BEFORE THE INDUSTRIAL COMMISSION

OF THE STATE OF NORTH DAKOTA

CASE NO. 27828
ORDER NO. 30278

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER ADOPTING NEW RULES AND AMENDMENTS TO THE "GENERAL RULES AND REGULATIONS FOR THE CONSERVATION OF CRUDE OIL AND NATURAL GAS" CODIFIED AS ARTICLE 43-02 NORTH DAKOTA ADMINISTRATIVE CODE.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause came on for hearing at 8:00 a.m. and 1:00 p.m. on the 7th day of October, 2019 and at 8:00 a.m. and 1:30 p.m. on the 8th day of October, 2019.

(2) The record of this case was open for ten (10) days after the hearing to receive written comments on the proposed additions and amendments to the rules. The record closed October 18, 2019.

(3) The Commission is authorized to adopt, and from time to time amend or repeal, reasonable rules in conformity with the provisions of any statute administered or enforced by the agency.

(4) It is necessary to amend existing rules codified in North Dakota Administrative Code (NDAC) Chapters 43-02-03 (Oil and Gas), 43-02-05 (Underground Injection Control), and 43-02-06 (Royalty Statements) to implement, administer, and enforce the provisions of North Dakota Century Code (NDCC) Chapter 38-08.

(5) Pursuant to NDCC Sections 28-32-14 and 28-32-15, the amended rules in the appendix to this order will become effective April 1, 2020, but only upon the Attorney General determining their legality and after approval of the Administrative Rules Committee.

(6) The amendment of existing rules is in the public interest.

IT IS THEREFORE ORDERED:

(1) Amended sections to NDAC Chapters 43-02-03, 43-02-05, and 43-02-06, in the appendix to this order, are hereby approved and adopted.

(2) Pursuant to NDCC Sections 28-32-14 and 28-32-15, the amended rules in the appendix to this order will become effective April 1, 2020, but only upon the Attorney General determining their legality and after approval of the Administrative Rules Committee.

(3) Existing regulations not specifically amended by this order shall remain in full force and effect.

(4) This order shall be effective pursuant to the applicable statutes and laws of this state and shall remain in full force and effect until further order of the Commission.

Dated this 25th day of November, 2019.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Doug Goehring, Agriculture Commissioner

APPENDIX TO COMMISSION ORDER NO. 30278

NORTH DAKOTA INDUSTRIAL COMMISSION

RULES AND REGULATIONS – NORTH DAKOTA ADMINISTRATIVE CODE

2020 RULE CHANGES

RULES AND REGULATIONS
NORTH DAKOTA ADMINISTRATIVE CODE
CHAPTER 43-02-03 (OIL AND GAS)
CHAPTER 43-02-05 (UNDERGROUND INJECTION CONTROL)
CHAPTER 43-02-06 (ROYALTY STATEMENTS)

RULES AND REGULATIONS
CHAPTER 43-02-03

43-02-03-10. AUTHORITY TO COOPERATE WITH OTHER AGENCIES. The commission may from time to time enter into ~~arrangements~~ agreements with state and federal government agencies, tribal authorities, industry committees, and individuals with respect to special projects, services, and studies relating to conservation of oil and gas.

History: Amended effective ___.

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

43-02-03-14.2. OIL AND GAS METERING SYSTEMS.

1. Application of section. This section is applicable to all allocation and custody transfer metering stations measuring production from oil and gas wells within the state of North Dakota, including private, state, and federal wells. If these rules differ from federal requirements on measurement of production from federal oil and gas wells, the federal rules take precedence.

2. Definitions. As used in this section:

   a. "Allocation meter" means a meter used by the producer to determine the volume from an individual well before it is commingled with production from one or more other wells prior to the custody transfer point.

   b. "Calibration test" means the process or procedure of adjusting an instrument, such as a gas meter, so its indication or registration is in satisfactorily close agreement with a reference standard.

c. "Custody transfer meter" means a meter used to transfer oil or gas from the producer to transporter or purchaser.

d. "Gas gathering meter" means a meter used in the custody transfer of gas into a gathering system.

e. "Meter factor" means a number obtained by dividing the net volume of fluid (liquid or gaseous) passed through the meter during proving by the net volume registered by the meter.

f. "Metering proving" means the procedure required to determine the relationship between the true volume of a fluid (liquid or gaseous) measured by a meter and the volume indicated by the meter.

3. Inventory filing requirements. The owner of metering equipment shall file with the commission an inventory of all meters used for custody transfer and allocation of production from oil or gas wells, or both. Inventories must be updated on an annual basis, and filed with the commission on or before the first day of each year, or they may be updated as frequently as monthly, at the discretion of the operator. Inventories must include the following:

a. Well name and legal description of location or meter location if different.

b. North Dakota industrial commission well file number.

c. Meter information:

(1) Gas meters:

(a) Make and model.

(b) Differential, static, and temperature range.

(c) Orifice tube size (diameter).

(d) Meter station number.

(e) Serial number.

(2) Oil meters:

(a) Make and model.

(b) Size.

(c) Meter station number.

(d) Serial number.

4. Installation and removal of meters. The commission must be notified of all custody transfer meters placed in service. The owner of the custody transfer equipment shall notify the commission of the date a meter is placed in service, the make and model of the meter, and the meter or station number. The commission must also be notified of all metering installations removed from service. The notice must include the date the meter is removed from service, the serial number, and the meter or station number. The required notices must be filed with the commission within thirty days of the installation or removal of a meter.

   All allocation meters must be approved prior to installation and use. The application for approval must be on a sundry notice (form 4 <u>or form provided by the commission</u>) and shall include the make and model number of the meter, the meter or station number, the serial number, the well name, its location, and the date the meter will be placed in service.

