requirements. In addition to informational requirements set forth in subsections 1 through 3 of 43-02-02.3-10, permit applications for large, non-coal, surface and subsurface mining operations and extraction facilities shall address the following:

1. Identification of interests. In addition to the information requirements set forth in subsection 1 of 43-02-02.3-10, the applicant will provide the following information:

a. A listing of all parties, including addresses, which have an ownership and controlling interest in the operation. Alternatively, the applicant may submit the applicant's most recent 10k form required by the United States Securities and Exchange Commission.

b. A statement of all current or previous mining operations within the United States held during the five years prior to application owned, operated, or controlled by any person identified in subdivision a of subsection 1 and the names and addresses of regulatory agencies with jurisdiction over the environmental aspects of those operations that could provide a compliance history for the operations.

c. The name and address of a designated agent for the service of notices and orders from the director.

d. A listing of all federal and state permits required for the operation.

2. A surface facilities map which identifies the locations of: buildings; stationary mining/processing equipment; roads; underground utilities; power lines; proposed drainage control structures; the location of topsoil and subsoil storage areas; tailings or processed waste facilities; disposal areas for overburden; solid and liquid wastes and wastewater discharge treatment and containment facilities.

3. Sampling and Analysis Plan.

a. The applicant shall submit four copies of a proposed sampling and anaylsis plan (SAP) to the director for review prior to baseline data collection. The proposed SAP should contain, at a minimum, the following information for each relevant resource:

(1) sampling objectives;

(2) a list of the data to be collected;

(3) methods of collection;

(4) General water chemistry and the parameters to be analyzed for;

(5) maps indicating the proposed sampling locations;

(6) sampling frequency; and

(7) laboratory and field quality assurance plans.

b. The director shall distribute the proposed SAP to other agencies as determined by the director. The agencies will have 30 days from receipt of the proposed SAP to submit written comments to the director. Any written comments received within 30 days shall be provided to the applicant. The director shall also provide written comments and recommendations to the applicant on the adequacy of the SAP.

c. The applicant may request a conference with the director to discuss the SAP.

4. Baseline data. Descriptions, maps, drawings, or photographs shall be included as required for determination of existing conditions, operations, reclamation and postmining use. Baseline data shall include, as applicable:

a. A description of the climatological factors representative of the permit area including precipitation, prevailing winds and temperature.

b. A description of the thickness and nature of the topsoil and subsoil within the proposed permit area. A soil survey and soil analyses conducted in accordance with standard methods acceptable to the director will be required to show variations in topsoil and subsoil depth and suitability. If a published soil survey is not available, a new survey must be prepared by a soil classifier as defined by North Dakota Century Code 43-36-01.

c. A map which delineates existing vegetation types and a description, including cover, density, and productivity of the plant communities within the proposed permit area. Included in this description shall be the results of an inventory conducted for any sensitive, threatened or endangered plant species within the permit area.

d. Wildlife information shall be obtained for the permit area and adjacent area. Where species may be impacted beyond these areas, the information shall include, to the extent practicable, the area of potential impact.

e. A description of the ore body in the proposed permit area, including geologic plans and cross-sections depicting the nature and depth of overburden, mineralized zone or ore body, aquifers and springs. A description of the potential for geochemical alteration of overburden, ore body and other materials present within the permit area. Detailed analyses may be required if the substrata is suspected to contain substances that are likely to create acid drainage or might degrade surface water or groundwater or hinder reclamation.

f. Surface and groundwater information including:

(1) A map indicating the location of surface waters and the location and size of watersheds in and adjacent to the proposed permit area. The map shall depict all watercourses, lakes, natural and artificial water bodies, springs, and riparian and wetland areas. Streams shall be classified as ephemeral, intermittent or perennial. The map shall identify all watercourses, lakes, springs, and riparian and wetland areas into which surface or pit drainage will be discharged or may possibly be expected to reach;

(2) A description of surface drainage systems sufficient to identify the seasonal variation in surface water quantity and quality within the proposed permit and affected areas to the extent possible;

(3) Lithology and thickness of each geologic unit below the site indicating which units are water bearing, cross sections and potentiometric maps indicating the locations of wells and the groundwater flow direction in the vicinity of the site, and references or sources for this information;

(4) A description of the aquifer characteristics including total dissolved solids concentration, maximum and minimum depths to groundwater, direction of flow and gradients, transmissivity and storativity, and a general description of groundwater quality, and references or sources for this information; and

(5) The location of all water wells and developed springs within and extending at least one mile from the proposed permit area. Water quality and quantity information for each well and spring shall be provided in the format required by the director.

g. A description and delineation on topographic maps of any prior mining operations which may have affected the permit area including, if known, the type of mining and processing method and a list of any processing chemicals or reagents used.

h. A list and accompanying map indicating all sites on or eligible for listing on the National Register of Historic Places and known cemeteries and human burials within the proposed permit area. Included with this list and map shall be a description of the effects the proposed mining operations may have on these sites and any proposed mitigation measures.

i. A description of the present and historic land use of the permit area, the general patterns of land use in the surrounding areas, and a narrative of land capability and productivity based upon Natural Resource Conservation Service land use, capability classes or a similar classification.

5. Operation plan. In addition to the information requested in subsection 3 of 43-02-02.3-10, applicant will provide the following information as applicable:

a. The identification of any toxic-forming or acid-forming materials present or to be left on the site as a result of mining or mineral processing.

b. In addition to the estimated total acreages proposed to be disturbed, provide an estimate of acreage to be either disturbed or reclaimed annually during the permit term.

c. A description of the plan for saving, protecting and replacing the topsoil and subsoil.

d. Maps and plans indicating the location, size and capacities for the mine facilities including:

(1) Leach pads, heaps, ore dumps and stockpiles;

(2) Impoundments;

(3) Ponds;

(4) Diversions;

(5) Disposal systems;

(6) Pits;

(7) Tailings disposal facilities;

(8) Mills;

(9) Water treatment facilities;

(10) Storage areas for equipment, vehicles, fuel, chemicals and solutions;

(11) Topsoil and subsoil stockpiles;

(12) Waste rock dumps; and

(13) Other facilities or structures.

e. A contingency plan to mitigate impacts to wildlife when there has been an emergency or accidental discharge of toxic substances that may impact wildlife.

f. A description of measures which will be undertaken to control sedimentation from the permit area and a plan for the monitoring of non-point source sediment pollution from the disturbed area.

6. Impact Assessment: The operator shall provide a general narrative description identifying potential surface and subsurface impacts. This description will include, at a minimum:

a. Projected impacts to surface and groundwater systems;

b. Potential impacts to state and federal threatened and endangered species or their critical habitats;

c. Projected impacts of the mining operation on existing soil resources;

d. Projected impacts of mining operations on slope stability, erosion control, air quality, and public health and safety; and

e. Actions which are proposed to mitigate any of the above referenced impacts.

7. Reclamation Plan. Each application shall include a reclamation plan, including maps or drawings as necessary, consisting of a narrative description of the proposed reclamation including:

   a. A statement of the current land use and the proposed post-mining land use for the disturbed area, including a written preference statement from the surface owner for the proposed post-mine land use.

   b. A map at an appropriate scale and an approximate schedule indicating the reclamation activities to take place on disturbed areas of the mine site including the number of acres to be reclaimed. The operator will be required to follow the sequence described unless modified or revised.

   c. A description of the manner and the extent to which roads, highwalls, slopes, impoundments, drainages, pits and ponds, piles, drill holes, and similar structures will be reclaimed to the approximate original contour.

   d. A detailed description of any surface facilities to be left as part of the post-mining land use, including buildings, utilities, roads, pads, ponds, pits and surface equipment where the post-mine land use has been zoned as industrial or commercial land by the county.

   e. A description of the treatment, location and disposition of any toxic-forming or acid-forming materials generated and left on site, including a map showing the location of such materials upon the completion of reclamation.

   f. Plans for replacing the topsoil and subsoil that is removed and saved.

   g. A planting program as best calculated to revegetate the disturbed area.

      (1) Plans shall include, at a minimum, soil stabilization procedures, seed bed preparation, seed mixtures and rates, and timing of seeding.

      (2) Where there is no original protective vegetative cover, an alternative practical procedure must be proposed to minimize or control erosion or siltation.

   h. A topographic map of the anticipated surface configuration of the permit area upon completion of reclamation operations. The map shall be at appropriate contour intervals and scale.

   i. A statement that the operator will conduct reclamation as required by these rules.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-12. Review for completeness. The department will determine whether the application is complete. The department will notify the applicant in writing, within thirty days after the application is submitted, whether the application is complete or specify deficiencies that must be corrected in order to complete the application. If the application is substantially deficient, it will be rejected. The department will notify the applicant when the application is considered complete.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-13. Review period.

1. The department will have one hundred eighty days after the filing date to approve or disapprove the application.

2. The department may extend the review period not to exceed an additional one hundred eight days if:

   a. Additional time is needed to correct application deficiencies.

   b. Significant changes are submitted that in the department's judgment require additional time to review. The department may require additional public notification of the amended application.

   c. The department requires additional time to conduct an informal conference or a formal hearing or complete the decision.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-14. Permit application fees.

1. A fee of one hundred dollars must accompany the application for a small mining facility permit.

2. A fee of five hundred dollars plus ten dollars per acre must accompany the application for a large mining facility permit.

History:
General Authority: NDCC 38-12-03

Law Implemented: NDCC 38-12-03

43-02-02.3-15. Information added after filing date. Additional information submitted to the department by the applicant to supplement, correct, amend, or clarify an application following the filing date must also be submitted with the county recorder in the county or counties in which the proposed permit area is located. The additional information must be submitted at least thirty days before the hearing date. The applicant must transmit proof of submission with the county recorder to the department. The department shall give notice to the public of the additional information at least fifteen days before the scheduled hearing date.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-16. Notice to agencies. Within the first ten days of the review period of a permit application, the department shall send copies of the application to the department of agriculture, the state department of health, and to the water commission.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-17. Notice of hearing. Except in the case of an emergency, the commission will give thirty days' notice to the general public of the time and place of the hearing on the application by one publication in a newspaper of general circulation in the state capital and in a newspaper of general circulation in the country where the land affected, or some part, is situated. Immediately upon receiving notice of the hearing date, the permit applicant shall give notice by certified mail to surface and subsurface owners within the permit application area and to the county recorder in the county or counties in which the proposed permit area is located.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-18. Permit approval or denial. Within ninety days of the hearing, or a reasonable time thereafter, the department will notify the applicant of the commission's decision as to whether the permit is approved or denied.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-19. Permit term.

