PROPOSED 2008 RULE CHANGES

RULES AND REGULATIONS
NORTH DAKOTA ADMINISTRATIVE CODE
CHAPTER 43-02-03

A. DEFINITIONS

43-02-03-01. DEFINITIONS. The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-08 except:

1. "Adjusted allowable" means the allowable production a proration unit receives after all adjustments are applied.

2. "Allocated pool" is one in which the total oil or natural gas production is restricted and allocated to various proration units ~~and fractional proration units~~ therein in accordance with proration schedules.

3. "Allowable production" means that number of barrels of oil or cubic feet of natural gas authorized to be produced from the respective proration units ~~and fractional proration units~~ in an allocated pool.

~~4. "Back allowable" means the authorized accumulative underage or shortage for a given proration unit or fractional proration unit.~~

4~~5~~. "Barrel" means forty-two United States gallons [158.99 liters] measured at sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter].

5~~6~~. "Barrel of oil" means forty-two United States gallons [158.99 liters] of oil after deductions for the full amount of basic sediment, water, and other impurities present, ascertained by centrifugal or other recognized and customary test.

6~~7~~. "Bottom hole or subsurface pressure" means the pressure in pounds per square inch gauge under conditions existing at or near the producing horizon.

7~~8~~. "Bradenhead gas well" means any well capable of producing gas through wellhead connections from a gas reservoir which has been successfully cased off from an underlying oil or gas reservoir.

8~~9~~. "Casinghead gas" means any gas or vapor, or both gas and vapor, indigenous to and produced from a pool classified as an oil pool by the commission.

~~9~~10. "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.

10~~11~~. "Common purchaser for natural gas" means any person now or hereafter engaged in purchasing, from one or more producers, gas produced from gas wells within each common source of supply from which it purchases, for processing or resale.

11~~12~~. "Common purchaser for oil" means every person now engaged or hereafter engaging in the business of purchasing oil in this state.

12~~13~~. "Common source of supply" is synonymous with pool and is a common accumulation of oil or gas, or both, as defined by commission orders.

13~~14~~. "Completion" means an oil well shall be considered completed when the first oil is produced through wellhead equipment into tanks from the ultimate producing interval after casing has been run. A gas well shall be considered complete when the well is capable of producing gas through wellhead equipment from the ultimate producing zone after casing has been run. A dry hole shall be considered complete when all provisions of plugging are complied with as set out in this chapter.

14~~15~~. "Condensate" means the liquid hydrocarbons recovered at the surface that result from condensation due to reduced pressure or temperature of petroleum hydrocarbons existing in a gaseous phase in the reservoir.

15~~16~~. "Cubic foot of gas" means that volume of gas contained in one cubic foot [28.32 liters] of space and computed at a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius].

16~~17~~. "Director" means the director of oil and gas of the industrial commission, the assistant director of oil and gas of the industrial commission, and their designated representatives.

17~~18~~. "Enhanced recovery" means the increased recovery from a pool achieved by artificial means or by the application of energy extrinsic to the pool, which artificial means or application includes pressuring, cycling, pressure maintenance, or injection to the pool of a substance or form of energy but does not include the injection in a well of a substance or form of energy for the sole purpose of (a) aiding in the lifting of fluids in the well, or (b) stimulation of the reservoir at or near the well by mechanical, chemical, thermal, or explosive means.

18~~19~~. "Exception well 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.

~~20. "Fractional proration unit for oil" means a tract of land containing more or less than forty acres [16.19 hectares] predominantly situated within the confines of a pool.~~

19~~21~~. "Gas lift" means any method of lifting liquid to the surface by injecting gas into a well from which oil production is obtained.

20~~22~~. "Gas-oil ratio" means the ratio of the gas produced in cubic feet [cubic meters] to a barrel of oil concurrently produced during any stated period.

21~~23~~. "Gas-oil ratio adjustment" means the reduction in allowable of a high gas-oil ratio proration unit to conform with the production permitted by the limiting gas-oil ratio for the particular pool during a particular proration period.

22~~24~~. "Gas transportation facility" means a pipeline in operation serving one or more gas wells for the transportation of natural gas, or some other device or equipment in like operation whereby natural gas produced from gas wells connected therewith can be transported.

23~~25~~. "Gas well" means a well producing gas or natural gas from a common source of gas supply as determined by the commission.

24~~26~~. "High gas-oil ratio proration unit" means a proration unit with a producing oil well with a gas-oil ratio in excess of the limiting gas-oil ratio for the pool.

25~~27~~. "Injection or input well" means any well used for the injection of air, gas, water, or other fluids into any underground stratum.

26~~28~~. "Limiting gas-oil ratio" means the gas-oil ratio assigned by the commission to a particular oil pool to limit the volumes of casinghead gas which may be produced from the various oil-producing units within that particular pool.

27~~29~~. "Log or well log" means a systematic, detailed, and correct record of formations encountered in the drilling of a well, including commercial electric logs, radioactive logs, dip meter logs, and other related logs.

~~30. "Marginal unit" means a proration unit or fractional proration unit that cannot produce at a rate equal to the top unit allowable for the proration period for the pool.~~

~~31. "Minimum allowable" means the minimum amount of production from an oil or gas well which will encourage the continued operation of such well and below which the well might be threatened with premature plugging and resulting waste.~~

28~~32~~. "Multiple completion" means the completion of any well so as to permit the production from more than one common source of supply.

29~~33~~. "Natural gas or gas" means and includes all natural gas and all other fluid hydrocarbons not herein defined as oil.

~~34. "Nonmarginal unit" means a proration unit or a fractional proration unit that can produce at a rate equal to the top unit allowable for the proration period for the pool.~~

~~35. "Normal unit allowable" means the amount of allowable production allocated to proration units which are producing from a depth of five thousand feet [1,524 meters]or above.~~

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

31~~36~~. "Official gas-oil ratio test" means the periodic gas-oil ratio test made by order of the commission and by such method and means and in such manner as prescribed by the commission.

32~~37~~. "Offset" means a well drilled on a forty-acre [16.19-hectare] tract cornering or contiguous to a forty-acre [16.19-hectare] tract having an existing oil well, or a well drilled on a one hundred sixty-acre [64.75-hectare] tract cornering or contiguous to a one hundred sixty-acre [64.75-hectare] tract having an existing gas well; provided, however, that for wells subject to a fieldwide spacing order, "offset" means any wells located on spacing units cornering or contiguous to the spacing unit or well which is the subject of an inquiry or a hearing.

33~~38~~. "Oil well" means any well capable of producing oil or oil and casinghead gas from a common source of supply as determined by the commission.

34~~39~~. "Operator" is the principal on the bond covering a well and such person shall be responsible for drilling, completion, and operation of the well, including plugging and reclamation of the well site.

35~~40~~. "Overage or overproduction" means the amount of oil or the amount of natural gas produced during a proration period in excess of the amount authorized on the proration schedule.

36~~41~~. "Potential" means the properly determined capacity of a well to produce oil, or gas, or both, under conditions prescribed by the commission.

37~~42~~. "Pressure maintenance" means the injection of gas or other fluid into a reservoir, either to increase or maintain the existing pressure in such reservoir or to retard the natural decline in the reservoir pressure.

38~~43~~. "Proration day" consists of twenty-four consecutive hours which shall begin at seven a.m. and end at seven a.m. on the following day.

3944. "Proration month" means the calendar month which shall begin at seven a.m. on the first day of such month and end at seven a.m. on the first day of the next succeeding month.

~~45. "Proration period" means for oil the proration month and for gas six consecutive calendar months which shall begin at seven a.m. on the first day of a calendar month and end at seven a.m. on the first day of the seventh succeeding month.~~

4046. "Proration schedule" means the periodic order of the commission authorizing the production, purchase, and transportation of oil or of natural gas from the various units of oil or of natural gas proration in allocated pools.

4147. "Proration unit for gas" consists of such geographical area as may be prescribed by special pool rules issued by the commission.

~~48. "Proration unit for oil" consists of a tract of land containing forty acres [16.19 hectares] predominantly situated within the confines of a pool.~~

4249. "Recomplete" means the subsequent completion of a well in a different pool.

4350. "Reservoir" means pool or common source of supply.

4451. "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.

4552. "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.

4653. "Spacing unit" is the area in each pool which is assigned to a well for drilling, producing, and proration purposes in accordance with the commission's rules or orders.