   Meter installations for measuring production from oil or gas wells, or both, must be constructed to American petroleum institute or American gas association standards or to meter manufacturer's recommended installation. Meter installations constructed in accordance with American petroleum institute or American gas association standards in effect at the time of installation shall not automatically be required to retrofit if standards are revised. The commission will review any revised standards, and when deemed necessary will amend the requirements accordingly.

5. Registration of persons proving or testing meters. All persons engaged in meter proving or testing of oil and gas meters must be registered with the commission. Those persons involved in oil meter testing, by flowing fluid through the meter into a test tank and then gauging the tank, are exempted from the registration process. However, such persons must notify the commission prior to commencement of the test to allow a representative of the commission to witness the testing process. A report of the results of such test shall be filed with the commission within thirty days after the test is completed. Registration must include the following:

   a. Name and address of company.

   b. Name and address of measurement personnel.

   c. Qualifications, listing experience, or specific training.

   Any meter tests performed by a person not registered with the commission will not be accepted as a valid test.

6. Calibration requirements. Oil and gas metering equipment must be proved or tested to American petroleum institute or American gas association standards or to the meter manufacturer's recommended procedure to establish a meter factor or to ensure measurement accuracy. The owner of a custody transfer meter or allocation meter shall notify the commission at least ten days prior to the testing of any meter.

a. Oil allocation meter factors shall be maintained within two percent of original meter factor. If the factor change between provings or tests is greater than two percent, ~~the~~ meter use must be discontinued until successfully reproven after being repaired or ~~adjusted and tested within forty-eight hours of repair or~~ replaced.

b. Oil custody transfer meter factors shall be maintained within one-quarter of one percent of the previous meter factor. If the factor change between provings or tests is greater than one-quarter of one percent, meter use must be discontinued until successfully reproven after being repaired or replaced.

~~b.~~ c. Copies of all oil allocation meter test procedures are to be filed with and reviewed by the commission to ensure measurement accuracy.

~~c.~~ d. All gas meters must be tested with a minimum of a three point test for static and differential pressure elements and a two point test for temperature elements. The test reports must include an as-found and as-left test and a detailed report of changes.

~~d.~~ e. Test reports must include the following:

(1) Producer name.

(2) ~~Lease~~ Well or CTB name.

(3) Well file number or CTB number.

~~(3)~~ (4) Pipeline company or company name of test contractor.

~~(4)~~ (5) Test personnel's name.

~~(5)~~ (6) Station or meter number.

~~e.~~ f. Unless required more often by the director, minimum frequency of meter proving or calibration tests are as follows:

(1) Oil meters used for custody transfer shall be proved monthly for all measured volumes which exceed two thousand barrels per month. For volumes two thousand barrels or less per month, meters shall be proved at each two thousand barrel interval or more frequently at the discretion of the operator.

(2) Quarterly for oil meters used for allocation of production.

(3) Semiannually for gas meters used for allocation of production.

(4) Semiannually for gas meters in gas gathering systems.

(5) For meters measuring more than one hundred thousand cubic feet [2831.68 cubic meters] per day on a monthly basis, orifice plates shall be inspected semiannually, and meter tubes shall be inspected at least every five years to ensure continued conformance with the American gas association meter tube specifications.

(6) For meters measuring one hundred thousand cubic feet [2831.68 cubic meters] per day or less on a monthly basis, orifice plates shall be inspected annually.

~~f.~~ g. ~~Meter~~ All meter test reports, including failed meter test reports, must be filed within thirty days of completion of proving or calibration tests unless otherwise approved. ~~Failed meter reports must be filed within seven days of failed test date.~~ Test reports are to be filed on, but not limited to, all meters used for allocation measurement of oil or gas and all meters used in crude oil custody transfer.

~~g.~~ h. Accuracy of all equipment used to test oil or gas meters must be traceable to the standards of the national institute of standards and technology. The equipment must be certified as accurate either by the manufacturer or an independent testing facility. The certificates of accuracy must be made available upon request. Certification of the equipment must be updated as follows:

(1) Annually for all equipment used to test the pressure and differential pressure elements.

(2) Annually for all equipment used to determine temperature.

(3) Biennially for all conventional pipe provers.

(4) Annually for all master meters.

(5) Five years for equipment used in orifice tube inspection.

7. Variances. Variances from all or part of this section may be granted by the commission provided the variance does not affect measurement accuracy. All requests for variances must be on a sundry notice (form 4).

A register of variances requested and approved must be maintained by the commission.

History: Effective May 1, 1994; amended effective July 1, 1996; September 1, 2000; July 1, 2002; April 1, 2018; ____.

General Authority
NDCC 38-08-04

Law Implemented
NDCC 38-08-04

C. DRILLING

43-02-03-15. BOND AND TRANSFER OF WELLS.

1. Bond requirements. Prior to commencing ~~drilling operations~~ <u>construction of a site or appurtenance or road access thereto</u>, any person who proposes to drill a well for oil, gas, injection, or source well for use in enhanced recovery operations, shall submit to the commission, and obtain its approval, a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The operator of such well shall be the principal on the bond covering the well. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

2. Bond amounts and limitations. The bond shall be in the amount of fifty thousand dollars when applicable to one well only. Wells drilled to a total depth of less than two thousand feet [609.6 meters] may be bonded in a lesser amount if approved by the director. When the principal on the bond is drilling or operating a number of wells within the state or proposes to do so, the principal may submit a bond conditioned as provided by law. Wells utilized for commercial injection operations must be bonded in the amount of ~~fifty~~ <u>one hundred</u> thousand dollars. A blanket bond covering more than one well shall be in the amount of one hundred thousand dollars, provided the bond shall be limited to no more than six of the following in aggregate:

   a. A well that is a dry hole and is not properly plugged;

   b. A well that is plugged and the site is not properly reclaimed; ~~and~~

   c. A well that is abandoned pursuant to subsection 1 of North Dakota Century Code section 38-08-04 or section 43-02-03-55 and is not properly plugged and the site is not properly reclaimed~~.~~<u>; and</u>