1. The permit will remain in effect as long as active mining continues at a mine site and the operator remains in full compliance with all permit conditions.

2. A permit shall be reviewed and may be required to be modified or revised for any of the following:

   a. Additional applicable requirements under North Dakota Century Code chapters 38-12 and 38-12.1 and North Dakota Administrative Code article 43-02; or

   b. The director determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms or conditions of the permit.

3. If the permit area contains property owned by the federal or state government, the expiration or termination of the government's authorization for the operator to conduct mining operations on the property automatically suspends the operator's authority to continue mining operations on the property, although not necessarily reclamation operations, by the permit issued under chapter 43-02-02.3.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-20. Permit modifications or revision. An application for a permit modification or revision shall be in a format acceptable to the director and shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present. A permit modification or revision will not be granted unless the director determines that the proposed modification or revision meets the requirements of this rule.

1. A permit modification or revision for a mining operation is required for:

   a. Each new discrete processing, leaching, excavation, storage or stockpile unit located within the permit area and not identified in the permit;

   b. Each expansion of such a unit identified in the permit that exceeds the design limits specified in the permit; and

   c. Any change in the approved reclamation plan.

2. The operator may request additional acreage [hectarage] if the department considers the addition an incidental boundary change to the original permit area.

3. The operator may file an application to withdraw any lands previously approved as a part of a permit area, except lands on which operations have commenced. The operator shall demonstrate and certify that the proposed acreage [hectarage] to be deleted has not been affected by mining activities. Applications to delete undisturbed acreage [hectarage] are not subject to the public notice, procedural, and approval or denial standards of North Dakota Century Code chapter 38-12.

4. Revisions are modifications that require public notice and an opportunity for public hearing pursuant to this rule. The director shall review each request for a permit modification to determine whether it must be processed as a revision.

   a. The director shall consider the following factors and their level of impact to determine whether a permit modification would have a significant environmental impact requiring a revision:

      (1) Whether the proposed change would authorize an expansion of design limits beyond that currently authorized by the permit that:

         (a) Would be located in or is expected to have a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers, other water bodies or riparian areas.

         (b) Is expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/l.

         (c) Is expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.

         (d) Would be located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas determined by the Game and Fish Department likely to result in an adverse impact on an endangered species.

         (e) Would adversely impact archeological and historical areas.

         (f) Would be located in a known cemetery or other burial ground.

         (g) Would be located in an area designated as a Federal Wilderness Area, Wilderness Study Area, Area of Critical Environmental Concern, or an area within the national Wild and Scenic River System.

      (2) Whether the proposed change would result in a significant increase in the required amount of financial assurance as determined by the director; or

(3) Whether the proposed change would significantly depart from the nature or scale of the permit.

b. An application for a permit modification or revision shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present.

5. The following actions do not require permit modifications or revisions:

a. The construction, relocation or modification of roads within the disturbed area that does not change the reclamation plan;

b. Placement or movement of support buildings, equipment areas, maintenance shops, monitoring facilities, wells, power lines, power poles, substations, and communications facilities within the disturbed area that does not change the reclamation plan; and

c. The movement of tanks, pipelines, utilities, and portable units.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.3-21. Revocation and limitation of permits.

1. After notice and hearing, the commission may revoke a mining permit or limit its duration. The commission may act upon its own motion or upon the application of an owner in the permit area. In deciding whether to revoke or limit a permit, the factors that the commission may consider include:

a. The technical ability of the operator and other owners to conduct mining operations.

b. The experience of the operator and other owners in similar mining operations.

c. Contractual obligations such as an expiring lease.

d. The amount of ownership the operator and other owners hold in the lease. If the operator is the majority owner or if its interest when combined with that of its supporters is a majority of the ownership, it is presumed that the operator should retain the permit. This presumption, even if not rebutted, does not prohibit the commission from limiting the duration of the permit. However, if the amount of the interest owned by the owner seeking revocation or limitation and its supporters are a majority of the ownership, the commission will presume that the permit should be revoked.

2. The commission may suspend a permit that is the subject of a revocation or limitation proceeding. A permit will not be suspended or revoked after operations have commenced.

3. If the commission revokes a permit upon the application of an owner and issues a permit to that owner or to another owner who supported revocation, the commission may limit the duration of such permit. The commission may also, if the parties fail to agree, order the owner acquiring the permit to pay reasonable costs incurred by the former operator and the conditions under which payment is to be made. The costs for which reimbursement may be ordered may include those involving survey of the well site, title search of surface and mineral title, and preparation of an opinion of mineral ownership.

4. If the commission declines to revoke a permit or limit the time within which it must be exercised, it may include a term in its order restricting the ability of the operator to renew the permit or to acquire another permit within the same spacing or drilling unit.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-22. Operational practices. The operator shall conform to the following practices:

1. The mining and reclamation operation shall be designed and operated using the most appropriate technology and best management practices.

2. Public safety and welfare. The operator shall minimize hazards to the public safety and welfare during operations. Methods to minimize hazards shall include but not be limited to:

   a. The proper disposal of trash, scrap metal and wood, and extraneous debris;

   b. The plugging or capping of drill, core, or other exploratory holes pursuant to section 43-02-02-24;

   c. The posting of appropriate warning signs in locations where public access to operations is readily available; and

   d. The construction of berms, fences, or barriers above highwalls or other excavations.

3. Drainages. If natural channels are to be affected by the mining operation, then the operator shall take appropriate measures to avoid or minimize environmental damage.

4. Erosion control. Operations shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.

5. Toxic-forming materials. All toxic-forming or potentially deleterious material shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled.

6. Soils. All available topsoil and subsoil shall be removed, stored and stabilized The salvaged topsoil and subsoil must be respread following the backfill and grading of disturbed areas.

7. Concurrent reclamation. During operations, disturbed areas shall be reclaimed as soon as practical when no longer needed, except to the extent necessary to preserve evidence of mineralization for proof of discovery. Areas which have been disturbed but are not routinely or currently utilized shall be kept in a safe, environmentally stable condition. All reclamation work through seeding must be completed within three years of completion of mining.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-23. Performance and reclamation standards and requirements. The land surface of the permit area will be restored as nearly as possible to its original condition unless conflicting with the approved post-mining land use. Each reclamation plan must be developed to meet the site-specific characteristics of the mining operation and the site.

1. Most Appropriate Technology and Best Management Practices. The mining operation and the reclamation plan shall be designed and operated using the most appropriate technology and the best management practices.

2. Contemporaneous Reclamation. Contemporaneous reclamation is required to the maximum extent practicable and in a manner that is consistent with the approved reclamation plan. All reclamation work must be completed within three years of completion of mining.

3. Assure Protection. The mining operation and completed reclamation shall meet the following requirements established to assure protection of human health and safety, the environment, wildlife and domestic animals.

a. Signs, Markers and Safeguarding. Measures will be taken to safeguard the public to prevent falls from highwalls or pit edges. Depending on site-specific characteristics, the following measures shall be required:

(1) Posting warning signs in locations near hazardous areas;

(2) Restricting access to hazardous areas;

(3) Marking the permit area boundaries;

(4) Posting a sign at the main entrances giving a telephone number of a person to call in the event of emergencies related to the mine; or

(5) Other measures as needed to protect human safety.

b. Wildlife Protection. Measures shall be taken to minimize adverse impacts on wildlife and important habitat. Based on site-specific characteristics, the following measures will be required:

(1) Restricting access of wildlife and domestic animals to toxic chemicals or otherwise harmful materials;

(2) Minimizing harm to wildlife habitat during mining; and

(3) Reclaiming areas of wildlife habitat if not in conflict with the approved post-mining land use.

c. Cultural Resources. Cultural resources listed on or eligible for listing on the National Register of Historic Places, and any cemeteries or burial grounds shall be protected until clearance has been granted by the appropriate authority.

d. Hydrologic Balance. Operations shall be planned and conducted to minimize change to the hydrologic balance in both the permit and potentially affected areas. If not in conflict with the approved post-mining land use, reclamation shall result in a hydrologic balance similar to pre-mining conditions unless non-mining impacts have substantially changed the hydrologic balance.

(1) Operations shall be designed so that non-point source surface releases of acid or other toxic substances shall be contained within the permit area, and that all other surface flows from the disturbed area are treated to meet all applicable state and federal regulations.

(2) The disturbed areas shall not contribute suspended solids above background levels, or where applicable the health department standards, to ephemeral, intermittent and perennial streams.

(3) To provide data to determine background levels for surface water entering the permit area, appropriate monitoring shall be conducted on drainages leading into the permit area.

(4) All diversions of overland flow shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and to assure the safety of the public.

(a) No diversion shall be located so as to increase the potential for landslides.

(b) Unless site-specific characteristics require a different standard which is included in the approved permit, diversions which have watersheds larger than ten acres shall be designed, constructed and maintained to safely pass the peak runoff from a ten year, twenty-four hour precipitation event.

(c) All diversion designs which have watersheds larger than ten acres shall be included in the permit application and certified by a registered professional engineer. Diversion designs shall be kept on-site or otherwise be made available, upon request, to the director for inspection.

(d) When no longer needed, temporary diversions shall be removed and the disturbed area reclaimed.

e. Stream Diversions. When streams are to be diverted, the stream channel diversion shall be designed, constructed, and removed in accordance with the following:

(1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, the combination of channel, bank and flood plain configurations shall be adequate to safely pass the peak run-off of a ten year, twenty four hour precipitation event for temporary diversions, a hundred year, twenty four hour precipitation event for permanent diversions;

(2) The design and construction of all intermittent and perennial stream channel diversions shall be certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be included in the permit application and retained on site or otherwise made available upon request to the director; and

(3) When no longer needed, temporary stream channel diversions shall be removed and the disturbed area reclaimed.

f. Impoundments. If impoundments are required they shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and adjoining property and to assure the safety of the public.