4754. "Stratigraphic test well" means any well or hole, except a seismograph shot hole, drilled for the purpose of gathering information in connection with the oil and gas industry with no intent to produce oil or gas from such well.

4855. "Tank bottoms" means that accumulation of hydrocarbon material and other substances which settle naturally below crude oil in tanks and receptacles that are used in handling and storing of crude oil, and which accumulation contains basic sediment and water in an amount rendering it unsaleable to an ordinary crude oil purchaser; provided, that with respect to lease production and for lease storage tanks, a tank bottom shall be limited to that volume of the tank in which it is contained that lies below the bottom of the pipeline outlet thereto.

~~56. "Top unit allowable for gas" means the maximum number of cubic feet [cubic meters] of natural gas, for the proration period, allocated to a proration unit for gas in an allocated gas pool.~~

~~57. "Top unit allowable for oil" means the maximum number of barrels of oil daily for each calendar month allocated to a proration unit for oil in a pool to nonmarginal units.~~

49~~58~~. "Treating plant" means any plant permanently constructed or portable used for the purpose of wholly or partially reclaiming, treating, processing, or in any manner making tank bottoms or any other waste oils marketable.

~~59. "Underage" means the amount of oil or the amount of natural gas during a proration period by which a given proration unit failed to produce in an amount equal to that authorized on the proration schedule.~~

History: Amended effective January 1, 1983; May 1, 1992; July 1, 1996; December 1, 1996; September 1, 2000; July 1, 2002.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

C. DRILLING

43-02-03-16.3. RECOVERY OF A RISK PENALTY. The following govern the recovery of the risk penalty pursuant to subsection 3 of North Dakota Century Code section 38-08-08 and subsection 3 of North Dakota Century Code section 38-08-09.4:

1. An owner may recover the risk penalty under the provisions of subsection 3 of North Dakota Century Code section 38-08-08, provided the owner gives, to the owner from whom the penalty is sought, a written invitation to participate in the risk and cost of drilling a well, including reentering a plugged and abandoned well, or the risk and cost of reentering an existing well to drill deeper or a horizontal lateral. If the nonparticipating owner's interest is not subject to a lease or other contract for development, an owner seeking to recover a risk penalty must also make a good-faith attempt to have the unleased owner execute a lease.

    a. The invitation to participate in drilling must contain the following:

        (1) The location of the proposed or existing well and its proposed depth and objective zone.

        (2) An itemization of the estimated costs of drilling and completion.

(3) The approximate date upon which the well was or will be spudded or reentered.

(4) The time within which the invitation must be accepted. At least thirty days should be given, for it is presumed that at least thirty days is needed to adequately consider and respond to an invitation. In unusual circumstances, however, the owner seeking the risk penalty may allow less than thirty days in which to respond to the invitation, but in no circumstances may less than fifteen days be allowed.

(5) Notice that the participating owners plan to impose a risk penalty and that the nonparticipating owner may object to the risk penalty by either responding in opposition to the petition for a risk penalty, or if no such petition has been filed, by filing an application or request for hearing with the commission.

b. An election to participate must be in writing.

c. An invitation to participate and an election to participate must be served personally, by mail requiring a signed receipt, by facsimile transmission followed within one business day by mailing, or by overnight courier or delivery service requiring a signed receipt. Failure to accept mail requiring a signed receipt constitutes service.

d. An election to participate is only binding upon an owner electing to participate if the well is spudded or reentry operations are commenced on or before ~~within~~ ninety days after the date the owner extending the invitation to participate sets as the date upon which a response to the invitation is to be received. It also expires if the permit to drill or reenter expires without having been exercised. If an election to participate lapses, a risk penalty can only be collected if the owner seeking it again complies with the provisions of this section.

2. An owner may recover the risk penalty under the provisions of subsection 3 of North Dakota Century Code section 38-08-09.4, provided the owner gives, to the owner from whom the penalty is sought, a written invitation to participate in the unit expense. If the nonparticipating owner's interest is not subject to a lease or other contract for development, an owner seeking to recover a risk penalty must also make a good-faith attempt to have the unleased owner execute a lease.

a. The invitation to participate in the unit expense must contain the following:

(1) A description of the proposed unit expense, including the location, objectives, and plan of operation.

(2) An itemization of the estimated costs.

(3) The approximate date upon which the proposal was or will be commenced ~~commence~~.

(4) The time within which the invitation must be accepted. At least thirty days should be given, for it is presumed that at least thirty days is needed to adequately consider and respond to an invitation. In unusual circumstances, however, the owner seeking the risk penalty may allow less than thirty days in which to respond to the invitation, but in no circumstances may less than fifteen days be allowed.

(5) Notice that the participating owners plan to impose a risk penalty and that the nonparticipating owner may object to the risk penalty by either responding in opposition to the petition for a risk penalty, or if no such petition has been filed, by filing an application or request for hearing with the commission.

b. An election to participate must be in writing.

c. An invitation to participate and an election to participate must be served personally, by mail requiring a signed receipt, by facsimile transmission followed within one business day by mailing, or by overnight courier or delivery service requiring a signed receipt. Failure to accept mail requiring a signed receipt constitutes service.

d. An election to participate is only binding upon an owner electing to participate if the unit expense is commenced within ninety days after the date the owner extending the invitation request to participate sets as the date upon which a response to the request invitation is to be received. If an election to participate lapses, a risk penalty can only be collected if the owner seeking it again complies with the provisions of this section.

e. An invitation to participate in a unit expense covering monthly operating expenses shall be effective for all such monthly operating expenses for a period of five years if the unit expense identified in the invitation to participate is first commenced within ninety days after the date set in the invitation to participate as the date upon which a response to the invitation to participate must be received. An election to participate in a unit expense covering monthly operating expenses is effective for five years after operations are first commenced. If an election to participate in a unit expense comprised of monthly operating expenses expires or lapses after five years, a risk penalty may only be assessed and collected if the owner seeking the penalty once again complies with this section.

3. Upon its own motion or the request of a party, the commission may include in a pooling order requirements relating to the invitation and election to participate, in which case the pooling order will control to the extent it is inconsistent with this section.

History: Effective December 1, 1996; amended effective May 1, 2004; January 1, 2006.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04
38-08-08

43-02-03-18.1. EXCEPTION LOCATION. If upon application for an exception location, the commission finds that a well drilled at the location prescribed by any applicable rule or order of the commission would not produce in paying quantities, that surface conditions would substantially add to the burden or hazard of such well, or that the drilling of such well at a location other than the prescribed location is otherwise necessary either to protect correlative rights, to prevent waste, or to effect greater ultimate recovery from oil and gas, the commission may enter an order, after notice and hearing, permitting the well to be drilled at a location other than that prescribed and shall include in such order suitable provisions to prevent the production from that well of more than its just and equitable share of the oil and gas in the pool. The application for an exception well location shall set forth the names of the lessees of adjoining properties and the names of any unleased mineral owners of the adjoining properties. The application shall be accompanied by a plat or sketch accurately showing the property for which the exception well location is sought, the location of the proposed well, and all other completed and drilling wells on this property and on the adjoining properties. The applicant or its attorney shall certify that a copy of the application has been sent ~~by certified or registered mail~~ to all lessees and all unleased mineral owners of properties adjoining the tract which would be affected by the exception location. If the applicant is the lessee of adjoining tracts that would be affected by the exception, the applicant must give notice, as prescribed above, to its lessors of such tracts.

History: Amended effective January 1, 1983; May 1, 1990; May 1, 1994; July 1, 1996.

General Authority
NDCC 38-08-04
38-08-07

Law Implemented
NDCC 38-08-04
38-08-07

43-02-03-19. RESERVE PIT FOR DRILLING MUD AND DRILL CUTTINGS - RECLAMATION OF SURFACE. In the construction of a drill site, access road, and all associated facilities, the 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.

In order to assure a supply of proper material or mud-laden fluid to confine oil, gas, or water to its native strata during the drilling of any well, each operator shall provide, before drilling is commenced, a container or reserve pit of sufficient size to contain said material or fluid, and the accumulation of drill cuttings. A reserve pit 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. In special circumstances, the director may prohibit construction of a reserve pit or may impose more stringent pit <u>construction and</u> reclamation requirements. 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.

Reserve 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.

When required by the director, the reserve pit or site or appropriate parts thereof must be fenced.