   <u>d.</u> <u>A well that is temporarily abandoned under section 43-02-03-55 for more than seven years.</u>

   If this aggregate of wells is reached, all well permits, for which drilling has not commenced, held by the principal of such bond are suspended. No rights may be exercised under the permits until the aggregate of wells drops below the required limit, or the operator files the appropriate bond to cover the permits, at which time the rights given by the drilling permits are reinstated. A well with an approved temporary abandoned status <u>for no more than seven years</u> shall have the same status as an oil, gas, or injection well. The commission may, after notice and hearing, require higher bond amounts than those referred to in this section. Such additional amounts for bonds must be related to the economic value of the well or wells and the expected cost of plugging and well site reclamation, as determined by the commission. The commission may refuse to accept a bond or to add wells to a blanket bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; if a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

3. Unit bond requirements. Prior to commencing unit operations, the operator of any area under unitized management shall submit to the commission, and obtain its approval, a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The operator of the unit shall be the principal on the bond covering the unit. The amount of the bond shall be specified by the commission in the order approving the plan of unitization. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

   Prior to transfer of a unit to a new operator, the commission, after notice and hearing, may revise the bond amount for a unit, or in the case when the unit was not previously bonded, the commission may require a bond and set a bond amount for the unit.

4. Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-08, and all administrative rules and orders of the commission. It shall be a plugging bond, as well as a drilling bond, and is to endure up to and including approved plugging of all oil, gas, and injection wells as well as dry holes. Approved plugging shall also include practical reclamation of the well site and appurtenances thereto. If the principal does not satisfy the bond's conditions, then the surety shall satisfy the conditions or forfeit to the commission the face value of the bond.

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

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

      (1) The principal shall submit a schematic drawing identifying all lines owned by the principal which leave the constructed pad or facility and shall provide any details the director deems necessary.

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

      (3) On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and does accept such transfer and does accept the responsibility of such well under the transferee's one-well bond or,

as the case may be, does accept the responsibility of such wells under the transferee's blanket bond, said bond being tendered to or on file with the commission." Such acceptance must likewise be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

b. When the commission has passed upon the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of plugging the well and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if ~~the~~ <u>any</u> well <u>on the bond</u> is in violation of a statute, rule, or order. <u>No abandoned well may be transferred from a bond unless transferee has obtained a single well bond in an amount equal to the cost of plugging the well and reclaiming the well site.</u>

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

6. Treating plant bond. Prior to ~~the commencement of operations~~ <u>commencing site or road access construction</u>, any person proposing to operate a treating plant must submit to the commission and obtain its approval of a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the plant shall be the principal on the bond. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota. The amount of the bond must be as prescribed in section 43-02-03-51.3. It is to remain in force until the operations cease, all equipment is removed from the site, and the site and appurtenances thereto are reclaimed, or liability of the bond is transferred to another bond that provides the same degree of security. If the principal does not satisfy the bond's conditions, then the surety shall satisfy the conditions or forfeit to the commission the face value of the bond. The director may refuse to transfer any treating plant from a bond if the treating plant is in violation of a statute, rule, or order.

7. Saltwater handling facility bond. Prior to ~~the commencement of operations~~ <u>commencing site or road access construction</u>, any person proposing to operate a saltwater handling facility that is not already bonded as an appurtenance shall submit to the commission and obtain its approval of a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the saltwater handling facility must be the principal on the bond. Each surety bond must be executed by a

responsible surety company authorized to transact business in North Dakota. The amount of the bond must be as prescribed in section 43-02-03-53.3. It is to remain in force until the operations cease, all equipment is removed from the site, and the site and appurtenances thereto are reclaimed, or liability of the bond is transferred to another bond that provides the same degree of security. If the principal does not satisfy the bond's conditions, the surety shall satisfy the conditions or forfeit to the commission the face value of the bond. Transfer of property does not release the bond. The director may refuse to transfer any saltwater handling facility from a bond if the saltwater handling facility is in violation of a statute, rule, or order.

8. Crude oil and produced water underground gathering pipeline bond. The bonding requirements for crude oil and produced water underground gathering pipelines are not to be construed to be required on flow lines, injection pipelines, pipelines operated by an enhanced recovery unit for enhanced recovery unit operations, or on piping utilized to connect wells, tanks, treaters, flares, or other equipment on the production facility.

    a. Any owner of an underground gathering pipeline transferring crude oil or produced water, after April 19, 2015, shall submit to the commission and obtain its approval of a surety bond or cash bond prior to July 1, 2017. Any owner of a proposed underground gathering pipeline to transfer crude oil or produced water shall submit to the commission and obtain its approval of a surety bond or cash bond prior to placing into service. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the crude oil or produced water underground gathering pipeline must be the principal on the bond. Each surety bond must be executed by a responsible surety company authorized to transact business in North Dakota. The bond must be in the amount of fifty thousand dollars when applicable to one crude oil or produced water underground gathering pipeline system only. Such underground gathering pipelines that are less than one mile [1609.34 meters] in length may be bonded in a lesser amount if approved by the director. When the principal on the bond is operating multiple gathering pipeline systems within the state or proposes to do so, the principal may submit a blanket bond conditioned as provided by law. A blanket bond covering one or more underground gathering pipeline systems must be in the amount of one hundred thousand dollars. The owner shall file with the director, as prescribed by the director, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point of all underground gathering pipelines on the bond. Each layer must include at least the following information:

        (1) The name of the pipeline gathering system and other separately named portions thereof;

        (2) The type of fluid transported;

        (3) The pipeline composition;

(4) Burial depth; and

(5) Approximate in-service date.

b. The blanket bond covering more than one underground gathering pipeline system is limited to no more than six of the following instances of noncompliance in aggregate:

(1) Any portion of an underground gathering pipeline system that has been removed from service for more than one year and is not properly abandoned pursuant to section 43-02-03-29.1; and

(2) An underground gathering pipeline right-of-way, including associated above ground equipment, which has not been properly reclaimed pursuant to section 43-02-03-29.1.