(1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, impoundments having earthen embankments but not subject to the jurisdiction of the Mine Safety and Health Administration or the state department of health shall:

(a) Have a minimum elevation at the top of the settled embankment of two feet above the water surface in the pond with the spillway flowing at the design depth;

(b) Have a top width of the embankment not less than six feet;

(c) Have combined upstream and downstream side slopes of the settled embankment not less than five horizontal : one vertical with neither slope steeper than two horizontal : one vertical. Slopes shall be vegetated or otherwise stabilized to control erosion;

(d) Have the embankment foundation cleared of all vegetative matter, all surfaces sloped to no steeper than one horizontal : one vertical and the entire foundation area scarified;

(e) Have fill material free of vegetative matter and frozen soil;

(f) Have suffient capacity for sediment storage and have sediment removed when that capacity is reached; and

(g) Have spillways provided to safely discharge the peak runoff of a twenty-five year, twenty-four hour precipitation event, or an event with a ninety percent chance of not being exceeded for the design life of the structure; or

(h) Have other site-specific design criteria for embankments as long as they result in a minimum static safety factor of 1.3 with water impounded to the design level;

(i) Be designed and certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be retained on site or otherwise made available upon request to the director; and

(j) If necessary for sediment control, be in place before any other disturbance to the watershed for the impoundment.

(2) When no longer required, impoundments shall be graded to achieve positive drainage unless:

(a) The surface estate owner has requested in writing that they be retained;

(b) They are consistent with the approved reclamation plan; and

(c) They are appropriate for the post-mining land use or the self-sustaining ecosystem.

g. Minimization of Mass Movement. All temporary stockpiles shall be constructed and maintained to minimize mass movement.

h. Riparian and Wetland Areas. Disturbance to riparian and wetland areas shall be minimized during mining. Adverse effects to riparian and wetland areas shall be mitigated during reclamation unless the mitigation conflicts with the approved post-mining land use.

i. Roads. Roads shall be constructed and maintained to control erosion.

(1) Drainage control structures shall be used as necessary to control runoff and to minimize erosion, sedimentation and flooding. Culverts or other drainage facilities shall be installed as road construction progresses and shall be capable of safely passing a ten year, twenty-four hour precipitation event unless site-specific characteristics indicate a different standard is appropriate and is included in the approved permit. Culverts and drainage pipes shall be constructed and maintained to avoid plugging, collapsing, or erosion.

(2) Roads to be constructed in or across intermittent or perennial streams require site-specific designs to be submitted with the permit application.

(3) Permanent roads must be approved by the surface owner and be consistent with the approved post-mining land use.

j. Explosives. Blasting shall be conducted to prevent injury to persons or damage to property not owned by the operator. Fly rock shall be confined to the permit area. The director may require a detailed blasting plan, pre-blast surveys or specify blast design limits to control possible adverse effects to structures.

4. Reclamation of surface facilities. The permit area shall be stabilized, to the extent practicable, to minimize future impact to the environment and protect air and water resources. Unless otherwise approved by the department, the reclamation of surface facilities shall include the removal of all buildings, roads, and structures, and the surface restored as nearly as possible to its original condition. Tailings

impoundments and ponds must be reclaimed and filled in and respread with topsoil and subsoil. All grading, backfilling, and topographic reconstruction must control erosion and sedimentation, protect areas outside the affected land from slides or other damage, and minimize the need for long-term maintenance.

Measures must be taken to reduce, to the extent practicable, the formation of acid and other toxic drainage that may otherwise occur following closure to prevent releases that cause federal or state standards to be exceeded. Nonpoint source

surface releases for acid or other toxic substances shall be contained within the permit area.

Pond and impoundment reclamation must meet the following requirements:

a. Pond sludges must be chemically characterized to determine whether further treatment is necessary before disposal. Sludges must be removed for disposal at on offsite permitted solid waste facility or buried and covered onsite in a solid waste facility permitted in accordance with the applicable solid waste rules in North Dakota Administrative Code article 33-20; and

b. Geomembranes must be removed from impoundments, unless it is demonstrated to the department's satisfaction that they will serve a useful function consistent with the approved postmining land use. The geomembrane material must be disposed of in a permitted landfill or may be disposed of onsite only if the operator first secures a solid waste permit in compliance with North Dakota Administrative Code article 33-20.

5. Topsoil and subsoil. The operator shall take measures to remove and save all available topsoil and subsoil and protect it from erosion or contamination and assure that it is in a usable condition for sustaining vegetation when needed. The following requirements shall be met unless site-specific characteristics mandate different requirements and those requirements are included in the approved permit.

a. Topsoil and subsoil shall be sampled and analyzed for vegetation establishment suitability:

(1) Sample spacing and interval shall be based on-site specific materials; and

(2) Suitability will be identified by analysis based on-site specific materials.

b. Revegetation must be a component of the reclamation plan and all available topsoil and subsoil must be salvaged and replaced on disturbed areas.

c. Where direct distribution of topsoil or subsoil is not possible, it shall be stockpiled separately and in a manner to prevent loss of the resource.

d. Topsoil and subsoil shall be distributed in a manner to establish and maintain vegetation, consistent with the approved permit.

e. After distribution, topsoiled and subsoiled areas shall be stabilized to protect loss of the resource.

f. Where topsoil has been stockpiled for more than one year, the operator may be required to conduct analyses to determine if amendments are necessary.

6. Erosion Control. Reclamation of disturbed lands must result in a condition that minimizes erosion. Revegetated lands must not contribute suspended solids above background levels, or where applicable the health department's standards, to streamflow of intermittent and perennial streams. Acceptable practices to control erosion include the following:

a. Stabilizing disturbed areas through land shaping, berming, or grading to final contour;

b. Minimizing reconstructed slope lengths and gradients;

c. Diverting runoff;

d. Establishing vegetation;

e. Regulating channel velocity of water;

f. Lining drainage channels with rock, vegetation or other geotechnical materials; and

g. Mulching.

7. Revegetation. Revegetated lands must meet the following standards:

a. Revegetation success for a return as near as possible to original condition shall be determined through comparison of ground cover, productivity and diversity and shall be made on the basis of the following approved reference areas.

(1) Foliage or basal cover and productivity of living perennial plants of the revegetated area shall be established equal to ninety percent of the reference area or equal to the approved revegetation standard using scientifically valid sampling techniques;

(2) Diversity of plant life forms (woody plants, grasses, forbs) shall consider what is reasonable based on the physical environment of the reclaimed area; and

(3) Woody plant species shall be established to the approved density standard.

b. For areas for which the approved post-mining land use is for wildlife habitat or forest land, success of vegetation shall be determined on the basis of tree or shrub stocking (density) and ground cover.

(1) The ground cover of living perennial plants shall be equal to ninety percent of the native ground cover of the reference area or the approved standard and shall be adequate to minimize erosion.

(2) Tree density for forest land shall have establishment rates of plant species equal to ninety percent of the approved reference area or other approved standard and shall be adequate to minimize erosion.

(3) If wildlife habitat is to be the post-mining land use, the operator shall select and use plant species on reclaimed areas based on the following criteria:

(a) Their proven nutritional value for fish and wildlife;

(b) Their uses as cover and security for wildlife;

(c) Their ability to support and enhance fish and wildlife habitat; and

(d) Distribute plant life forms to maximize benefits of edge effect, cover and other benefits for fish and wildlife.

c. Revegetation for other post-mining land shall be consistent with the approved post-mining land use. Site-specific standards may include standards for foliar or basal cover, production and diversity and will be included in the approved permit.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-24. Report of production. The operator of a mine shall, on or before the tenth day of the second month succeeding the month in which production occurs, file with the director the amount of production made by the mine upon form 5-sm or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

Production data submitted to the director shall be kept confidential for a period of one year when so requested by the operator. Such period may be further extended upon approval by the commission.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-25. Annual report. Every operator shall, on or before April 30 of each year after a permit has been issued, submit, on a form provided by the director, a report for the preceding calendar year. The report must:

1. Provide the status of the operation;

2. Provide production figures for the operation;

3. Identify, on a separate map, the location of the disturbed areas and if reclaimed, the year in which the work was done;

4. Identify the number of acres disturbed, the number of acres reclaimed during the reporting year and the number of acres which have not yet been reclaimed;

5. Indicate the current market value of any collateral posted as financial assurance in accordance with 43-02-02.3-05; and

6. Indicate the compliance status for all existing state and federal environmental permits held by operator for this operation.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.3-26. Additional information may be required. This chapter shall not be taken or construed to limit or restrict the authority of the commission to require the furnishing of such additional reports, data, or other information relative to production or products as may appear to be necessary or desirable, either generally or specifically, for the prevention of waste, protection of correlative rights, and the conservation of natural resources.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

PROPOSED 2013 RULE CHANGES

SOLUTION MINING
CHAPTER 43-02-02.4

43-02-02.4-01. Definitions. The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-12, except:

1. "Adjacent area" means land located outside permit area where air, surface or ground water, fish, wildlife, vegetation, or other resources may be adversely impacted by surface mining and reclamation operations.

2. "Certified or registered mail" means any form of service by the United States postal service, federal express, Pitney Bowes, and any other commercial, nationwide delivery service that provides the mailer with a document showing the date of delivery or refusal to accept delivery.

3. "Department" means the department of mineral resources of the industrial commission.

4. "Deposit" means an underground concentration containing a common accumulation of subsurface minerals.

5. "Director" means the director of the department of mineral resources of the industrial commission.

6. "Diversion" means a channel, embankment, or other man-made structure constructed to divert water from one area to another.

7. "Field" means the general area underlaid by a concentration of subsurface minerals. Field also includes the geological formation containing such subsurface minerals.