1. Within a reasonable time, but not more than one year, after the completion of a well, the reserve pit shall be reclaimed. Prior to reclaiming the pit, the operator or the operator's agent shall file a sundry notice (form 4) 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:

    a. The name and address of the reclamation contractor;

    b. The name and address of the surface owner;

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

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

    All pit water and oil on the pit 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 and surface sloped, when practicable, to promote surface drainage away from the reclaimed pit area.

2. Within a reasonable time, but not more than one year, after a well is plugged, the well site, access road, and other associated facilities constructed for the well shall be reclaimed as closely as practicable to original condition, or in the case of a completed well, the unused portion of the site shall be reclaimed. Prior to site reclamation, the operator or the operator's agent shall file a sundry notice (form 4) with the director and obtain approval of a reclamation plan. 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;

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

    d. Reseeding plans, if applicable.

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.

3. Gravel or other surfacing material shall be removed 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.

4. 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.

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

6. 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: Amended effective March 1, 1982; January 1, 1983; May 1, 1992; July 1, 2002.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-03-22. DEFECTIVE CASING OR CEMENTING. In any well that appears to have defective casing or cementing, the operator shall report the defect to the director on a sundry notice (form 4). 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 considered to have defective casing.

History: Amended effective January 1, 1983; May 1, 1992; September 1, 2000; July 1, 2002; May 1, 2004.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-03-28. SAFETY REGULATION. During drilling operations all oil wells shall be cleaned into a pit or tank, not less than forty feet [12.19 meters] from the derrick floor and one hundred fifty feet [45.72 meters] from any fire hazard.

All flowing oil wells must be produced through an approved oil and gas separator or emulsion treater of ample capacity and in good working order. No boiler, portable electric lighting generator, or treater shall be placed nearer than one hundred fifty feet [45.72 meters] to any producing well or oil tank. Placement as close as 125 feet [xx.xx meters] may be allowed if a flame arrestor is utilized on the equipment. 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.

No well shall be drilled nor production equipment installed less than five ~~three~~ hundred ~~and thirty~~ feet [xxx.xx ~~100.58~~ meters] from an occupied dwelling ~~a building or residence~~ unless agreed to in writing by the surface owner 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.

History: Amended effective January 1, 1983; May 1, 1990; September 1, 2000; January 1, 2006.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-03-30. NOTIFICATION OF FIRES, LEAKS, SPILLS, OR BLOWOUTS. All persons controlling or operating any well, pipeline, receiving tank, storage tank, or production facility into which oil, gas, or water is produced, received, stored, processed, or through which oil, gas, 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. 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 ~~within ten days~~ by a written report within ten days after clean up of the incident, unless ~~if~~ deemed unnecessary ~~necessary~~ 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. If any such incident occurs or travels offsite of a facility, the persons, as named above, responsible for proper notification shall also notify the surface owners upon whose land the incident occurred or traveled.

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

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-03-31. WELL LOG, COMPLETION, AND WORKOVER REPORTS. After the plugging of a well, a plugging record (form 7) shall be filed with the director. 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) shall be filed with the director. In no case shall oil or gas 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 cause to be run a gamma ray log from total depth to ground level elevation of the well bore. The operator shall cause to be run a log from which the presence and quality of cement can be determined in every well in which production or intermediate casing has been set. The obligation to log may be waived by the director if the necessity therefor 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. Two copies of all logs run shall be submitted to the director free of charge. Logs shall be submitted as one paper 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, and noninterpretive lithologic logs or sample descriptions if compiled by the operator.

All information furnished to the director on new permits, except the operator name, well name, location, spacing or drilling unit description, spud date, rig contractor, and any production runs, shall be kept confidential for not more than six months if requested by the operator in writing. The six-month period shall commence on the date the well is completed or the date the written request is received, whichever is earlier. If the written request accompanies the application for permit to drill or is filed after permitting but prior to spudding, the six-month period shall commence on the date the well is spudded.

All information furnished to the director on recompletions or reentries, except the operator name, well name, location, spacing or drilling unit description, spud date, rig contractor, and any production runs, shall be kept confidential for not more than six months if requested by the operator in writing. The six-month period shall commence on the date the well is completed or the date the well was approved for recompletion or reentry, whichever is earlier. Any information furnished to the director prior to approval of the recompletion or reentry shall remain public.

Approval must be obtained on a sundry notice (form 4) 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) with the director. The report shall present a

detailed account of all work done and the date of such work; the daily production of oil, gas, 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) of such installation. The notice shall include all pertinent information on the pump and the operation thereof 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.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; May 1, 1994; July 1, 1996; September 1, 2000; July 1, 2002; January 1, 2006.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

D. PLUGGING OF WELLS

43-02-03-55. ABANDONMENT OF WELLS - SUSPENSION OF DRILLING.

1. The removal of production equipment or the failure to produce oil or gas, other than a gas well shut in for lack of a market, 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. An abandoned well must be plugged and its site must be reclaimed pursuant to sections 43-02-03-34 and 43-02-03-19.

2. The director may waive for one year the requirement to plug and reclaim an abandoned well 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 oil and gas. 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. <u>A fee of one hundred dollars shall be submitted with each application to temporarily abandon or extend the temporary abandonment status of any well.</u>

3. In addition to the waiver in subsection 2, the director may also waive the duty to plug and reclaim an abandoned well for any other good cause found 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 43-02-03-34 and 43-02-03-19.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; August 1, 1999.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

G. OIL PRORATION AND ALLOCATION

43-02-03-63. REGULATION OF POOLS. To prevent waste and to protect correlative rights, when the commission finds that total production in an area significantly exceeds the reasonable market demand and undue marketing discrimination is occurring, the commission ~~shall~~ may prorate or distribute the allowable production among ~~the~~ proration units ~~and fractional proration units in a pool~~ upon a reasonable basis through rules, regulations, or orders pertaining to any pool or area after notice and hearing.

~~After notice and hearing, the commission, in order to prevent waste and protect correlative rights, may promulgate rules, regulations, or orders pertaining to any pool~~.

History: Amended effective January 1, 1983.

General Authority
NDCC 38-08-04
38-08-06

Law Implemented
NDCC 38-08-04
38-08-06

43-02-03-64. RATE OF PRODUCING WELLS. In allocated oil and gas pools the owner or operator of any ~~producing~~ proration unit shall not produce from ~~any proration~~ the unit during any proration period more oil or gas than the allowable production from such unit~~s~~ as shown by the proration schedule, provided that such owners or operators shall be permitted to maintain a uniform rate of production for each unit during the proration period. In order to maintain a uniform rate of production from the pool during any proration period, any operator may produce a total volume of oil and gas equal to that shown on the applicable proration schedule plus ~~or minus~~ five days ~~top~~ unit allowable, and any such overproduction may ~~shall~~ be deducted from the total allowable for the well in the second month following~~; and any such underproduction shall be added to the total allowable on the well for the second month following; provided, that if the underproduction shall exceed five days top unit allowable for the unit, none of the underproduction shall be added to the allowable for the second month following, except as provided in section 43-02-03-65~~.

~~A fractional proration unit shall be allowed to produce only in the proportion that the acreage content thereof bears to forty acres [16.19 hectares].~~

Where the commission has established ~~adopted~~ spacing ~~special~~ rules in any pool, proration units shall consist of spacing units. ~~wells drilled in accordance with those special rules shall be allowed to produce a daily amount of oil and gas equal to the top unit allowable as set by the commission multiplied by a factor, the numerator of which shall be the number of acres assigned to a spacing unit in the pool and the denominator of which shall be forty.~~

History: Amended effective January 1, 1983; September 1, 2000.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04
38-08-06	38-08-06

43-02-03-65. AUTHORIZATION FOR PRODUCTION, PURCHASE, AND TRANSPORTATION.

When necessary the commission shall hold a hearing to set proration ~~the normal~~ unit allowables ~~allowable~~ for the state.

The commission shall consider all evidence of market demand for oil and gas, including sworn statements of individual demand as submitted by each purchaser or buyer in the state, and determine the amount to be produced from all pools. The amount so determined will be allocated among the various pools in accordance with existing regulations and in each pool in accordance with regulations governing each pool. In allocated pools, effective the first day of each proration period, the commission will issue a proration schedule which will authorize the production of oil and gas from the various units in strict accordance with the schedule, and the purchase and transportation of such production. Allowable for wells completed after the first day of the proration period will become effective from the date of well completion. A supplementary order will be issued by the commission to the operator of a newly completed or recompleted well, and to the purchaser or transporter of the production from a newly completed or recompleted well, establishing the effective date of completion, the amount of production permitted during the remainder of the proration period, and the authority to purchase and transport same from said proration unit~~s and fractional proration units~~.