If this aggregate of underground gathering pipeline systems is reached, the commission may refuse to accept additional pipeline systems on the bond until the aggregate is brought back into compliance. The commission, after notice and hearing, may require higher bond amounts than those referred to in this section. Such additional amounts for bonds must be related to the economic value of the underground gathering pipeline system and the expected cost of pipeline abandonment and right-of-way reclamation, as determined by the commission. The commission may refuse to accept a bond or to add underground gathering pipeline systems to a blanket bond if the owner or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of underground gathering pipelines; if a civil or administrative action brought by the commission is pending against the owner or surety company; if an underground gathering pipeline system has exhibited multiple failures; or for other good cause.

c. The underground gathering pipeline bond is to remain in force until the pipeline has been abandoned, as provided in section 43-02-03-29.1, and the right-of-way, including all associated above ground equipment, has been reclaimed as provided in section 43-02-03-29.1, or liability of the bond is transferred to another bond that provides the same degree of security. If the principal does not satisfy the bond's conditions, the surety shall satisfy the conditions or forfeit to the commission the face value of the bond.

d. Transfer of underground gathering pipelines under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in the underground gathering pipeline and the principal desires to be released from the bond covering the underground gathering pipeline, the principal must proceed as follows:

(1) The principal shall notify the director, in writing, of all proposed transfers of underground gathering pipelines at least thirty days before the closing date of the transfer. The director, for good cause, may waive this requirement.

Notice of underground gathering pipeline transfer. The principal shall submit, as provided by the director, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point of all underground gathering pipelines to be transferred to a certain transferee, naming such transferee, for the purpose of ownership or operation. The date of assignment or transfer must be stated and the form 15pl signed by a party duly authorized to sign on behalf of the principal.

The notice of underground gathering pipeline transfer must recite the following: "The transferee has read the foregoing statement and does accept such transfer and does accept the responsibility of such underground gathering pipelines under the transferee's pipeline bond or, as the case may be, does accept the responsibility of such underground gathering pipelines under the transferee's pipeline systems blanket bond, said bond being tendered to or on file with the commission." Such acceptance must likewise be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

(2) When the commission has passed upon the transfer and acceptance and accepted it under the transferee's bond, the transferor must be released from the responsibility of abandoning the underground gathering pipelines and right-of-way reclamation. If such underground gathering pipelines include all underground gathering pipeline systems within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any underground gathering pipeline from a bond if the underground gathering pipeline is in violation of a statute, rule, or order.

(3) The transferee (new owner) of any underground gathering pipeline is responsible for the abandonment and right-of-way reclamation of any such underground gathering pipeline. For that purpose the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such underground gathering pipeline. The original or prior bond may not be released as to the abandonment and right-of-way reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such underground gathering pipeline. All liability on bonds continues until the abandonment and right-of-way reclamation of such underground gathering pipeline is completed and approved by the director.

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

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

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

History: Amended effective April 30, 1981; March 1, 1982; January 1, 1983; May 1, 1990; May 1, 1992; May 1, 1994; December 1, 1996; September 1, 2000; July 1, 2002; May 1, 2004; January 1, 2006; April 1, 2012; April 1, 2014; January 1, 2017; April 1, 2018; __.

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

43-02-03-16. APPLICATION FOR PERMIT TO DRILL AND RECOMPLETE. Before any person shall begin any well-site preparation for the drilling of any well other than surveying and staking, such person shall ~~file~~ obtain approval from the director. ~~An~~ An application for permit to drill (form 1 or form provided by the commission) shall be filed with the director, together with a permit fee of one hundred dollars. Verbal approval may be given for site preparation by the director in extenuating circumstances. No ~~drilling activity~~ site construction, or appurtenance or road access thereto, shall commence until such application is approved and a permit to drill is issued by the director. The application must be accompanied by the bond pursuant to section 43-02-03-15 or the applicant must have previously filed such bond with the commission, otherwise the application is incomplete. An incomplete application received by the commission has no standing and will not be deemed filed until it is completed.

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

For wells permitted on new pads built after July 31, 2013, permit conditions imposed by the commission may include, upon request of the owner of a permanently occupied dwelling within one thousand feet of the proposed well, requiring the location of all flares, tanks, and treaters utilized in connection with the permitted well be located at a greater distance from the occupied dwelling than the well head, if the location can be reasonably accommodated within the proposed pad location. If the facilities are proposed to be located farther from the dwelling than the well bore, the director can issue the permit without comment from the dwelling owner. The applicant shall give any such owners written notice of the proposed facilities personally or by certified mail, return receipt requested, and addressed to their last-known address listed with the county property tax department. The commission must receive written comments from such owner within five business days of the owner receiving said notice. An application for permit must include an affidavit from the applicant identifying each owner's name and address, and the date written notice was given to each owner. The owner's notice must include:

1. A copy of North Dakota Century Code section 38-08-05.

2. The name, telephone number, and if available the electronic mail address of the applicant's local representative.

3. A sketch of the area indicating the location of the owner's dwelling, the proposed well, and location of the proposed flare, tanks, and treaters.

4. A statement indicating that any such owner objecting to the location of the flare, tanks, or treaters, must notify the commission within five business days of receiving the notice.

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

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

The director shall deny an application for a permit under this section if the proposal would cause, or tend to cause, waste or violate correlative rights. The director of oil and gas shall state in writing to the applicant the reason for the denial of the permit. The applicant may appeal the decision of the director to the commission.

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

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; May 1, 1994; September 1, 2000; July 1, 2002; April 1, 2010; April 1, 2012; April 1, 2014; October 1, 2016; ___.