8. "Log or well log" means a systematic, detailed, and correct record of formations encountered in the drilling of a well, and includes commercial electrical logs and similar records.

9. "Occupied dwelling" means a residence which is lived in by a person at least six months throughout a calendar year.

10. "Product means any commodity made from any subsurface mineral.

11. "Saltwater handling facility" means any container such as a pit, tank, or pool, whether covered or uncovered, used for the handling, storage, disposal of deleterious substances obtained, or used, in connection with the drilling or operation of wells.

12. "Solution mining" means the process of injecting fluid into a well to dissolve rock salt or other readily soluble rock or mineral, and the production of the resulting artificial brine.

13. "Toxic-forming materials" means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or uses of water.

14. "Waste" means (a) physical waste, (b) operations which cause or tend to cause unnecessary or excessive surface loss, or(c) operations that do not recover all of the mineral being mined that is technically and economically possible.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-02. Scope of chapter. This chapter contains general rules of statewide application which have been adopted by the industrial commission to conserve the natural resources of North Dakota, to prevent waste, and to provide for operation in a manner as to protect correlative rights of all owners of subsurface minerals. Special rules, pool rules, field rules, and regulations and orders have been and will be issued when required and shall prevail as against general rules, regulations, and orders if in conflict therewith. However, wherever this chapter does not conflict with special rules heretofore or hereafter adopted, this chapter will apply in each case. The commission may grant exceptions to this chapter, after due notice and hearing, when such exceptions will result in the prevention of waste and operation in a manner to protect correlative rights.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-03. Bond. Before any person receives a permit to produce subsurface minerals via solution mining or commences extraction facility operations, the person shall submit to the commission, and obtain its approval, a surety bond or cash bond. An alternate form of security may be approved by the commission after notice and hearing, as provided by law. The operator of a well or facility shall be the principal on the bond covering such activity. Each such surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

1. Bond amounts and limitations for deep solution and injection wells.

   a. For deep solution wells the amount of the bond shall be commensurate with the number of wells, the type of project, and the environmental risk. The amount of a bond will be determined by a formula that assigns reclamation costs based

upon the number of drill sites, the depths of the holes, and the anticipated surface restoration costs.

b. Wells utilized for commercial disposal operations must be bonded in the amount of fifty thousand dollars.

When the principal on the bond is drilling or operating a number of wells within the state or proposes to do so, the principal may submit a bond conditioned as provided by law. A well with an approved temporary abandoned status shall have the same status as an exploratory, mineral, or injection well.

2. Extraction facility bond requirements. The amount of the bond shall be specified by the commission in the order approving the permit area and based upon facility size and estimated reclamation costs. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

3. Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-12, and all administrative rules and orders of the commission, and continues until any of the following occurs:

a. The testholes or wells have been satisfactorily plugged which shall include practical reclamation of the well site and appurtenances thereto, and all logs, plugging records, and other pertinent data required by statute or rules and orders of the commission are filed and approved.

b. The mined lands or lands disturbed by any method of exploration or production of subsurface minerals have been restored and approved by the director.

c. The liability on the bond has been transferred to another bond and such transfer approved by the commission.

4. Transfer of property under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in a well, extraction facility, or surface mining facility and the principal desires to be released from the bond covering the well or facility, such as producers, not ready for plugging, the principal must proceed as follows:

a. The principal must notify the director in writing of all proposed transfers of property at least thirty days before the closing date of the transfer. The director may, for good cause, waive this requirement.

The principal shall submit to the commission a form 15-sm reciting that a certain property, or properties, describing each by quarter-quarter, section, township, and range, is to be transferred to a certain transferee, naming such transferee, for the purpose of ownership or operation. The date of assignment or transfer must

be stated and the form signed by a party duly authorized to sign on behalf of the principal.

On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and accepts such transfer and the responsibility of such property under the transferee's one-well bond, surface mining facility bond, or extraction facility bond." Such acceptance must be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

b. When the commission has approved the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of well plugging and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if the well is in violation of a statute, rule, or order.

c. The transferee (new operator) of any extraction facility, surface mining facility, or injection well shall be responsible for the plugging and site reclamation of any such property. For that purpose, the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such well. The original or prior bond shall not be released as to the plugging and reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such well. All liability on bonds shall continue until the plugging and site reclamation of such property is completed and approved.

5. Bond Termination. The commission shall, in writing, advise the principal and any sureties on any bond as to whether the plugging and reclamation is approved. If approved, liability under such bond may be formally terminated upon receipt of a written request by the principal. The request must be signed by an officer of the principal or a person authorized to sign for the principal.

6. Director's authority. The director is vested with the power to act for the commission as to all matters within this section, except requests for alternative forms of security, which may only be approved by the commission.

7. The director shall periodically review the amount of bond. The director may require adjustments to the amount of bond to reflect inflationary increases or increases in the anticipated costs of reclamation.

The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; if a civil or administrative action brought by the commission is pending against the operator or surety

company; or for other good cause.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-04. Designation and responsibilities of operator. The principal on the bond covering a surface mining facility is the operator of the mine. The operator is responsible for compliance with all laws relating to the mine site. A dispute over designation of the operator of a well may be addressed by the commission. In doing so, the factors the commission may consider include those set forth in subsection 1 of section 43-02-02.3-18.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-05. Permit required. A permit is required prior to the commencement of drilling or mining.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-06. Submission of permit applications. Any person who conducts or expects to conduct solution mining operations shall file with the department a complete mining facility permit application, well permit application under chapter 43-02-02, an underground injection permit under chapter 43-02-2.1, and all required materials. The applicant shall file with the department proof that it submitted a copy of the applications to the county recorder in the county in which the proposed permit area is located.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-07. Summary document. The permit application must contain a summary document that describes the main elements of the operation and identifies the major environmental issues involved.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-08. Solution mining operation permit requirements. Permit applications for solution mining operations shall address the following:

1. Identification of interests to include:

   a. The name and address of the operator responsible for the mining operations and reclamation of the site.

   b. A listing of all parties, including addresses, which have an ownership and controlling interest in the operation. Alternatively, the applicant may submit the applicant's most recent 10k form required by the United States Securities and Exchange Commission.

   c. A statement of all current or previous mining operations within the United States held during the five years prior to application owned, operated, or controlled by any person identified in subdivision b and the names and addresses of regulatory agencies with jurisdiction over the environmental aspects of those operations and that could provide a compliance history for the operations.

   d. The name and address of the surface landowners and mineral owners of all land to be affected by the mining operation.

   e. The name and address of a designated agent for the service of notices and orders from the director.

   f. The mine name and the Mine Safety and Health Administration identification number.

   g. A listing of all federal and state permits required for the operation.

   h. The identification all property interests the applicant holds, including options, in the lands for which a permit is sought and in all contiguous land. This identification must cover surface and subsurface interests and legal descriptions must be provided identifying the location of each interest and option.

2. Project location description and maps plotted at a scale to accurately identify locational landmarks and operational details, to include:

   a. A legal description of the proposed permit area.

   b. The general location as shown on a topographic map which gives the location of the following: perennial, intermittent and ephemeral streams; springs and seeps; wetlands, riparian areas, lakes and other water bodies; residences, businesses and other structures; existing and proposed roads; other access routes; support facilities, cemeteries; burial grounds; cultural resources listed on the National

Register of Historic Places; electrical transmission and communication lines; pipelines; and oil, gas and water wells on and within ½ mile of the permit area.

c. An operations map which identifies:

(1) The area to be disturbed;

(2) The location of any existing or proposed operations including access roads, drill holes, trenches, pits, cuts, or other planned small mining activities; and

(3) Any adjacent previous disturbance for with the operator is not responsible.

d. A surface facilities map which identifies: buildings; stationary mining/processing equipment; roads; utilities; power lines; proposed drainage control structures; the location of topsoil and subsoil storage areas; tailings or processed waste facilities; disposal areas for overburden; solid and liquid wastes and wastewater discharge treatment and containment facilities.

3. Sampling and Analysis Plan.

a. The applicant shall submit a proposed sampling and analysis plan (SAP) to the director for review prior to baseline data collection. Four copies should be submitted to facilitate the review. The proposed SAP should contain, at a minimum, the following information for each relevant resource:

(1) sampling objectives;

(2) a list of the data to be collected;

(3) methods of collection;

(4) General water chemistry and the parameters to be analyzed for;

(5) maps indicating the proposed sampling locations;

(6) sampling frequency; and

(7) laboratory and field quality assurance plans.

b. The director shall distribute the proposed SAP to other agencies as determined by the director. The agencies will have 30 days from receipt of the proposed SAP to submit written comments to the director. Any written comments received within 30 days shall be provided to the applicant. The director shall also provide written comments and recommendations to the applicant on the adequacy of the SAP.

c. The applicant may request a conference with the director to discuss the SAP.