~~When it appears that a single normal unit allowable will not supply the amounts of oil or gas required by the markets available, the commission may designate separate marketing districts within the state and prescribe separate normal unit allowables for each district~~.

~~A marginal unit shall be permitted to produce any amount of oil which it is capable of producing up to and including the top unit allowable for that particular pool for the particular proration period; provided the operator of such unit shall file with the commission for a supplemental order covering the difference between the amount shown on the proration schedule and the top unit allowable for the pool. The commission shall issue such supplemental order setting forth the daily amount of~~

~~production which such unit shall be permitted to produce for the particular proration period and shall furnish such supplemental order to the operator of the unit and a copy thereof to the transporter authorized to transport the production from the unit. Underages may be made up or unavoidable and lawful overages compensated for during the third proration period next following the proration period in which such underages or overages occurred.~~

~~All back allowables authorized for purchase will be published in a proration schedule. No back allowable, except as provided in section 43-02-03-64, shall be placed on the proration schedule unless requested by the producer. In requesting back allowables, the producer shall indicate the reason for the underage and the director may approve any portion of the request. The usual grounds for back allowable which may be considered are (1) failure of purchaser to transport assigned allowable, (2) mechanical failure or repairs to well equipment during the proration period, and (3) testing or gathering engineering data.~~

~~In order to preclude premature plugging, a common purchaser within its purchasing area is authorized and directed to make one hundred percent purchases from units of settled production producing ten barrels or less daily of oil, or sixty thousand cubic feet [169.9 cubic meters] or less daily of gas, in lieu of ratable purchases or takings. Provided such purchaser's takings are curtailed below ten barrels per unit of oil daily, or below sixty thousand cubic feet [169.9 cubic meters] per unit of gas daily, then such purchaser is authorized and directed to purchase equally from all such units within its purchasing area regardless of their producing ability insofar as they are capable of producing.~~

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04
38-08-06	38-08-06

43-02-03-66. APPLICATION FOR ALLOWABLE ON NEW OIL WELLS. No well shall be placed on the proration schedule until a completion report (form 6) has been filed with the director.

The discovery well of any ~~first four wells in any field or~~ pool hereafter discovered shall be allowed to produce at a maximum efficient rate ~~any amount of oil it is capable of producing~~ until such time as proper spacing is set for the pool ~~but in no case to exceed a maximum of two hundred barrels of oil per day if the same can be done without waste and provided further, that a market can be obtained for such oil produced.~~

~~The allowable production provided for above shall continue in effect for a period of not more than eighteen months from the date of completion of the first well in the field or pool, or until the completion of the fifth well in the pool, whichever shall occur first~~, and shall produce thereafter, only pursuant to the general proration rules and regulations of the commission.

~~The producer or operator of any well claiming a discovery allowable under this section shall report to the director, not later than the tenth of each month, the results of a potential test, made on or about the first day of the month, in accordance with the provisions of section 43-02-03-40.~~

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04
38-08-06 — 38-08-06

43-02-03-67. OIL PRORATION. ~~The allocation between pools shall be in accordance with the top of the producing depth of the pool and the corresponding proportional factor set out below. The depth to the casing shoe or the top perforation in the casing, whichever is the higher in the first well completed in a pool determines the depth classification for the pool. Top unit allowables shall be calculated for each of the several ranges of depth in the following proportions:~~

~~**Pool Depth Range**~~	~~**Proportional Factor**~~
~~From 0 to 5,000 feet~~	
~~5,000 to 6,000 feet~~	~~1.33~~
~~6,000 to 7,000 feet~~	~~1.77~~
~~7,000 to 8,000 feet~~	~~2.33~~
~~8,000 to 9,000 feet~~	~~3.00~~
~~9,000 to 10,000 feet~~	~~3.77~~
~~10,000 to 11,000 feet~~	~~4.67~~
~~11,000 to 12,000 feet~~	~~5.67~~
~~below 12,000 feet~~	~~6.75~~

~~The normal unit allowable shall be set by the commission and shall be uniform for all proration units within all pools producing from five thousand feet [1524 meters] or above.~~

~~Top unit allowables for each range of depth shall then be determined by multiplying the normal unit allowable by the proportional factor for each depth range as set out in the table hereinabove; any fraction of a barrel shall be regarded as a full barrel for both normal and top unit allowables.~~

At the beginning of each calendar month, the distribution or proration to the respective proration units ~~in each pool~~ shall be changed in order to take into account all new wells which have been completed and were not in the proration schedule during the previous calendar month. Where any well is completed between the first and last day of the calendar month, its proration unit shall be assigned an allowable ~~in accordance with whether such unit is marginal or nonmarginal,~~ beginning at seven a.m., on the date of completion and for the remainder of that calendar month.
History: Amended effective January 1, 1983.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04
38-08-06 — 38-08-06

43-02-03-68. GAS-OIL RATIO LIMITATION. In allocated pools containing a well or wells producing from a reservoir which contains both oil and gas, each proration unit shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the ~~top~~ proration unit oil allowable ~~for the depth of the pool and~~ currently assigned to the pool. In the event the commission has not set a gas-oil ratio limit for a particular oil pool, the limiting gas-oil ratio shall be two thousand cubic feet [56.63 cubic meters] of gas for each barrel of oil produced.

A gas-oil limit shall be placed on all allocated oil pools, and all proration ~~units or fractional proration~~ units having a gas-oil ratio exceeding the limit for the pool shall be adjusted unless previously exempted by the commission after hearing, in accordance with the following formula:

1. Any proration unit which, on the basis of the latest official gas-oil ratio test has a gas-oil ratio in excess of the limiting gas-oil ratio for the pool in which it is located, shall be permitted to produce ~~daily~~ that number of barrels of oil which shall be determined by multiplying the proration ~~current top~~ unit allowable by the fraction, the numerator of which shall be the limiting gas-oil ratio for the pool and the denominator of which shall be the official gas-oil ratio test of the well.

2. Any unit containing a well or wells producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the proration ~~top~~ unit allowable currently assigned to the pool.

~~3. A marginal unit shall be permitted to produce the same total volume of gas which it would be permitted to produce if it were a nonmarginal unit.~~

~~4. All gas produced with the current oil allowable determined in accordance with this rule shall be deemed to have been lawfully produced.~~

All proration units to which gas-oil ratio adjustments are applied shall be so indicated in the proration schedule with adjusted allowables stated. The adjustment shall be made effective on the first day of the month following that in which the gas-oil ratio tests were reported for the pool, as set forth in the special field rules applicable to the pool.

In cases of new pools the limiting gas-oil ratio shall be two thousand cubic feet [56.63 cubic meters] per barrel until such time as changed by the commission after a hearing. After notice and hearing, the commission shall determine or redetermine, the specific gas-oil ratio limit which is applicable to a particular allocated oil pool.

History: Amended effective January 1, 1983.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04
38-08-06	38-08-06

H. GAS PRORATION AND ALLOCATION

43-02-03-69. ALLOCATION OF GAS PRODUCTION. When the commission determines that allocation of gas production in a designated gas pool is necessary to prevent waste, and to protect correlative rights, the commission, after notice and hearing, shall consider the nominations of purchasers from that gas pool and other relevant data, and shall fix the allowable production of that pool, and shall allocate production among the proration units ~~and fractional proration units~~ in the pool delivering to a gas transportation facility upon a reasonable basis.

The commission shall include in the proration schedule of such pool any proration unit ~~or fractional proration unit~~ which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas producible from such proration unit ~~or fractional proration unit~~.

History: Amended effective January 1, 1983.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04
38-08-06	38-08-06

Create new Chapter:

GEOLOGIC STORAGE OF CARBON DIOXIDE
CHAPTER 43-02-04.1

43-02-04.1-01. DECLARATION OF POLICY.

The commission declares that (1) the geologic storage of carbon dioxide will benefit the citizens of the state and the state's environment by reducing greenhouse gas emissions; (2) carbon dioxide is a valuable commodity to the citizens of the state; (3) geologic storage of carbon dioxide gas may allow for the orderly withdrawal as appropriate or necessary, thereby allowing carbon dioxide to be available for commercial, industrial, or other uses, including the use of carbon dioxide for enhanced recovery of oil and gas (EOR).