General Authority	Law Implemented
NDCC 38-08-05	NDCC 38-08-05

43-02-03-16.2. REVOCATION AND LIMITATION OF DRILLING PERMITS.

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

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

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

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

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

   e. Contractual obligations such as an expiring lease.

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

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

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

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

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

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

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 approximate surface location of the proposed or existing well, proposed completion and total depth, objective zone, and completion location if other than a vertical well.

      (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) A statement indicating the invitation must be accepted within thirty days of receiving it.

(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.

(6) Drilling or spacing unit description.

b. An election to participate must be in writing and must be received by the owner giving the invitation within thirty days of the participating party's receipt of the invitation.

c. An invitation to participate and an election to participate must be served personally, by mail requiring a signed receipt, 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 or declining to participate if the well is spudded or reentry operations are commenced on or before 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.

(4) A statement indicating the invitation must be accepted within thirty days of receiving it.

(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 and must be received by the owner giving the invitation within thirty days of the participating party's receipt of the invitation.

c. An invitation to participate and an election to participate must be served personally, by mail requiring a signed receipt, 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 or declining 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; January 1, 2008; April 1, 2010; April 1, 2012; April 1, 2014; ___.

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

43-02-03-19.3. EARTHEN PITS AND RECEPTACLES. Except as otherwise provided in sections 43-02-03-19.4, ~~and~~ 43-02-03-19.5, and 43-02-03-51.3, no saltwater, drilling mud, crude oil, waste oil, or other waste shall be stored in earthen pits or open receptacles except in an emergency and upon approval by the director.

A lined earthen pit or open receptacle may be temporarily used to retain oil, water, cement, solids, or fluids generated in well plugging operations. A pit or receptacle used for this purpose must be sufficiently impermeable to provide adequate temporary containment of the oil, water, or fluids. The contents of the pit or receptacle must be removed within seventy-two hours after operations have ceased and must be disposed of at an authorized facility in accordance with section 43-02-03-19.2. Within thirty days after operations have ceased, the earthen pit shall be reclaimed and the open receptacle shall be removed. The director may grant an extension of the thirty-day time period to no more than one year for good reason.

The director may permit pits or receptacles used solely for the purpose of flaring casinghead gas. A pit or receptacle used for this purpose must be sufficiently impermeable to provide adequate temporary containment of fluids. Permission for such pit or receptacle shall be conditioned on locating the pit not less than one hundred fifty feet [45.72 meters] from the vicinity of wells and tanks and keeping it free of any saltwater, crude oil, waste oil, or other waste. Saltwater, drilling mud, crude oil, waste oil, or other waste shall be removed from the pit or receptacle within twenty-four hours after being discovered and must be disposed of at an authorized facility in accordance with section 43-02-03-19.2.

The director may permit pits used solely for storage of freshwater used in completion and well servicing operations. Permits for freshwater pits shall be valid for a period of one year but may be reauthorized upon application. Freshwater pits shall be lined and no pit constructed for this purpose shall be wholly or partially constructed in fill dirt unless approved by the director. The director may approve chemical treatment to municipal drinking water standards upon application.

The freshwater pit shall have signage on all sides accessible to vehicular traffic clearly identifying the usage as freshwater only.

The director may permit portable-collapsible receptacles used solely for storage of fluids used in completion and well servicing operations, although no flowback fluids may be allowed. Permits for such receptacles are valid for a period of one year but may be reauthorized upon application. Such receptacles must utilize a sealed inner bladder, erected to conform to American petroleum institute standards, and may not be wholly or partially constructed on fill dirt unless approved by the director. Such receptacles must have signage on all sides accessible to vehicular traffic clearly identifying the fluid contained within.

History: Effective September 1, 2000; amended effective April 1, 2010; April 1, 2012; October 1, 2016; ___.

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

43-02-03-21. CASING, TUBING, AND CEMENTING REQUIREMENTS. All wells drilled for oil, natural gas or injection shall be completed with strings of casing which shall be properly cemented at sufficient depths to adequately protect and isolate all formations containing water, oil or gas or any combination of these; protect the pipe through salt sections encountered; and isolate the uppermost sand of the Dakota group.

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

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

Production or intermediate casing strings shall consist of new or reconditioned pipe that has been previously tested to two thousand pounds per square inch [13800 kilopascals]. Such strings must be allowed to stand under pressure until the tail cement has reached a compressive strength of at least five hundred pounds per square inch [3450 kilopascals]. All filler cements utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within twenty-four hours and at least five hundred pounds per square inch [3450 kilopascals] within seventy-two hours, although in any horizontal well performing a single stage cement job from a measured depth of greater than thirteen thousand feet [3962.4 meters], the filler cement utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within forty-eight hours and at least five hundred pounds per square inch [3450 kilopascals] within ninety-six hours. All compressive strengths on production or intermediate casing cement shall be calculated at a temperature found in the Mowry formation using a gradient of 1.2 degrees Fahrenheit per one hundred feet [30.48 meters] of depth plus eighty degrees Fahrenheit [26.67 degrees Celsius]. <u>At a formation temperature at or in excess of two hundred thirty degrees Fahrenheit [110 degrees Celsius], cement blends must include additives to address compressive strength regression.</u>

~~After cementing each~~ <u>Each</u> casing string shall be tested by application of pump pressure of at least one thousand five hundred pounds per square inch [10350 kilopascals] <u>immediately after cementing, while the cement is in a liquid state, or the casing string must be pressure tested after all cement has reached five hundred pounds per square inch [3450 kilopascals] compressive strength</u>.

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

All flowing wells must be equipped with tubing. A tubing packer must also be utilized unless a waiver is obtained after demonstrating the casing will not be subjected to excessive pressure or corrosion. The packer must be set as near the producing interval as practicable, but in all cases must be above the perforations.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996; January 1, 1997; September 1, 2000; July 1, 2002; May 1, 2004; January 1, 2006; April 1, 2010; April 1, 2012; ___.