4. Baseline data. Descriptions, maps, drawings, or photographs shall be included as required for determination of existing conditions, operations, reclamation and postmining use. Baseline data shall include, as applicable:

   a. A description of the climatological factors representative of the permit area including precipitation, prevailing winds and temperature.

   b. A description of the thickness and nature of the topsoil and subsoil within the proposed permit area. A soil survey and soil analyses conducted in accordance with standard methods acceptable to the director will be required to show variations in topsoil and subsoil depth and suitability. If a published soil survey is not available, a new survey must be prepared by a soil classifier as defined by North Dakota Century Code 43-36-01.

   c. A map which delineates existing vegetation types and a description, including cover, density, and productivity of the plant communities within the proposed permit area. Included in this description shall be the results of an inventory conducted for any sensitive, threatened or endangered plant species within the permit area.

   d. Wildlife information shall be obtained for the permit area and adjacent area. Where species may be impacted beyond these areas, the information shall include, to the extent practicable, the area of potential impact.

   e. A description of the ore body in the proposed permit area, including geologic plans and cross-sections depicting the nature and depth of overburden, mineralized zone or ore body, aquifers and springs. A description of the potential for geochemical alteration of overburden, ore body and other materials present within the permit area. Detailed analyses may be required if the substrata is suspected to contain substances that are likely to create acid drainage or might degrade surface water or groundwater or hinder reclamation.

   f. Surface and groundwater information to include:

      (1) A map indicating the location of surface waters and the location and size of watersheds in and adjacent to the proposed permit area. The map shall depict all watercourses, lakes, natural or artificial water bodies, springs, and riparian and wetland areas. Streams shall be classified as ephemeral, intermittent or perennial. The map shall identify all watercourses, lakes, springs, and riparian and wetland areas into which surface or pit drainage will be discharged or may possibly be expected to reach;

      (2) A description of surface drainage systems sufficient to identify the seasonal variation in surface water quantity and quality within the proposed permit and affected areas to the extent possible;

(3) Lithology and thickness of each geologic unit below the site indicating which units are water bearing, cross sections and potentiometric maps indicating the locations of wells and the groundwater flow direction in the vicinity of the site, and references or sources for this information;

(4) A description of the aquifer characteristics including total dissolved solids concentration, maximum and minimum depths to groundwater, direction of flow and gradients, transmissivity and storativity, and a general description of groundwater quality, and references or sources for this information; and

(5) The location of all water wells and developed springs within and extending at least one mile from the proposed permit area. Water quality and quantity information for each well and spring shall be provided in the format required by the director.

g. A description and delineation on topographic maps of any prior mining operations which may have affected the permit area including, if known, the type of mining and processing method and a list of any processing chemicals or reagents used.

h. A list and accompanying map indicating all sites on or eligible for listing on the National Register of Historic Places and known cemeteries and human burials within the proposed permit area. Included with this list and map shall be a description of the effects the proposed mining operations may have on these sites and any proposed mitigation measures.

i. A description of the present and historic land use of the permit area, the general patterns of land use in the surrounding areas, and a narrative of land capability and productivity based upon Natural Resource Conservation Service land use.

5. Operation plan. Provide a brief narrative description of the proposed mining operation. The description must include the following information:

a. A general description of the minerals sought, the methods of extraction, and any processing to be conducted on site; any chemicals to be used on site must be identified.

b. An estimate of depth to groundwater and total dissolved solids concentration.

c. Estimated width and length of any new roads to be constructed.

d. The identification of any toxic-forming or acid-forming materials present or to be left on the site as a result of mining or mineral processing.

e. A discussion of plans for saving and replacing topsoil and subsoil from the areas to be affected.

f. The amount of material (including mineral deposit, overburden, waste rock, or core hole material) to be extracted, moved, or proposed to be moved, relating to the mining operation.

g. Maps and plans indicating the location, size and capacities for the mine facilities including:

(1) Leach pads, heaps, ore dumps and stockpiles;

(2) Impoundments;

(3) Ponds;

(4) Diversions;

(5) Disposal systems;

(6) Pits;

(7) Tailings disposal facilities;

(8) Mills;

(9) Water treatment facilities;

(10) Storage areas for equipment, vehicles, fuel, chemicals and solutions;

(11) Topsoil and subsoil stockpiles;

(12) Waste rock dumps; and

(13) Other facilities or structures.

h. Plans for any structures that will be used for managing runoff from the disturbed areas and a discussion of other sediment control measures that will be used.

i. A contingency plan to mitigate impacts to wildlife when there has been an emergency or accidental discharge of toxic substances that may impact wildlife.

6. Reclamation Plan. A reclamation plan will include maps or drawings as necessary and a narrative description of the proposed reclamation including:

a. A statement of the current land use and the proposed post-mining land use for the disturbed area, including a written preference statement from the surface owner for the proposed post-mine land use.

b. A description of the manner and the extent to which roads, highwalls, slopes, impoundments, drainages, pits and ponds, piles, drill holes, and similar structures will be reclaimed to the approximate original contour.

c. A detailed description of any surface facilities to be left as part of the post-mining land use, including but not limited to buildings, utilities, roads, pads, ponds, pits and surface equipment in those instances where the post-mine land use has been zoned as industrial or commercial land by the county.

d. A description of the treatment, location and disposition of any toxic-forming or acid-forming materials generated and left on site, including a map showing the location of such materials upon the completion of reclamation.

e. Plans for replacing the topsoil and subsoil that is removed and saved.

f. A planting program as best calculated to revegetate the disturbed area.

(1) Plans shall include, at a minimum, soil stabilization procedures, seed bed preparation, seed mixtures and rates, and timing of seeding.

(2) Where there is no original protective vegetative cover, an alternative practical procedure must be proposed to minimize or control erosion or siltation.

g. A topographic map of the anticipated surface configuration of the permit area upon completion of reclamation operations. The map shall be at appropriate contour intervals and scale.

h. A statement that the operator will conduct reclamation as required by these rules.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-09. Review for completeness. The department will determine whether the application is complete. The department will notify the applicant in writing, within thirty days after the application is submitted, whether the application is complete or whether there are specific deficiencies that must be corrected in order to complete the application. If the application is substantially deficient, it will be rejected. The department will notify the application when the application is considered complete.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-10. Review period.

1. The department will have one hundred eighty days after the filing date to approve or disapprove the application.

2. The department may extend the review period not to exceed an additional one hundred eight days if:

   a. Additional time is needed to correct application deficiencies;

   b. Significant changes are submitted that in the department's judgment require additional time to review. The department may require additional public notification of the amended application; or

   c. The department requires additional time to conduct an informal conference or a formal hearing or complete the decision.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-11. Permit applications – fees. A fee of five hundred dollars must accompany the permit application.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-12. Information added after filing date. Additional information submitted to the department by the applicant to supplement, correct, amend, or clarify an application following the filing date must also be submitted with the county recorder in the county or counties in which the proposed permit area is located. The additional information must be submitted at least thirty days before the hearing date. The applicant must provide proof of submission to the county recorder to the department. The department shall give notice to the public of the additional information at least fifteen days before the scheduled hearing date.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-13. Notice to agencies. Within the first ten days of the review period of a

permit application, the department shall send copies of the application to the department of agriculture, the state department of health, and to the water commission.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-14. Notice of hearing. Except in the case of an emergency, the commission will give thirty days' notice to the general public of the time and place of the hearing on the application. Immediately upon receiving notice of the hearing date, the permit applicant shall give notice by certified mail to surface and subsurface owners within the permit application area and to the county recorder in the county or counties in which the proposed permit area is located.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-15. Permit approval or denial. Within ninety days of the hearing, or a reasonable time thereafter, the department will notify the applicant of the commission's decision as to whether the permit is approved or denied.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-16. Permit Term.

1. The permit will remain in effect as long as active mining continues at a mine site and the operator remains in full compliance with all permit conditions.

2. A permit shall be reviewed and may be required to be modified or revised due to:

   a. Additional applicable requirements under North Dakota Century Code chapters 38-12 and 38-12.1 and North Dakota Administrative Code article 43-02; or

   b. The director determining that the permit contains a material mistake or that inaccurate statements were made in establishing the terms or conditions of the permit.

3. If the permit area contains property owned by the federal or state government, the expiration or termination of the government's authorization for the operator to conduct mining operations on the property automatically revokes the operator's permit, but does not suspend the operator's reclamation operations.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-17. Permit modifications or revision. An application for a permit modification or revision shall be in a format acceptable to the director and shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present. A permit modification or revision will not be granted unless the director determines that the proposed modification or revision meets the requirements of this rule.

1. A permit modification or revision for a mining operation is required for:

   a. Each new discrete processing, leaching, excavation, storage or stockpile unit located within the permit area and not identified in the permit;

   b. Each expansion of such a unit identified in the permit that exceeds the design limits specified in the permit; and

   c. Any change in the approved reclamation plan.

2. Revisions are modifications that require public notice and an opportunity for public hearing pursuant to this rule. The director shall review each request for a permit modification to determine whether it must be processed as a revision.

   a. The director shall consider the following factors and their level of impact to determine whether a permit modification would have a significant environmental impact requiring a revision:

      (1) Whether the proposed change would authorize an expansion of design limits beyond that currently authorized by the permit that:

         (a) Would be located in or is expected to have a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers, other water bodies or riparian areas.

         (b) Is expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/l.

         (c) Is expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.

         (d) Would be located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas

determined by the Game and Fish Department likely to result in an adverse impact on an endangered species.

(e) Would adversely impact cultural resources listed on either the National Register of Historic Places or the State Register of Cultural Properties.

(f) Would be located in a known cemetery or other burial ground.

(g) Would be located in an area designated as a Federal Wilderness Area, Wilderness Study Area, Area of Critical Environmental Concern, or an area within the national Wild and Scenic River System.

(2) Whether the proposed change would result in a significant increase in the required amount of financial assurance as determined by the director; or

(3) Whether the proposed change would significantly depart from the nature or scale of the permit.

b. An application for a permit modification or revision shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present.

3. The following actions do not require permit modifications or revisions:

a. The construction, relocation or modification of roads within the disturbed area that does not change the reclamation plan;

b. Placement or movement of support buildings, equipment areas, maintenance shops, monitoring facilities, wells, power lines, power poles, substations, and communications facilities within the disturbed area that does not change the reclamation plan; and

c. The movement of tanks, pipelines, utilities, and portable units.

History:
General Authority: NDCC 38-12-03
Law Implemented: NDCC 38-12-03

43-02-02.4-18. Revocation and limitation of permits.

1. After notice and hearing, the commission may revoke a mining permit or limit its duration. The commission may act upon its own motion or upon the application of an owner in the permit area. In deciding whether to revoke or limit a permit, the factors that the commission may consider include:

a. The technical ability of the operator and other owners to conduct mining operations.

b. The experience of the operator and other owners in similar mining operations.

c. Contractual obligations such as an expiring lease.

d. The amount of ownership the operator and other owners hold in the lease. If the operator is the majority owner or if its interest when combined with that of its supporters is a majority of the ownership, it is presumed that the operator should retain the permit. This presumption, even if not rebutted, does not prohibit the commission from limiting the duration of the permit. However, if the amount of the interest owned by the owner seeking revocation or limitation and its supporters are a majority of the ownership, the commission will presume that the permit should be revoked.