The commission, its agents, representatives, and employees are charged with the duty and obligation of enforcing all rules and statutes of North Dakota relating to all persons and property necessary to administer and enforce effectively the provisions of this article concerning the geologic storage of carbon dioxide. In exercising such jurisdiction and authority granted to it, the commission may conduct hearings and enforce rules, regulations, and orders concerning geologic storage of carbon dioxide.

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-02. Definitions.

The terms used throughout this chapter have the same meaning as in chapter 43-02-03 and North Dakota Century Code chapter 38-08 except:

(a) **"CO_2"** means carbon dioxide of sufficient purity and quality as to not compromise the safety and efficiency of the reservoir to effectively contain the CO_2.

(b) **"CO_2 Facility"** (CF) means, all surface and subsurface infrastructure including wellhead equipment, downhole well equipment, compression facilities and CO_2 flow lines from injection facilities to wells within the GSU, monitoring instrumentation, injection equipment, and offices. CF does not include the main transportation pipeline to the GSU and pump stations along that pipeline.

(c) **"CO_2 flow lines"** means the pipeline transporting the CO_2 from the CF injection facilities to the wellhead.

(d) **"CO_2 injection well"** means a well used to inject CO_2 into and/or withdraw CO_2 from a reservoir.

(e) **"CO_2 Storage Project"** (CSP) means CO_2 Storage Project in entirety including CF and GSU.

(f) **"CSP Closure Period"** means that period of time (10 years unless otherwise designated by the commission) from the permanent cessation of active CSP injection operations until the expiration of the CSP performance bond, unless monitoring efforts following the operational period demonstrate to the commission that a different time frame is appropriate.

(g) **"CSP Operational Period"** means the period of time in which injection occurs.

(h) **"CSP Operator"** means any person, corporation, partnership, limited liability company, or other entity authorized by the commission to operate a storage facility and required by commission to hold the permit.

(i) **"CSP Permit"** means the permit issued by the state or province to operate a CSP.

(j) **"CSP Post Closure Period"** means that period of time after the release of the CSP performance bond.

(k) **"Formation fracture pressure"** means the pressure, measured in pounds per square inch, which, if applied to a subsurface formation, will cause that formation to physically fracture.

(l) **"Fresh water"** means an underground source of drinking water unless otherwise defined by the commission.

(m) **"Geologic Storage"** means the permanent or short term underground storage of carbon dioxide in a reservoir.

(n) **"Geological Storage Unit"** (GSU) means the reservoir used by an entity that holds the commission permit authorizing CO_2 injection activities.

(o) **"Reservoir"** means for the purposes of these rules any subsurface sand, stratum, formation, or cavity or void (whether natural or artificially created) including oil and natural gas reservoirs, saline formations and coal seams, suitable for or capable of being made suitable for the injection and safe and efficient storage of CO_2 therein.

(p) **"Commission"** means the state agency designated by the state for purposes of these regulations.

(q) **"Subsurface observation well"** means a well either completed or recompleted for the purpose of observing subsurface phenomena, including the presence of CO_2, pressure fluctuations, fluid levels and flow, temperature, and in situ water chemistry.

(r) **"Underground source of drinking water"** (USDW) means an aquifer or any portion thereof which supplies drinking water for human consumption, or in which the ground water contains fewer than ten thousand milligrams per liter total dissolved solids and which is not an exempted aquifer.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-03. General Requirements

(a) The use of a reservoir as a storage facility for carbon dioxide is hereby authorized, provided that the commission shall first enter an order, after public notice and hearing, approving such proposed geologic storage of carbon dioxide and designating the horizontal and vertical boundaries of the geologic storage facility. In order to establish a storage facility for carbon dioxide, the commission shall find as follows:

(1) That the storage facility and reservoir are suitable and feasible for the injection and storage of carbon dioxide;

(2) That a good faith effort has been made to obtain the consent of a majority of the owners having property interests affected by the storage facility and that the operator intends to acquire any remaining interest by eminent domain or otherwise allowed by statute;

(3) That the use of the storage facility for the geologic storage of carbon dioxide will not contaminate other formations containing fresh water or oil, gas, coal or other commercial mineral deposits; and

(4) That the proposed storage will not unduly endanger human health and the environment and is in the public interest.

(b) Upon the commission's issuance of an order of approval as set forth above, said order, or a certified copy thereof, shall be filed for record in the probate court [or other appropriate entity of jurisdiction where land records are filed] of the county or counties in which the storage facility is to be located.

(c) Prior to commencing injection of carbon dioxide, the storage operator shall record in the county or counties in which the storage facility is located, and with the commission, a certificate, entitled "Certificate of Operation of Storage Facility," which shall contain a statement that the storage operator has acquired by eminent domain or otherwise all necessary ownership rights with respect to the storage facility, and the date upon which the storage facility shall be effective.

(d) If any depleted pool for any previously established field(s) or producing unit(s) for hydrocarbons is contained within the boundaries of the storage facility, the commission may in its order of approval for such storage facility order that such field(s) or unit(s) shall be dissolved as of the effective date of the storage facility as set forth in the Certificate of Operation of Storage Facility.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-03.1. Protection against pollution and escape of carbon dioxide

The commission shall issue such orders, permits, certificates, rules and regulations, including establishment of appropriate and sufficient financial sureties as may be necessary, for the purpose of regulating the drilling, operation, and well plugging and abandonment and removal of surface buildings and equipment of the storage facility in order to protect the storage facility against pollution, invasion, and the escape or migration of carbon dioxide.

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-03.2 Eminent domain or other applicable statutory authority.

(a) Any storage operator is hereby empowered, after obtaining approval of the commission as herein required, to exercise the right of eminent domain provided by law, to acquire all surface and subsurface rights and interests necessary or useful for the purpose of operating the storage facility, including easements and rights-of-way across lands for transporting carbon dioxide among facilities constituting said storage facility. Such power shall be exercised under the procedure provided by other applicable laws relating to eminent domain. [1]

(b) No rights or interests in storage facilities acquired for the injection, storage and state authorized withdrawal of carbon dioxide by a party who has obtained an order from the commission under the provisions of Section 2, shall be subject to the exercise of the right of eminent domain authorized by the article. The commission, however, may reopen an earlier order for the purpose of balancing the interests of both projects. Nothing in this article shall alter or revise any power of eminent domain that may exist under any other authority.

(c) The right of eminent domain granted in this section shall not prevent the right of the owner of said land or of other rights therein to drill through the storage facility so appropriated in such manner as shall comply with the rules and regulations of the commission issued for the purpose of protecting the storage facility against pollution or invasion and against the escape or migration of carbon dioxide. Furthermore, the right of eminent domain granted in this section shall not prejudice to the rights of the owners of said lands or other rights or interests therein as to all other uses not acquired for the storage facility.

43-02-04.1-03.3. Cooperative Agreements.

The commission is authorized to enter into cooperative agreements with other governments or government entities for the purpose of regulating carbon dioxide storage projects which extend beyond state regulatory authority under this article.

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-03.4. Site Access

(a) The commission shall, at all times, have access to and may inspect all CO_2 storage operations and records for the purpose of determining that performance is being conducted in accordance with

the CSP permit, or the requirements pursuant to Sections 3.0–9.0, or in accordance with the orders of the commission approving CO_2 storage operations.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-03.5. CSP Permit Transfer

(a) Transfer Notification by Transferor: The CSP operator shall notify the commission, in writing, in such form as the commission may direct, of the sale, assignment, transfer, conveyance, exchange, or other disposition of the CSP by the operator of the CSP as soon as is reasonably possible, but in no event later than the date that the sale, assignment, transfer, conveyance, exchange, or other disposition becomes final. The operator shall not be relieved of responsibility for the CSP until the commission approves the sale, assignment, transfer, conveyance, exchange, or other disposition, in writing, and the person or entity acquiring the CSP is in compliance with all appropriate requirements. The operator's notice shall contain all of the following:

(1) The name and address of the person or entity to whom the CSP was or will be sold, assigned, transferred, conveyed, exchanged, or otherwise disposed.

(2) The name and location of the CSP, and a description of the land upon which the CSP is situated.