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

43-02-03-23. BLOWOUT PREVENTION. In all drilling operations, proper and necessary precautions shall be taken for keeping the well under control, including the use of a blowout preventer and high pressure fittings attached to properly cemented casing strings adequate to withstand anticipated pressures. During the course of drilling, the pipe rams shall be functionally operated at least once every twenty-four-hour period. The blind rams shall be functionally operated each trip out of the well bore. The blowout preventer shall be pressure tested at installation on the wellhead, after modification of any equipment, and every thirty days thereafter. For pad drilling operations, moving from one wellhead to another within the thirty days, pressure testing is required on connections when the integrity of a pressure seal is broken or a component appears to be damaged or compromised. The director may postpone such pressure test if the necessity therefor can be demonstrated to the director's satisfaction. All tests shall be noted in the driller's record.

In all workover operations, proper and necessary precautions shall be taken for keeping the well under control, including the use of a blowout preventer and high pressure fittings attached to properly cemented casing strings adequate to withstand anticipated pressures.

History: Amended effective January 1, 1983; September 1, 2000; July 1, 2002; ___.

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

43-02-03-27.1 HYDRAULIC FRACTURE STIMULATION.

1. ~~For~~ Prior to performing any hydraulic fracture stimulation ~~performed~~ including re-fracs, through a frac string run inside the intermediate casing string:

a. The frac string must be either stung into a liner with the hanger/packer located in cemented casing or run with a packer set at a minimum depth of one hundred feet [30.48 meters] below the top of cement or a minimum depth of one hundred feet [30.48 meters] below the top of the Inyan Kara formation, whichever is deeper.

b. The intermediate casing-frac string annulus must be pressurized and monitored during frac operations. Prior to performing any re-frac, a casing evaluation tool must be run to verify adequate wall thickness of the intermediate casing.

c. An adequately sized, function tested pressure relief valve must be utilized on the treating lines from the pumps to the wellhead, with suitable check valves to limit the volume of flowback fluid should the relief valve open. The relief valve must be set to limit line pressure to no more than eighty-five percent of the internal yield pressure of the frac string.

d. An adequately sized, function tested pressure relief valve and an adequately sized diversion line must be utilized to divert flow from the intermediate casing to a pit or containment vessel in case of frac string failure. The relief valve must be set to limit annular pressure to no more than eighty-five percent of the lowest internal yield pressure of the intermediate casing string or no greater than the pressure test on the intermediate casing, less one hundred pounds per square inch gauge, whichever is less.

e. The surface casing must be fully open and connected to a diversion line rigged to a pit or containment vessel.

f. An adequately sized, function tested remote operated frac valve must be utilized at a location on the christmas tree that provides isolation of the well bore from the treating line and must be remotely operated from the edge of the location or other safe distance.

g. Within sixty days after the hydraulic fracture stimulation is performed, the owner, operator, or service company shall post on the fracfocus chemical disclosure registry all elements made viewable by the fracfocus website.

2. ~~For~~ Prior to performing any hydraulic fracture stimulation ~~performed~~, including re-fracs, through an intermediate casing string:

a. The maximum treating pressure shall be no greater than eighty-five percent of the American petroleum institute rating of the intermediate casing.

b. Casing evaluation tools to verify adequate wall thickness of the intermediate casing shall be run from the wellhead to a depth as close as practicable to one hundred feet [30.48 meters] above the completion formation and a visual inspection with photographs shall be made of the top joint of the intermediate casing and the wellhead flange.

If the casing evaluation tool or visual inspection indicates wall thickness is below the American petroleum institute minimum or a lighter weight of intermediate casing than the well design called for, calculations must be made to determine the reduced pressure rating. If the reduced pressure rating is less than the anticipated treating pressure, a frac string shall be run inside the intermediate casing.

c. Cement evaluation tools to verify adequate cementing of the intermediate casing shall be run from the wellhead to a depth as close as practicable to one hundred feet [30.48 meters] above the completion formation.

(1) If the cement evaluation tool indicates defective casing or cementing, a frac string shall be run inside the intermediate casing.

(2) If the cement evaluation tool indicates the ~~top of cement behind the intermediate casing is below the top of the Mowry formation~~ intermediate casing string cemented in the well fails to satisfy section 43-02-03-21~~,~~ a frac string shall be run inside the intermediate casing.

d. The intermediate casing and wellhead must be pressure tested to a minimum depth of one hundred feet [30.48 meters] below the top of the Tyler formation for at least thirty minutes with less than five percent loss to a pressure equal to or in excess of the maximum frac design pressure.

e. If the pressure rating of the wellhead does not exceed the maximum frac design pressure, a wellhead and blowout preventer protection system must be utilized during the frac.

f. An adequately sized, function tested pressure relief valve must be utilized on the treating lines from the pumps to the wellhead, with suitable check valves to limit the volume of flowback fluid should the relief valve open. The relief valve must be set to limit line pressure to no greater than the test pressure of the intermediate casing, less one hundred pounds per square inch [689.48 kilopascals].

g. The surface casing valve must be fully open and connected to a diversion line rigged to a pit or containment vessel.

h. An adequately sized, function tested remote operated frac valve must be utilized between the treating line and the wellhead.

i. Within sixty days after the hydraulic fracture stimulation is performed, the owner, operator, or service company shall post on the fracfocus chemical disclosure registry all elements made viewable by the fracfocus website.

3. If during the stimulation, the pressure in the intermediate casing-surface casing annulus exceeds three hundred fifty pounds per square inch [2413 kilopascals] gauge, the owner or operator shall verbally notify the director as soon as practicable but no later than twenty-four hours following the incident.

History: Effective April 1, 2012; amended effective April 1, 2014; ___.