2. The commission may suspend a permit that is the subject of a revocation or limitation proceeding. A permit will not be suspended or revoked after operations have commenced.

3. If the commission revokes a permit upon the application of an owner and issues a permit to that owner or to another owner who supported revocation, the commission may limit the duration of such permit. The commission may also, if the parties fail to agree, order the owner acquiring the permit to pay reasonable costs incurred by the former operator and the conditions under which payment is to be made. The costs for which reimbursement may be ordered may include those involving survey of the well site, title search of surface and mineral title, and preparation of an opinion of mineral ownership.

4. If the commission declines to revoke a permit or limit the time within which it must be exercised, it may include a term in its order restricting the ability of the operator to renew the permit or to acquire another permit within the same spacing or drilling unit.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-19. Surface facilities – location - exception to location requirements.

1. All surface facilities and flow lines installed shall be constructed so that the materials contained in the facilities do not cause waste. Operation of surface facilities and flow lines shall not begin until the operator has complied with the methods and means to prevent pollution as specified in these rules.

2. Surface facilities may not be located less than 500 feet from either of the following:

a. Existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption.

b. Occupied dwellings.

3. Surface facilities may be located closer than 500 feet from existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and occupied dwellings under either of the following conditions:

a. Upon presentation to the director of a written consent signed by the owner or owners of all existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and occupied dwellings.

b. After notice and hearing, the commission determines that the proposed surface facility location will prevent waste, protect environmental values, and not compromise public safety.

4. The director shall be notified within 24 hours of emergency repairs to existing surface facilities that substantially modify the facility or piping. Details regarding such emergency repairs, including changes in size or location of facility structures or piping, shall be submitted in writing within 30 days of the repair.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-20. Operators of Class III injection wells. Prior to the construction of any injection well to be utilized for the extraction of minerals or energy, an operator shall obtain an underground injection control permit pursuant to North Dakota Administrative Code chapter 43-02-02.1.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-21. Notice of mechanical integrity testing. At least 30 days before a regularly scheduled test, an operator shall notify the director of the date and approximate time of the test. The notification shall include a copy of the proposed test procedure including procedures for wireline logging. Mechanical integrity testing shall not be conducted until an operator has received approval of the test procedure from the director. Mechanical integrity testing may be witnessed by the director.

History:
General Authority: NDCC 38-12-02

Law Implemented: NDCC 38-12-02

43-02-02.4-22. Mechanical integrity testing.

1. Prior to commencing operations, the operator of a new injection well must demonstrate the mechanical integrity of the well. Injection wells must demonstrate continual mechanical integrity and be tested at least once every five years. An injection well has mechanical integrity if:

    a. There is no significant leak in the casing, tubing, or packer; and

    b. There is no significant fluid movement into an underground source of drinking water or an unauthorized zone through vertical channels adjacent to the injection bore.

2. One of the following methods must be used to evaluate the absence of significant leaks:

    a. Pressure test with liquid or gas.

    b. Monitoring of positive annulus pressure following a valid pressure test.

    c. Radioactive tracer survey.

3. One of the following methods must be used to establish the absence of significant fluid movement:

    a. A log from which cement can be determined or well records demonstrating the presence of adequate cement to prevent such migration.

    b. Radioactive tracer survey, temperature log, or noise log.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-23. Calibration of pressure gauges. The operator shall calibrate all pressure gauges used in mechanical integrity demonstrations according to the manufacturer's recommendations. A copy of the calibration certificate shall be submitted to the director at the time of demonstration and every time the gauge is calibrated. A pressure gauge shall have a resolution so as to allow detection of at least one half of the maximum allowable pressure change.

History:
General Authority: NDCC 38-12-02

Law Implemented: NDCC 38-12-02

43-02-02.4-24. Reports of mechanical integrity. The operator shall file a signed copy of the report of a mechanical integrity test with the director within 60 days after testing. A copy of the pressure record shall accompany the report. The report shall include evaluation of the test results by a person qualified to provide such an evaluation. Reports of mechanical integrity demonstrations utilizing downhole logs shall be accompanied by an interpretation of the log by a person qualified to make such interpretations.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-25. Mechanical integrity testing required by the director. The director may require a demonstration of mechanical integrity following a change of well status or if there is reason to believe a well does not have mechanical integrity.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-26. Cavity size. The operator of a solution well shall submit a plan to monitor cavity size and shape for approval by the director. The plan shall include frequency of monitoring and shall include a description of the method used to determine the size and shape of the cavity.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-27. Subsidence monitoring above a cavity created by solution mining. The operator shall submit a plan for subsidence monitoring above a cavity for approval by the director. The plan shall include frequency of monitoring and shall include a description of the method used to monitor subsidence.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-28. Abandonment of cavity created by solution mining. Before abandoning a cavity used for storage, the operator shall remove stored product to the extent

practicable and replace it with brine or fresh water subject to the approval of the director.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-29. Central production facility – commingling of production.

1. The director shall have the authority to approve requests to consolidate production equipment at a central location.

2. Commingling of production from two or more wells in a central production facility is prohibited unless approved by the director. There are two types of central production facilities that may be approved by the director.

   a. A central production facility in which all production going into the facility has common ownership (working interests, royalty interests, and overriding royalties), known as a common ownership central production facility. The director may approve a common ownership central production facility provided the production from each well can be accurately determined at reasonable intervals.

   b. A central production facility in which production going into the facility has diverse ownership, known as a diverse ownership central production facility. The director may approve a diverse ownership central production facility provided the production from each well is accurately metered prior to commingling. A diverse ownership central production facility that is not metered prior to commingling may only be approved by the commission after notice and hearing.

3. Common ownership central production facility. The application for permission to commingle solutions must be submitted on a sundry notice (form 4-sm) and shall include the following:

   a. A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well and flow lines from each well that will produce into the facility.

   b. A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items should be shown such as treaters, tanks, flow lines, valves, meters, and recycle pumps.

   c. An affidavit executed by a person who has knowledge as to the state of title demonstrating common ownership.

d. An explanation of the procedures or method to be used to accurately determine individual well production at periodic intervals. Such procedures or method shall be performed at least once every three months.

A copy of all tests are to be filed with the director on form 11-sm within thirty days after the tests are completed.

4. Diverse ownership central production facility. The application for permission to commingle solutions must be submitted on a sundry notice (form 4-sm) and shall include the following:

a. A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well, and flow lines from each well that will produce into the facility.

b. A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items should be shown such as treaters, tanks, flow lines, valves, meters, and recycle pumps.

c. The name of the manufacturer, size, and type of meters to be used. The meters must be proved at least once every three months and the results reported to the director within thirty days following the completion of the test.

d. An explanation of the procedures or method to be used to accurately determine individual well production at periodic intervals. Such procedures or method shall be performed monthly.

A copy of all tests are to be filed with the director on form 11-sm within thirty days after the tests are completed.

5. Any changes to a previously approved central production facility must be reported on a sundry notice (form 4-sm) and approved by the director.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-30. Production equipment, dikes, and seals. Storage of brine solution in underground or partially buried tanks or containers is prohibited. Surface tanks and production equipment must be devoid of leaks and in good condition. Unused tanks and production equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year. Dikes must be erected and maintained around tanks at any production facility.

Dikes must be erected around tanks at any new production facility within thirty days after the well has been completed. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid production. The required capacity of the dike may be lowered by the director if necessity can be demonstrated to the director's satisfaction.

Numbered metal security seals shall be properly utilized on all access valves and access points to secure the tank or battery of tanks.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-31. Tank cleaning permit. No tank bottom waste shall be removed from any tank used for the storage or sale of crude oil without prior approval by the director. Verbal approval may be given. Prior approval to remove tank bottom waste from tanks not used for the storage or sale of crude oil is not required.

Within thirty days of the removal of the tank bottom waste of any tank used for the storage or sale of crude oil, the owner or operator shall submit a report (form 23-sm) showing an accurate gauge of the contents of the tank and the amount of merchantable oil determinable from a representative sample of the tank bottom by the standard centrifugal test as prescribed by the American Petroleum Institute's code for measuring, sampling, and testing crude oil.

Within thirty days of the removal of the tank bottom waste of any permanent tank not used for the storage or sale of crude oil, the owner or operator shall submit a sundry notice (form 4-sm) detailing the cleaning operation.

All tank bottom waste must be disposed of in a manner authorized by the director and in accordance with all applicable local, state, and federal laws and regulations. Nothing contained in this section shall apply to reclaiming of pipeline break oil or the treating of tank bottoms at a pipeline station, crude oil storage terminal, or refinery or to the treating by a gasoline plant operator of oil and other catchings collected in traps and drips in the gas gathering lines connected to gasoline plants and in scrubbers at such plants.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-32. Saltwater handling facilities.

1. All saltwater liquids or brines produced shall be processed, stored, and disposed of without pollution of freshwater supplies. At no time shall saltwater liquids or brines be

allowed to flow over the surface of the land or into streams.

2. Underground injection of saltwater liquids and brines for the purpose of solution mining shall be in accordance with North Dakota Administrative Code chapter 43-02-2.1.

3. Underground injection of a waste product shall be in accordance with North Dakota Administrative Code chapter 33-25-01.

4. The operator shall take steps to minimize the amount of solids stored at the facility.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-33. Secondary containment - general requirements. Secondary containment measures at a wellhead or surface facility shall meet all of the following requirements:

1. The sidewalls and floor of a secondary containment area shall be constructed of sufficiently impermeable material to provide emergency containment.

2. Dikes or firewalls shall be maintained and the enclosure kept free of waste products, stored products, tank bottoms, brine, water, vegetation, debris, and any flammable or combustible material.

3. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid production.

4. An operator shall install an automatic surface facility shutdown system designed to prevent liquids from overflowing the secondary containment area. A surface facility shall be exempt from the requirement of an automatic shutdown system if the facility has staff present while operating and is equipped with alarm systems on the storage tank or tanks.

5. All transfer and injection pumps shall have leak containment constructed to prevent the seepage of any liquids moved by the pump or any lubricating oils into the surrounding soils, surface waters, or groundwater.