(3) The date that the sale, assignment, transfer, conveyance, exchange, or other disposition becomes final.

(4) The date when possession was or will be relinquished by the operator as a result of that disposition.

(b) Transfer Notification by Transferee: Every person or entity who acquires the right to operate a CSP, whether by purchase, transfer, assignment, conveyance, exchange, or other disposition, shall, as soon as it is reasonably possible, but not later than the date when the acquisition of the CSP becomes final, notify the commission in writing, of the person's or entity's operation. The acquisition of a CSP shall not be recognized as complete by the commission until the new operator provides all of the following material:

(1) The name and address of the person or entity from whom the CSP was acquired.

(2) The name and location of the CSP, and a description of the land upon which the CSP is situated.

(3) The date when the acquisition becomes final.

(4) The date when possession was or will be acquired.

(5) Performance bonds required by Geologic CO_2 Storage regulations 4.0 (10) and (11).

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-04. CO_2 Storage Project (CSP) Permit

(a) No CSP shall be constructed or operated without:

(1) the CSP operator holding the necessary and sufficient property rights for construction and operation of the CSP. The CSP operator is deemed to be holding such rights for any individual property to the extent that the applicant has initiated unitization or eminent domain proceedings related to that property and thereby gained the right of access to the property. The intention of the CSP operator to employ unitization or eminent domain to acquire property rights shall be included in public notice as defined in Section 5.0; and

(2) Obtaining a license from the commission.

(b) Application for CSP permit shall be submitted to the commission as required and shall include the following:

(1) A current site map showing the boundaries of the GSU, the location and well number of all proposed CO_2 injection wells, including any subsurface observation wells and the location of all other wells including cathodic protection boreholes and the location of all pertinent surface facilities within the boundary of the CSP;

(2) A technical evaluation of the proposed CSP including but not limited to the following:

(A) The name of the GSU;

(B) The name, description, and average depth of the reservoir or reservoirs to be utilized for geologic CO_2 storage;

(C) A geologic and hydrogeologic evaluation of the GSU, including an evaluation of all existing information on all geologic strata overlying the GSU including the immediate caprock containment characteristics and all designated subsurface monitoring zones. The evaluation shall include any available geophysical data and assessments of any regional tectonic activity, local seismicity and regional or local fault zones, and a comprehensive description of local and regional structural or stratigraphic features. The evaluation shall focus on the proposed CO_2 storage reservoir or reservoirs and a description of mechanisms of geologic confinement, including but not limited to rock properties, regional pressure gradients, structural features, and adsorption characteristics with regard to the ability of that confinement to prevent migration of CO_2 beyond the proposed storage reservoir. The evaluation shall also identify any productive oil and natural gas zones occurring stratigraphically above, below or within the GSU and any freshwater-bearing horizons known to be developed in the immediate vicinity of the GSU. The evaluation shall include exhibits and plan view maps showing the following:

(i) All wells, including but not limited to, water, oil, and natural gas exploration and development wells, and other man-made subsurface structures and activities, including coal mines, within one mile of the outside boundary of the GSU;

(ii) All manmade surface structures that are intended for temporary or permanent human occupancy within the GSU and within one mile of the outside boundary of the GSU;

(iii) Any regional or local faulting;

(iv) An isopach map of the proposed CO_2 storage reservoir or reservoirs;

(v) An isopach map of the primary and any secondary containment barrier;

(vi) A structure map of the top and base of the storage reservoir or reservoirs;

(vii) Identification of all structural spill points or stratigraphic discontinuities

controlling the isolation of stored CO_2 or associated fluids;

(viii) An evaluation of the potential displacement of in situ water and the potential impact on groundwater resources, if any; and

(ix) Structural and stratigraphic cross-sections that describe the geologic conditions at the reservoir.

(D) A review of the data of public record for all wells within the CSP Permit, which penetrate the reservoir or primary and/or secondary seals overlying the reservoir designated as the CO_2 storage reservoir, and those wells that penetrate the geologic CO_2 storage reservoir within one mile, or any other distance as deemed necessary by the commission, of the boundary of the GSU. This review shall determine if all abandoned wells have been plugged in a manner that prevents the movement of CO_2 or associated fluids from the geologic CO_2 storage reservoir. The review required under this paragraph shall be conducted by a geologist or engineer;

(E) The proposed calculated maximum volume and areal extent for the proposed GSU using a method acceptable to and filed with the commission;

(F) The proposed maximum bottom hole injection pressure to be utilized at the reservoir. The maximum allowed injection pressure, measured in psig, shall be no greater than 90 percent or other injection pressures approved by the commission of the formation fracture pressure as determined by a step rate test or other method approved by the commission. The GSU shall not be subjected to injection pressures in excess of the calculated fracture pressure even for short periods of time. Higher operating pressures may be allowed if approved by the commission. The application, if approved by the commission, shall be subject to any conditions established by the commission;

(G) The proposed maximum long-term GSU pressure and the necessary technical data to support the proposed GSU storage pressure request.

(3) The extent of the CO_2, determined by utilizing all available geologic and reservoir engineering information, and the projected response and storage capacity of the GSU;

(4) A detailed description of the proposed CF public safety and emergency response plan. The plan shall detail the safety procedures concerning the facility and residential, commercial, and public land use within one mile, or any other distance as deemed necessary by the commission, of the outside boundary of the CSP Permit. The public safety and emergency response procedures shall include contingency plans for CO_2 leakage from any well, flow lines or other permitted facility. The public safety and emergency response procedures shall also identify specific contractors and equipment vendors capable of providing necessary services and equipment to respond to such CO_2 injection well leaks or loss of containment from CO_2 injection wells or the CO_2 storage reservoir. These emergency response procedures should be updated as necessary throughout the operational life of the permitted storage facilities.

(5) A detailed worker safety plan that addresses CO_2 safety training and safe working procedures at the CF;

(6) A corrosion monitoring and prevention plan for all wells and surface facilities;

(7) A CF leak detection and monitoring plan for all wells and surface facilities. The approved leak detection and monitoring plan shall address:

(A) Identification of potential release to the atmosphere;

(B) Identification of potential degradation of groundwater resources with particular emphasis on USDWs; and

(C) Identification of potential migration of CO_2 into any overlying oil and natural gas reservoirs.

(8) A GSU leak detection and monitoring plan utilizing subsurface observation wells to monitor any movement of the CO_2 volume outside of the permitted GSU. This may include the collection of baseline information of CO_2 background concentrations in groundwater, surface soils, and chemical composition of in situ waters within the GSU. The approved subsurface leak detection and monitoring plan shall be dictated by the site characteristics as documented by materials submitted in support of the application with regard to CO_2 containment and address:

(A) Identification of potential release to the atmosphere;

(B) Identification of potential degradation of groundwater resources with particular emphasis on USDWs; and

(C) Identification of potential migration of CO_2 into any overlying oil and natural gas reservoirs.

(9) The proposed well casing and cementing program detailing compliance with Section 6.0;

(10) A performance bond covering the surface facility to the commission in an amount as established by the commission. The amount of the bond shall be sufficient to provide financial assurance to the commission to cover the abandonment of the CSP or remediation of facility leaks should the CSP operator not perform as required or cease to exist. The CSP bond shall be maintained for ten years after closure of the facility in accordance with Section 9.0 below;

(11) A performance bond for each CO_2 injection and subsurface observation well to the commission in an amount as established by the commission. The amount of the bond shall be sufficient to provide financial assurance to the commission to cover the plugging and abandonment or the remediation of a CO_2 injection and/or subsurface observation well should the CSP operator not perform as required in accordance with the permit or cease to exist;

(12) Any other information that the commission requires; and

(13) A closure plan.

History: Amended effective January 1, 2008.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-04.1-04.1. Amendment to CSP Permit

(a) The following changes to the original CSP permit conditions will require compliance with all the provisions of Section 4.1 above:

(1) Any change in the original areal extent of the CSP permit;

(2) Utilization of other reservoirs not specified in the original CSP permit;

(3) Any proposed increase in the permitted CO_2 storage volume; and

(4) Any change in the chemical composition of the injected CO_2 from the CO_2 composition at the time of permitting.

(b) Other significant changes to approved operational parameters contained in the original CSP permit will require compliance with Section 4.1 (b).