General Authority	Law Implemented
NDCC 38-08-04	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, electric generator, flare 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 one hundred twenty-five feet [38.10 meters] may be allowed if a spark or 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 or injection equipment to eliminate a fire hazard.

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

No well shall be drilled nor production or injection equipment installed nor saltwater handling facility or treating plant constructed less than five hundred feet [152.40 meters] from an occupied dwelling unless agreed to in writing by the owner of the dwelling or authorized by order of the commission.

Subsurface pressure must be controlled during all drilling, completion, and well-servicing operations with appropriate fluid weight and pressure control equipment. The operator conducting any well hydraulic fracture stimulation shall give prior written notice, up to ~~ten~~ thirty-one days and not less than ~~seven~~ twenty-one ~~business~~ days, to any operator of a well completed in the same or adjacent pool, if publicly available information indicates or if the operator is made aware, if the completion intervals are within ~~one thousand three hundred twenty~~ two thousand six hundred and forty feet [804.67 meters] of one another. Notice must include twenty four-hour emergency contact information, planned start and end dates, and contact information for scheduling updates.

History: Amended effective January 1, 1983; May 1, 1990; September 1, 2000; January 1, 2006; January 1, 2008; April 1, 2012; April 1, 2014; October 1, 2016; ___.

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

43-02-03-29.1. CRUDE OIL AND PRODUCED WATER UNDERGROUND GATHERING PIPELINES.

1. Application of section. This section is applicable to all underground gathering pipelines designed for or capable of transporting crude oil or produced water from an oil and gas production facility for the purpose of disposal, storage, or for sale purposes <u>or designed for or capable of transporting carbon dioxide from a carbon capture facility for the purpose of storage or enhanced oil recovery</u>. If these rules differ from the pipeline manufacturer's prescribed installation and operation practices, the pipeline manufacturer's prescribed installation and operation practices take precedence.

   The requirements in this section are not applicable to flow lines, injection pipelines, pipelines operated by an enhanced recovery unit for enhanced recovery unit operations, or on piping utilized to connect wells, tanks, treaters, flares, or other equipment ~~on the~~ <u>located entirely within the boundary of a well site or</u> production facility.

2. Definitions. The terms used throughout this section apply to this section only.

   <u>a.</u> "Crude oil or produced water underground gathering pipeline" means an underground gathering pipeline designed or intended to transfer crude oil or produced water from a production facility for disposal, storage, or sale purposes.

   <u>b. "New Construction" means a new gathering pipeline installation project or an alteration or re-route of an existing gathering pipeline where the location, composition, size, design temperature, or design pressure changes.</u>

   <u>c. "Pipeline Repair" is the work necessary to restore a pipeline system to a condition suitable for safe operations that does not change the design temperature or pressure.</u>

   <u>d. "Gathering System" is a group of connected pipelines that are connected that have been designated as a gathering system by the operator. A gathering system must have a unique name and must be interconnected.</u>

   <u>e. "In-Service Date" is the first date fluid was transported down the underground gathering pipeline for disposal, storage, or sale purposes after construction.</u>

3. Notifications.

   a. The underground gathering pipeline owner shall notify the commission, as provided by the director, at least seven days prior to commencing new construction of any underground gathering pipeline.

      (1) The notice of intent to construct a crude oil or produced water underground gathering pipeline must include the following:

(a) The proposed date construction is scheduled to begin.

(b) A statement that the director will be verbally notified approximately forty-eight hours prior to commencing the construction.

~~(b)~~ (c) A geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the proposed route of the pipeline from the point of origin to the termination point.

~~(c)~~ (d) The proposed underground gathering pipeline design drawings, including all associated above ground equipment.

[1] The proposed pipeline composition, specifications (i.e. size, weight, grade, wall thickness, coating, and standard dimension ratio).

[2] The type of fluid to be transported.

[3] The method of testing pipeline integrity (e.g. hydrostatic or pneumatic test) prior to placing the pipeline into service.

[4] Proposed burial depth of the pipeline.

[5] The location and type of all road crossings (i.e. bored and cased or bored only).

[6] The location of all environmentally sensitive areas, such as wetlands, streams, or other surface waterbodies that the pipeline may traverse, if applicable.

b. The underground gathering pipeline owner shall file a sundry notice (form 4 or form provided by the commission) with the director ~~notify~~ notifying the commission of any underground gathering pipeline system or portion thereof that has been removed from service for more than one year.

c. If damage occurs to any underground gathering pipeline, flow line, or other underground equipment used to transport crude oil, natural gas, carbon dioxide, or water produced in association with oil and gas, during construction, operation, maintenance, repair, or abandonment of an underground gathering pipeline, the responsible party shall verbally notify the director immediately.

d. The pipeline owner shall file a sundry notice (form 4 or form provided by the commission) within thirty days of the in-service date reporting the date of first service.

4. Design and construction.

The following applies to newly constructed crude oil and produced water underground gathering pipelines, including tie-ins to existing systems:

a. Underground gathering pipelines must be devoid of leaks and constructed of materials resistant to external corrosion and to the effects of transported fluids.

b. Underground gathering pipelines must be designed in a manner that allows for line maintenance, periodic line cleaning, and integrity testing.

c. Installation crews must be trained in all installation practices for which they are tasked to perform.

d. Underground gathering pipelines must be installed in a manner that minimizes interference with agriculture, road and utility construction, the introduction of secondary stresses, and the possibility of damage to the pipe. Tracer wire must be buried with any nonconductive pipe installed.

e. Unless the manufacturer’s installation procedures and practices provide guidance, pipeline trenches must be constructed to allow for the pipeline to rest on undisturbed native soil and provide continuous support along the length of the pipe. Trench bottoms must be free of rocks greater than two inches in diameter, debris, trash, and other foreign material not required for pipeline installation. If a trench bottom is over excavated, the trench bottom must be backfilled with appropriate material and compacted prior to installation of the pipe to provide continuous support along the length of the pipe.