6. Wellheads and flare stacks shall have secondary containment and spill containment areas constructed in a manner to prevent the seepage of waste product, stored product, or brine into the surrounding soils, surface waters, or groundwater. Secondary containment at the wellhead shall be constructed in a manner to capture leakage of liquid that may occur. In addition, if the wellhead is equipped with a pump jack utilizing a gasoline or diesel-powered engine, then the engine shall also have

secondary containment that is sufficient to prevent the seepage of any machine oils or fuels into the surrounding soils, surface waters, or groundwater.

7. An operator shall keep secondary containment areas free of standing liquid. All spills in a secondary containment area shall be pumped up within 48 hours of discovering the spill.

8. An operator shall submit to the director a plan for inspections and monitoring of active wells and surface facilities.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-34. Secondary containment - vessels. A vessel at a surface facility shall be elevated and placed on impervious pads or constructed so that any leakage can be easily detected. A vessel that is to be used on-site for 30 days or less shall, at a minimum, be placed on leak-resistant material installed in a manner to contain spills or leaks.

A waste product, stored product, or brine storage vessel shall be located in a secondary containment area.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-35. Secondary containment - loading and unloading areas.

1. A truck loading and unloading area located outside of a secondary containment area shall be constructed and sealed in a manner that prevents the seepage of waste product, stored product, or brine into the surrounding soils, surface waters, or groundwater. In addition, a ramp shall be constructed to contain any leakage from transfer operations at the vehicle being loaded or unloaded. The ramp area shall contain a sump and be connected to a secondary containment area so that any spillage drains into the sump and into the secondary containment area. The spill containment ramp and sump shall have a combined capacity of not less than 1,000 gallons.

2. Sumps shall be constructed of materials impervious to the waste product, stored product, and brine and resistant to damage and deterioration during use. Sumps shall be connected to the ramp area and the secondary containment area in a manner that prevents leakage.

3. All loading and unloading facility transfer lines that are not in use shall be secured to prevent spillage. A shutoff valve shall be installed at the truck connect point and at

the storage vessels. All shutoff valves shall be left in a normally closed position.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-36. Secondary containment - piping. All piping at a surface facility shall be routed above the ground and kept within the secondary containment area where practical. Piping that cannot be routed above the ground shall have its location marked with posts or with other location-identifying markers approved by the director so that the buried piping can be easily located.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-37. Secondary containment - certification. Upon completion of the construction of a surface facility, but before its use, an operator of a well shall certify to the director that the secondary containment area is constructed according to the approved plan. Following advance notice, the director may require an inspection of a surface facility before it is put into service. If an inspection is required it shall be conducted within 5 business days of the receipt of certification.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-38. Line markers for brine pipelines. If a pipeline conveys liquids to or from a well located outside the perimeter of a manufacturing plant, it is subject to the provisions of this rule.

1. Except as provided in subsection two of this rule, a marker shall be placed and maintained as close as practical over each buried brine pipeline, as follows:

   a. At each crossing of a public road and railroad.

   b. When necessary to identify the location of the brine pipeline to reduce the possibility of damage or interference.

   c. At the point of crossing of or under waterways and other bodies of water.

2. Markers shall be placed and maintained along each section of a brine pipeline that is located above ground in an area which is accessible to the public.

3. The following information shall be written legibly on a background of sharply contrasting color on each brine pipeline marker:

   a. The word "warning," or "caution," followed by the words "waste product brine" or "brine pipeline," all of which, except for markers in heavily developed urban areas, shall be not less than one and a half inches high and legible under normal conditions at a distance of twenty five feet.

   b. The name of the operator and the telephone number, including the area code, where the operator can be reached at all times.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-39. Pipelines - records. An operator shall keep records covering each leak discovered, repair made, pipeline break, pipeline patrol, and inspection for as long as the segment of pipeline involved remains in service.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-40. Purging, removal, and abandonment of lines and vessels. An operator of a well shall remove all flow lines and vessels, including tanks, if the flow lines or vessels are not used for one year and shall provide notification of the removal to the director. The director may allow a line to be purged and abandoned in place upon written application from the operator. The director may grant an exception to this rule upon written application.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-41. Existing facilities - maintenance.

1. The operator of a well shall maintain all existing dikes or fire walls installed before the effective date of these rules, and shall keep the containment area free of oil, emulsions, waste products, stored products, tank bottoms, brine, water, vegetation, debris, or any flammable or combustible material.

2. The director may require surface facilities constructed before the effective date of these rules to be upgraded to meet secondary containment requirements of this part if

the facility is substantially modified or if losses have resulted in pollution.

3. Before any modification of a secondary containment area, other than routine maintenance, the operator of a well shall notify the director in writing. The notification shall include a modified secondary containment plan reflecting the proposed changes. The operator shall receive approval from the director before making the modification. The director shall approve or deny the request within eleven days of receipt of the request. The director may require an inspection of the modified secondary containment area before it is returned to service.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-42. Operational practices. The operator shall conform to the following practices:

1. The mining and reclamation operation shall be designed and operated using the most appropriate technology and best management practices.

2. Public safety and welfare. The operator shall minimize hazards to the public safety and welfare during operations. Methods to minimize hazards shall include but not be limited to:

   a. The disposal of trash, scrap metal and wood, and extraneous debris;

   b. The plugging or capping of drill, core, or other exploratory holes pursuant to section 43-02-02-24;

   c. The posting of appropriate warning signs in locations where public access to operations is readily available; and

   d. The construction of berms, fences, or barriers above highwalls or other excavations.

3. Drainages. If natural channels are to be affected by the mining operation, then the operator shall take appropriate measures to avoid or minimize environmental damage.

4. Erosion control. Operations shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.

5. Toxic-forming materials. All toxic-forming or potentially deleterious material shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled.

6. Soils. All available topsoil and subsoil shall be removed, stored and stabilized The salvaged topsoil and subsoil must be respread following the backfill and grading of disturbed areas.

7. Concurrent reclamation. During operations, disturbed areas shall be reclaimed as soon as practical when no longer needed, except to the extent necessary to preserve evidence of mineralization for proof of discovery. Areas which have been disturbed but are not routinely or currently utilized shall be kept in a safe, environmentally stable condition. All reclamation work through seeding must be completed within three years of completion of mining.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-43. Performance and reclamation standards and requirements. The land surface of the permit area will be restored as nearly as possible to its original condition unless conflicting with the approved post-mining land use. Each reclamation plan must be developed to meet the site-specific characteristics of the mining operation and the site.

1. Most Appropriate Technology and Best Management Practices. The mining operation and the reclamation plan shall be designed and operated using the most appropriate technology and the best management practices.

2. Contemporaneous Reclamation. Contemporaneous reclamation is required to the maximum extent practicable and in a manner that is consistent with the approved reclamation plan. All reclamation work through seeding must be completed within three years of completion of mining.

3. Assure Protection. The mining operation and completed reclamation shall meet the following requirements established to assure protection of human health and safety, the environment, wildlife and domestic animals.

    a. Signs, Markers and Safeguarding. Measures will be taken to safeguard the public to prevent falls from highwalls or pit edges. Depending on site-specific characteristics, the following measures shall be required:

        (1) Posting warning signs in locations near hazardous areas;

        (2) Restricting access to hazardous areas;

(3) Marking the permit area boundaries;

(4) Posting a sign at the main entrances giving a telephone number of a person to call in the event of emergencies related to the mine; and

(5) Other measures as needed to protect human safety.

b. Wildlife Protection. Measures shall be taken to minimize adverse impacts on wildlife and important habitat. Based on site-specific characteristics, the following measures will be required:

(1) Restricting access of wildlife and domestic animals to toxic chemicals or otherwise harmful materials;

(2) Minimizing harm to wildlife habitat during mining; and

(3) Reclaiming areas of wildlife habitat if not in conflict with the approved post-mining land use.

c. Cultural Resources. Cultural resources listed on or eligible for listing on the National Register of Historic Places, and any cemeteries or burial grounds shall be protected until clearance has been granted by the appropriate authority.

d. Hydrologic Balance. Operations shall be planned and conducted to minimize change to the hydrologic balance in both the permit and potentially affected areas. If not in conflict with the approved post-mining land use, reclamation shall result in a hydrologic balance similar to pre-mining conditions unless non-mining impacts have substantially changed the hydrologic balance.

(1) Operations shall be designed so that non-point source surface releases of acid or other toxic substances shall be contained within the permit area, and that all other surface flows from the disturbed area are treated to meet all applicable state and federal regulations.

(2) The disturbed areas shall not contribute suspended solids above background levels, or where applicable the health department standards, to ephemeral, intermittent and perennial streams.

(3) To provide data to determine background levels for surface water entering the permit area, appropriate monitoring shall be conducted on drainages leading into the permit area.

(4) All diversions of overland flow shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and to assure the safety of the public.

(a) No diversion shall be located so as to increase the potential for landslides.

(b) Unless site-specific characteristics require a different standard which is included in the approved permit, diversions which have watersheds larger than ten acres shall be designed, constructed and maintained to safely pass the peak runoff from a ten year, twenty-four hour precipitation event.

(c) All diversion designs which have watersheds larger than ten acres shall be included in the permit application and certified by a registered professional engineer. Diversion designs shall be kept onsite or otherwise be made available, upon request, to the director for inspection.

(d) When no longer needed, temporary diversions shall be removed and the disturbed area reclaimed.

e. Stream Diversions. When streams are to be diverted, the stream channel diversion shall be designed, constructed, and removed in accordance with the following:

(1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, the combination of channel, bank and flood plain configurations shall be adequate to safely pass the peak run-off of a ten year, twenty-four hour precipitation event for temporary diversions, or a one hundred year, twenty-four hour precipitation event for permanent diversions;

(2) The design and construction of all intermittent and perennial stream channel diversions shall be certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be included in the permit application and retained on site or otherwise made available upon request to the director; and

(3) When no longer needed, temporary stream channel diversions shall be removed and the disturbed area reclaimed.

f. Impoundments**.** If impoundments are required they shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and adjoining property and to assure the safety of the public.