History: Amended effective January 1, 2008.
General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-04.1-05. Amalgamation of Subsurface Rights to Operate GSU

(a) Each application required under Section 4 above shall include a public hearing before the commission for the purposes of joining the necessary property ownership rights, as defined by the state or before the commission responsible for amalgamating these rights. These hearings at the discretion of the state regulatory agencies may be combined and heard simultaneously.
(b) Each applicant for a CSP shall give notice of the filing of an application on or before the date the application is filed with the commission by mailing notice via first class mail to the following:

(1) Each operator of hydrocarbon or other mineral extraction activities, or mineral lessee of record within one-half mile external to the boundary of the proposed CSP Permit;

(2) Each owner of record of the surface property and minerals within the boundaries of the proposed CSP Permit;

(3) Each owner of record of the surface property and minerals within one-half mile external to the boundary of the proposed CSP Permit; and

(4) Any other parties as required by the commission.

(c) The above notice shall contain a legal description of the proposed CSP Permit along with the date, time and place of the hearing before the commission and include notice of the right to file comments.
(d) In addition to mail notice of the above parties, public notice via publication shall be required. The public notice shall indicate that an application has been filed with the commission for a CSP and indicate the location of the proposed project and the date, time and place of the hearing before the commission to determine issuance of the application. Publication shall be in a newspaper of statewide circulation and in a local newspaper in a county or parish newspaper of each county/parish in which the CSP is located. The notice shall indicate that objections may be filed within 15 days of the date of publication.
(e) Objections received by the commission shall be in writing and specify the nature of the objection.
(f) Upon review of the application submitted in accordance with Section 4 above and following the Rights Amalgamation Hearing specified in this section, authorization to commence construction of the CSP shall be issued following approval by the commission.

History: Amended effective January 1, 2008.
General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

43-02-04.1-06. CSP Well Permit Application Requirements

(a) Following receipt of authorization to commence the CSP issued by the commission in accordance with Section 4 above, the applicant shall submit applications to drill, convert or, upon demonstration of mechanical integrity, re-enter a previously plugged and abandoned well for the CO_2 storage purposes.

(b) Application for permits to drill, deepen, convert, re-enter (drill out a previously plugged well) or operate a well shall be submitted on a form as prescribed by the commission and shall include at a minimum:

(1) A plat prepared by a licensed land surveyor showing the location of the proposed CO_2 injection or subsurface observation well. The plat shall be drawn to the scale of one (1) inch equals one thousand (1,000) feet, unless otherwise stipulated by the commission and shall show distances from the proposed well to the nearest GSU boundary. The plat shall show the latitude and longitude of the well in decimal degrees to five (5) significant digits. The plat shall also show the location and status of all other wells that have been drilled within one-fourth (1/4) mile, or any other distance deemed necessary by the commission, of the proposed CO_2 injection or subsurface observation well;

(2) A prognosis specifying the drilling, completion, or conversion procedures for the proposed CO_2 injection or subsurface observation well;

(3) A well bore schematic showing the name, description, and depth of the proposed reservoir and the depth of the deepest USDW; a description of the casing in the CO_2 injection or subsurface observation well, or the proposed casing program, including a full description of cement already in place or as proposed; and the proposed method of testing casing before use of the CO_2 injection well;

(4) A geophysical log, if available, through the reservoir to be penetrated by the proposed CO_2 injection well or if a CO_2 injection or subsurface observation well is to be drilled, a complete log through the reservoir from a nearby well is permissible. Such log shall be annotated to identify the estimated location of the base of the deepest USDW, showing the stratigraphic position and thickness of all confining strata above the reservoir and the stratigraphic position and thickness of the reservoir;

(5) The payment of an application fee of $100.

(c) No later than the conclusion of well drilling and completion activities, a permit application shall be submitted to operate a CO_2 injection well and shall include at a minimum:

(1) A schematic diagram of the surface injection system and its appurtenances;

(2) A final well bore diagram showing the name, description, and depths of the reservoir and the base of the deepest USDW; a diagram of the CO_2 injection well depicting the casing, cementing, perforation, tubing, and plug and packer records associated with the construction of the CO_2 injection well;

(3) A complete dual induction or equivalent log through the reservoir of the CO_2 injection well. Such log for wells drilled for CO_2 injection operations shall be run prior to the setting of casing through the CO_2 storage reservoir. Logs shall be annotated to identify the estimated location of the base of the deepest USDW, showing the stratigraphic position and thickness of all confining strata above the reservoir and the stratigraphic position and thickness of the reservoir unless previously submitted. When approved in advance by the commission, this information can be demonstrated with a dual induction or equivalent log run in a nearby well or by such other method acceptable to the commission;

(4) An affidavit specifying the chemical constituents of the injection stream other than CO_2 and their relative proportions;

(5) Proof that the long string of casing of the CO_2 injection well is cemented adequately so that the CO_2 is confined to the GSU. Such proof shall be provided in the form of a cement bond log or the results of a fluid movement study or such other method specified by the commission; and

(6) The results of a mechanical-integrity test, if applicable to well type, of the casing in accordance with the pressure test requirements, of this section, if a test was run within one calendar year preceding the request for issuance of a conversion permit for a previously drilled well.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-06.1. Permit Issuance

(a) Upon review and approval of the application to drill, deepen, convert, re-enter (drill out a previously plugged well) or operate a CO_2 injection well, submitted in accordance with Section 6.1, the commission shall issue permits to drill and operate.
(b) A permit shall expire twelve (12) months from the date of issuance if the permitted well has not been drilled or converted.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-06.2. CSP Well Operational Standards

(a) Surface casing in all newly drilled CO_2 injection and subsurface observation wells drilled below the USDW shall be set fifty feet below the base of the Fox Hills formation and cemented pursuant to NDAC Section 43-02-03-21.
(b) The longstring casing in all CO_2 injection and subsurface observation wells shall be cemented pursuant to NDAC Section 43-02-03-21.
(c) Any liner set in the wellbore shall be cemented with a sufficient volume of cement to fill the annular space to the surface.
(d) All cements used in the cementing of casings in CO_2 injection and subsurface observation wells shall be of sufficient quality to maintain well integrity in the CO_2 injection environment.
(e) All casings shall meet the standards specified in either of the following documents, which are hereby adopted by reference:

(1) “The most recent American Petroleum Institute (API) Bulletin on performance properties of casing, tubing, and drill pipe; or

(2) “Specification for casing and tubing (U.S. customary units),” API specification 5CT, as published by the API in October 1998; or

(3) NDAC Section 43-02-03-21 other casing as approved by the commission.

(f) All casings used in new wells shall be new casing or reconditioned casing of equivalent quality that has been pressure-tested in accordance with the requirements of paragraph (e). For new casings, the pressure test conducted at the manufacturing mill or fabrication plant may be used to fulfill the requirements of paragraph (e).

(g) The location and amount of cement behind casings shall be verified by a cement bond log, cement evaluation log, or any other evaluation method approved by the commission.

(h) All CO_2 injection wells shall be completed with and injection shall be through tubing and packer.

(i) All tubing strings shall meet the standards contained in paragraph (e) of this regulation. All tubing shall be new tubing or reconditioned tubing of equivalent quality that has been pressure-tested. For new tubing, the pressure test conducted at the manufacturing mill or fabrication plant may be used to fulfill this requirement.

(j) All wellhead components, including the casinghead and tubing head, valves, and fittings, shall be made of steel having operating pressure ratings sufficient to exceed the maximum injection pressures computed at the wellhead and to withstand the corrosive nature of CO_2. Each flow line connected to the wellhead shall be equipped with a manually operated positive shutoff valve located on or near the wellhead.

(k) All packers, packer elements, or similar equipment critical to the containment of CO_2 shall be of a quality to withstand exposure to CO_2.

(l) An accurate, operating pressure gauge or pressure recording device shall be available at all times, and all injection wells shall be equipped for installation and operation of such gauge or device. Gauges shall be calibrated as required by the commission and evidence of such calibration shall be available to the commission upon request.

(m) All newly drilled wells shall establish internal and external mechanical integrity as specified by the commission and demonstrate continued mechanical integrity through periodic testing as determined by the commission. All other existing wells to be used as CO_2 injection wells will demonstrate mechanical integrity as specified by the commission prior to use for CO_2 injection and be tested on an ongoing basis as determined by commission using these methods:

(1) Pressure tests. CO_2 injection wells, equipped with tubing and packer as required, shall be pressure tested as required by the commission. A testing plan shall be submitted to the commission for prior approval. At a minimum, the pressure shall be applied to the tubing casing annulus at the surface for a period of 30 minutes and shall have no decrease in pressure greater than 10 percent of the required minimum test pressure. The packer shall be set at a depth at which the packer will be opposite a cemented interval of the long string casing and shall be set no more than 50 feet above the uppermost perforation or open hole for the CO_2 storage reservoir; and

(2) The commission may require additional testing such as a bottom hole temperature and pressure measurements, tracer survey, temperature survey, gamma ray log, neutron log, noise log, casing inspection log, or a combination of two or more of these surveys and logs, to demonstrate mechanical integrity.

(n) Supervision of mechanical integrity testing. The commission may witness all mechanical integrity tests conducted by each CSP operator for regulatory purposes.

(o) If a CO_2 injection well fails to demonstrate mechanical integrity by an approved method, the operator of the well shall immediately shut in the well, report the failure to the commission, and commence isolation and repair of the leak. The operator shall, within 90 days or as otherwise directed by the commission, perform one of the following:

(1) Repair and retest the well to demonstrate mechanical integrity;

(2) Plug the well in accordance with state requirements; or
(3) Comply with alternative plan as approved by the commission.

(p) All CO_2 injection wells shall be equipped with down-hole safety shutoff valves.

(q) Additional requirements may be required by the commission to address specific circumstances and types of projects not specified in these rules.

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-06.3. Amendment to CSP Well Permits

(a) An amendment to the CSP Well Permit for: (1) a change in injection formation, and/or (2) a modification of maximum allowable injection rate and pressure, shall comply with the provisions of Section 6.1 (c)(5) and (6), 6.3 (b), (g), (h), (i), (l) and (m) above.

(b) Modification of well construction shall comply with the provisions of Section 6.1 (b)(3) and 6.3 (m).

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-07. CSP Operational Safety Plans

Each operator of a CSP shall implement the commission-approved CF public safety and emergency response plan and the worker safety plan proposed in Section 4. This plan shall include emergency response and security procedures. The plans, including revision of the list of contractors and equipment vendors, shall be updated as necessary or as the commission requires. Copies of the plans shall be available at the CF and at the nearest operational office of the holder of the CSP Permit.

History: Amended effective January 1, 2008.

General Authority	Law Implemented
NDCC 38-08-04	NDCC 38-08-04

43-02-04.1-07.1. CSP Operational Leak Detection and Reporting

(a) Leak detectors or other approved leak detection methodologies shall be placed at the wellhead of all CO_2 injection and subsurface observation wells. Leak detectors shall be integrated, where applicable, with automated warning systems and shall be inspected and tested on a semi-annual basis and if defective, shall be repaired or replaced within 10 days. Each repaired or replaced detector shall be retested if required by commission. An extension of time for repair or replacement of a leak detector may be granted upon a showing of good cause by the operator of the CSP. A record of each inspection, which shall include the inspection results, shall be maintained by the operator for at least five years and shall be made available to the state oil and natural gas regulatory agency upon request.
(b) The operator of a CSP shall immediately report to the commission any leaks detected at the surface facility and associated well equipment specified in (a) above.
(c) The operator of a CSP shall immediately report to the commission any pressure changes or other monitoring data from subsurface observation wells that indicate the presence of leaks in the GSU indicating the lack of confinement within the reservoir of the CO_2.
(d) The operator of a CSP shall immediately report to the commission any other indication of lack of containment of CO_2 to the reservoir not associated with wells and surface equipment.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-07.2. CSP General Requirements

(a) Each operator shall be required to conduct a corrosion monitoring and prevention program approved by the commission.
(b) Identification signs shall be placed at each facility in a centralized location and at each well site and show the name of the operator, the facility name and the emergency response number to contact the operator.

History: Amended effective January 1, 2008.
General Authority — Law Implemented
NDCC 38-08-04 — NDCC 38-08-04

43-02-04.1-08. Reporting Requirements

(a) The volume of CO_2 injected into and/or withdrawn since the last reporting, the average injection rate, average composition of the CO_2 stream, wellhead and downhole temperature and pressure data and/or other pertinent operational parameters as required by the commission shall be reported quarterly or as required by the commission.
(b) These quarterly reports shall be compiled and summarized annually to provide updated projections of the response and storage capacity of the GSU. The projections shall be based on actual GSU operational experience, including all new geologic data and information. All anomalies in predicted behavior as indicated in the most current permit conditions shall be explained and, if necessary, the permit conditions amended in accordance with Section 4.1.

History: Amended effective January 1, 2008.
General Authority Law Implemented
NDCC 38-08-04 NDCC 38-08-04

43-02-04.1-09. CSP Closure

(a) Prior to the conclusion of the operational period, the time period to be determined by the commission, the CSP permit holder shall provide an assessment of the operations conducted during the operational period, including but not limited to the volumes injected, extracted, any and all chemical analyses conducted, summary of all monitoring efforts, etc. The report shall also document the position and characteristics of the areal extent of the CO_2 and a prediction of the extent and movement of the CO_2 volume anticipated during the CSP closure period.

(b) The permittee shall submit a monitoring plan for the CSP closure period for approval by the commission, including but not limited to a review and final approval of which wells will be plugged and which wells will remain unplugged to be used as CSP closure and post closure period subsurface observation wells.

(c) Following well plugging, all associated surface equipment shall be removed and the well site returned to its original land use to the extent possible.

(d) The well casing shall be cut off at a depth of 5 feet below the surface and a steel plate welded on top identifying well name and that it was used for CO_2 injection.

(e) The commission shall develop in conjunction with the permittee a continuing monitoring plan for the CSP post closure period including but not limited to a review and final approval of which wells shall be plugged. The commission shall have full control of and responsibility for the remaining unplugged wells to be used by the commission as CSP post closure period subsurface observation wells or for other purposes as deemed necessary by the commission.

(f) Upon CSP closure all wells so designated by the commission shall be properly plugged and abandoned, all CF equipment and facilities shall be removed, and the CSP site reclaimed in accordance with the commission requirements.

(g) All subsurface observation and groundwater monitoring wells as approved in the CSP closure period monitoring plan shall remain in place for continued monitoring during CSP closure period.

(h) Upon termination of the CSP closure period, the permittee shall provide a final assessment of the subsurface position and the characteristics of the CO_2 volume within the GSU including the future movement and position of the CO_2 volume within the GSU.

(i) Wells other than those deemed as subsurface observation wells per paragraph (e) above, shall be plugged by the permittee in accordance with paragraph (c) above.

(j) At the conclusion of the CSP closure period, the commission shall issue a Certificate of Completion of Injection Operations, upon a showing by the CSP Operator that the reservoir is reasonably expected to retain mechanical integrity and remain emplaced, the CSP performance bond maintained by the CSP operator shall be released and continued monitoring of the site, remediation of any well leakage, including wells previously plugged and abandoned by the CSP operator, shall become the responsibility of designated state or federal agency program and the CSP operator and generator of the CO_2 shall be released from further the commission regulatory liability relating to the CF.

History: Amended effective January 1, 2008.
General Authority Law Implemented

GEOPHYSICAL EXPLORATION REQUIREMENTS
CHAPTER 43-02-12

43-02-12-06. NOTIFICATION OF WORK PERFORMED. Within thirty days following the completion of geophysical exploration by any person within this state, such person shall file with the commission a seismic completion report in the form of an affidavit deposing that the seismic project was completed in accordance with chapter 43-02-12, and incorporating a postplot map displaying the actual source point location and the location of all undetonated (loaded) holes, blowouts, and flowing holes or any other problem holes the director deems necessary. If obtained by the contractor, the latitude and longitude of each source and receiver point shall be submitted to the commission to the nearest tenth of a second.

Any person plugging a seismic hole must submit a plugging report and an affidavit of plugging detailing the line number, shot point number, hole depth, drill type, hole condition (wet, dry), bentonite used (sacks, capsules), and the depth at which the surface plug was set, and all other information necessary to describe the conditions of the shot hole.

The director is authorized to require the entire geophysical exploration project, or any portion thereof, to cease operations if further activity will cause excessive or irreparable damage to the surface of the land.

History: Effective December 1, 1997; amended effective September 1, 2000; May 1, 2004.

General Authority
NDCC 38-08.1

Law Implemented
NDCC 38-08.1-02,
38-08.1-05