(1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, impoundments having earthen embankments but not subject to the jurisdiction of the Mine Safety and Health Administration or the state department of health shall:

(a) Have a minimum elevation at the top of the settled embankment of two feet above the water surface in the pond with the spillway flowing at the design depth;

(b) Have a top width of the embankment not less than six feet;

(c) Have combined upstream and downstream side slopes of the settled embankment not less than five horizontal : one vertical with neither slope steeper than two horizontal : one vertical. Slopes shall be vegetated or otherwise stabilized to control erosion;

(d) Have the embankment foundation cleared of all vegetative matter, all surfaces sloped to no steeper than one horizontal : one vertical and the entire foundation area scarified;

(e) Have fill material free of vegetative matter and frozen soil;

(f) Have suffient capacity for sediment storage and have sediment removed when that capacity is reached; and

(g) Have spillways provided to safely discharge the peak runoff of a twenty-five year, twenty-four hour precipitation event, or an event with a ninety percent chance of not being exceeded for the design life of the structure; or

(h) Have other site-specific design criteria for embankments as long as they result in a minimum static safety factor of 1.3 with water impounded to the design level;

(i) Be designed and certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be retained on site or otherwise made available upon request to the director; and

(j) If necessary for sediment control, be in place before any other disturbance to the watershed for the impoundment.

(2) When no longer required, impoundments shall be graded to achieve positive drainage unless:

(a) The surface estate owner has requested in writing that they be retained;

(b) They are consistent with the approved reclamation plan; and

(c) They are appropriate for the post-mining land use or the self-sustaining ecosystem.

g. Minimization of Mass Movement. All temporary stockpiles shall be constructed and maintained to minimize mass movement.

h. Riparian and Wetland Areas. Disturbance to riparian and wetland areas shall be minimized during mining. Adverse effects to riparian and wetland areas shall be mitigated during reclamation unless the mitigation conflicts with the approved post-mining land use.

i. Roads. Roads shall be constructed and maintained to control erosion.

(1) Drainage control structures shall be used as necessary to control runoff and to minimize erosion, sedimentation and flooding. Culverts or other drainage facilities shall be installed as road construction progresses and shall be capable of safely passing a ten year, twenty-four hour precipitation event unless site-specific characteristics indicate a different standard is appropriate and is included in the approved permit. Culverts and drainage pipes shall be constructed and maintained to avoid plugging, collapsing, or erosion.

(2) Roads to be constructed in or across intermittent or perennial streams require site-specific designs to be submitted with the permit application.

(3) Permanent roads must be approved by the surface owner and be consistent with the approved post-mining land use.

j. Subsidence Control. Underground and in situ solution mining activities shall be planned and conducted, to the extent technologically and economically feasible, to prevent subsidence which may cause material damage to structures or property not owned by the operator.

(1) Solution mining activities near any aquifer that serves as a significant source of water supply to a public water system shall be conducted so as to avoid disruption of the aquifer and consequent exchange of groundwater between the aquifer and other strata.

(2) Solution mining activities conducted beneath or adjacent to any perennial stream must be performed in a manner so that subsidence is not likely to cause material damage to streams, water bodies and associated structures.

k. Explosives. Blasting shall be conducted to prevent injury to persons or damage to property not owned by the operator. Fly rock shall be confined to the permit area. The director may require a detailed blasting plan, pre-blast surveys or specify blast design limits to control possible adverse effects to structures.

4. Reclamation of surface facilities. The permit area shall be stabilized, to the extent practicable, to minimize future impact to the environment and protect air and water resources. Unless otherwise approved by the department, the reclamation of surface facilities shall include the removal of all buildings, roads, and structures, and the surface restored as nearly as possible to its original condition. Tailings impoundments and ponds must be reclaimed and filled in and respread with topsoil and subsoil. All grading, backfilling, and topographic reconstruction must control erosion and sedimentation, protect areas outside the affected land from slides or other damage, and minimize the need for long-term maintenance.

   Measures must be taken to reduce, to the extent practicable, the formation of acid and other toxic drainage that may otherwise occur following closure to prevent releases that cause federal or state standards to be exceeded. Nonpoint source surface releases for acid or other toxic substances shall be contained within the permit area.

   Pond and impoundment reclamation must meet the following requirements:

   a. Pond sludges must be chemically characterized to determine whether further treatment is necessary before disposal. Sludges must be removed for disposal at on offsite permitted solid waste facility or buried and covered onsite in a solid waste facility permitted in accordance with the applicable solid waste rules in article 33-20; and

   b. Geomembranes must be removed from impoundments, unless it is demonstrated to the department's satisfaction that they will serve a useful function consistent with the approved postmining land use. The geomembrane material must be disposed of in a permitted landfill or may be disposed of onsite only if the operator first secures a solid waste permit in compliance with North Dakota Administrative Code article 33-20.

5. Topsoil and subsoil. The operator shall take measures to remove and save all available topsoil and subsoil and protect it from erosion or contamination and assure that it is in a usable condition for sustaining vegetation when needed. The following requirements shall be met unless site-specific characteristics mandate different requirements and those requirements are included in the approved permit.

   a. Topsoil and subsoil shall be sampled and analyzed for vegetation establishment suitability:

      (1) Sample spacing and interval shall be based on-site specific materials; and

      (2) Suitability will be identified by analysis based on-site specific materials.

   b. Revegetation must be a component of the reclamation plan and all available topsoil and subsoil must be salvaged and replaced on disturbed areas.

c. Where direct distribution of topsoil or subsoil is not possible, it shall be stockpiled separately and in a manner to prevent loss of the resource.

d. Topsoil and subsoil shall be distributed in a manner to establish and maintain vegetation, consistent with the approved permit.

e. After distribution, topsoiled and subsoiled areas shall be stabilized to protect loss of the resource.

f. Where topsoil has been stockpiled for more than one year, the operator may be required to conduct analyses to determine if amendments are necessary.

6. Erosion Control. Reclamation of disturbed lands must result in a condition that minimizes erosion. Revegetated lands must not contribute suspended solids above background levels, or where applicable the state department of health's standards, to streamflow of intermittent and perennial streams. Acceptable practices to control erosion include the following:

a. Stabilizing disturbed areas through land shaping, berming, or grading to final contour;

b. Minimizing reconstructed slope lengths and gradients;

c. Diverting runoff;

d. Establishing vegetation;

e. Regulating channel velocity of water;

f. Lining drainage channels with rock, vegetation or other geotechnical materials; and

g. Mulching.

7. Revegetation. Revegetated lands must meet the following standards:

a. Revegetation success as near as possible to original condition shall be determined through comparison of ground cover, productivity and diversity and shall be made on the basis of the following approved reference areas:

(1) Foliage or basal cover and productivity of living perennial plants of the revegetated area shall be established equal to ninety percent of the reference area or equal to the approved revegetation standard using scientifically valid sampling techniques;

(2) Diversity of plant life forms (woody plants, grasses, forbs) shall consider what is reasonable based on the physical environment of the reclaimed area; and

(3) Woody plant species shall be established to the approved density standard.

b. For areas for which the approved post-mining land use is for wildlife habitat or forest land, success of vegetation shall be determined on the basis of tree or shrub stocking (density) and ground cover.

(1) The ground cover of living perennial plants shall be equal to ninety percent of the native ground cover of the reference area or the approved standard and shall be adequate to minimize erosion.

(2) Tree density for forest land shall have establishment rates of plant species equal to ninety percent of the approved reference area or other approved standard and shall be adequate to minimize erosion.

(3) If wildlife habitat is to be the post-mining land use, the operator shall select and use plant species on reclaimed areas based on the following criteria:

(a) Their proven nutritional value for fish and wildlife;

(b) Their uses as cover and security for wildlife;

(c) Their ability to support and enhance fish and wildlife habitat; and

(d) Distribute plant life forms to maximize benefits of edge effect, cover and other benefits for fish and wildlife.

c. Revegetation for other post-mining land shall be consistent with the approved post-mining land use. Site-specific standards may include standards for foliar or basal cover, production and diversity and will be included in the approved permit.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-44. Report of water injected. The operator of each and every injection well shall, on or before the tenth day of the second month succeeding the month in which injection occurs, file with the director the amount of liquid injected, the composition of the liquid, and the source thereof upon approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-45. Report of production. The operator of a mine shall, on or before the tenth day of the second month succeeding the month in which production occurs, file with the director the amount of production made by the mine upon form 5-sm or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

Production data submitted to the director shall be kept confidential for a period of one year when so requested by the operator. Such period may be further extended upon approval by the commission.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-46. Reports of natural brine produced. A person who is producing natural brine shall be required by the director to report annually, within 60 days after the end of the calendar year of production, the amount of natural brine produced during the calendar year of production, unless an extension of time is granted by the director. The reports shall be signed by the person who is producing brine on forms prescribed by, or acceptable to, the director.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-47. Solution mining - reporting. An operator shall control cavity shape during solution mining of bedded salt.

An operator who is solution mining shall report annually, within 60 days after the end of the calendar year, the amount of soluble mineral or rock removed and the volumes of fluids injected into and removed from each cavity.

The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

History:

General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-48. Rock profile determination. The operator shall determine the cavity roof position not less than biennially. Generally accepted wireline logging methods shall be utilized. The results of the determination shall be filed with the director not more than 60 days after completion and shall include all wireline logs run.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-49. Books and records to be kept to substantiate reports. All operators within North Dakota shall make and keep appropriate books and records for a period not less than six years covering their operations in North Dakota from which they may be able to make and substantiate the reports required by this chapter.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02

43-02-02.4-50. Additional information may be required. This chapter shall not be taken or construed to limit or restrict the authority of the commission to require the furnishing of such additional reports, data, or other information relative to production or products as may appear to be necessary or desirable, either generally or specifically, for the prevention of waste, protection of correlative rights, and the conservation of natural resources.

History:
General Authority: NDCC 38-12-02
Law Implemented: NDCC 38-12-02