   The width of the trench must provide adequate clearance on each side of the pipe. Trench walls must be excavated to ensure minimal sluffing of sidewall material into the trench. Subsoil from the excavated trench must be stockpiled separately from previously stripped topsoil.

f. Underground gathering pipelines that cross a township, county, or state graded road must be bored unless the responsible governing agency specifically permits the owner to open cut the road.

g. No pipe or other component may be installed unless it has been visually inspected at the site of installation to ensure that it is not damaged in a manner that could impair its strength or reduce its serviceability.

h. The pipe must be handled in a manner that minimizes stress and avoids physical damage to the pipe during stringing, joining, or lowering in. During the lowering in process the pipe string must be properly supported so as not to induce excess stresses on the pipe or the pipe joints or cause weakening or damage to the outer surface of the pipe.

i. When a trench for an underground gathering pipeline is backfilled, it must be backfilled in a manner that provides firm support under the pipe and prevents damage to the pipe and pipe coating from equipment or from the backfill material. Sufficient backfill material must be placed in the haunches of the pipe to provide long-term support for the pipe. Backfill material that will be within two feet of the pipe must be free of rocks greater than two inches in diameter and foreign debris. Backfilling material must be compacted as appropriate during placement in a manner that provides support for the pipe and reduces the potential for damage to the pipe and pipe joints.

j. Cover depths must be a minimum of four feet [1.22 meters] from the top of the pipe to the finished grade. The cover depth for an undeveloped governmental section line must be a minimum of six feet [1.83 meters] from the top of the pipe to the finished grade.

k. Underground gathering pipelines that traverse environmentally sensitive areas, such as wetlands, streams, or other surface waterbodies, must be installed in a manner that minimizes impacts to these areas. Any horizontal directional drilling plan prepared by the owner or required by the director, must be filed with the commission, prior to the commencement of horizontal directional drilling.

l. Clamping or squeezing as a method of connecting any produced water underground gathering pipeline shall be approved by the director. Prior to clamping or squeezing the pipeline, the owner shall file a sundry notice (form 4 or form provided by the commission) with the director and obtain approval of the clamping or squeezing plan. The notice must include documentation that the pipeline can be safely clamped or squeezed as prescribed by the manufacturer's specifications. Any damaged portion of a produced water underground gathering pipeline that has been clamped or squeezed must be replaced before it is placed into service.

5. Pipeline reclamation.

a. When utilizing excavation for pipeline installation, repair, or abandonment, topsoil must be stripped, segregated from the subsoils, and stockpiled for use in reclamation. "Topsoil" means the suitable plant growth material on the surface; however, in no event shall this be deemed to be more than the top twelve inches [30.48 centimeters] of soil or deeper than the depth of cultivation, whichever is greater.

b. The pipeline right-of-way must be reclaimed as closely as practicable to original condition. All stakes, temporary construction markers, cables, ropes, skids, and any other debris or material not native to the area must be removed from the right-of-way and lawfully disposed of.

c. During right-of-way reclamation all subsoils and topsoils must be returned in proper order to as close to the original depths as practicable.

d. The reclaimed right-of-way soils must be stabilized to prevent excessive settling, sluffing, cave-ins, or erosion.

e. The crude oil and produced water underground gathering pipeline owner is responsible for their right-of-way reclamation and maintenance until such pipeline is released by the commission from the pipeline bond pursuant to section 43-02-03-15.

6. Inspection.

All newly constructed crude oil and produced water underground gathering pipelines must be inspected by third-party independent inspectors to ensure the pipeline is installed as prescribed by the manufacturer's specifications and in accordance with the requirements of this section. A list of all third-party independent inspectors and a description of each independent inspector's qualifications, certifications, experience, and specific training must be provided to the commission upon request. A person may not be used to perform inspections unless that person has been trained and is qualified in the phase of construction to be inspected. <u>The third-party independent inspector shall not be an employee of the gathering pipeline owner/operator or the contractor hired to construct and install the pipeline.</u>

7. Associated pipeline facility.

No associated above ground equipment may be installed less than five hundred feet [152.40 meters] from an occupied dwelling unless agreed to in writing by the owner of the dwelling or authorized by order of the commission.

All associated above ground equipment used to store crude oil or produced water must be devoid of leaks and constructed of materials resistant to the effects of crude oil, produced water, brines, or chemicals that may be contained therein. The above materials requirement may be waived by the director for tanks presently in service and in good condition. Unused tanks and associated above ground equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

Dikes must be erected around all produced water or crude oil tanks at any new facility prior to placing the associated underground gathering pipeline into service. Dikes must be erected and maintained around all crude oil or produced water tanks or above ground equipment, when deemed necessary by the director. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid throughput. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction. Discharged crude oil or produced water must be properly removed and may not be allowed to remain standing within or outside of any diked areas.

The underground gathering pipeline owner shall take steps to minimize the amount of solids stored at the pipeline facility, although the remediation of such material may be allowed onsite, if approved by the director.

8. Underground gathering pipeline as built.

a. The owner of any underground gathering pipeline placed into service after July 31, 2011, shall file with the director, as prescribed by the director, within one hundred eighty days of placing into service, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point. ~~The shape file must have a completed attribute table containing the required data.~~ An affidavit of completion must accompany each layer containing the following information:

(1) A ~~statement~~ third-party inspector certificate that the pipeline was constructed and installed in compliance with section 43-02-03-29.1.

(2) The outside diameter, minimum wall thickness, composition, ~~internal yield pressure,~~ and maximum temperature rating of the pipeline, or any other specifications deemed necessary by the director.

(3) The maximum allowable operating pressure of the pipeline.

(4) The specified minimum yield strength and internal yield pressure of the pipeline if applicable to the composition of pipe.

(5) The type of fluid that will be transported in the pipeline.

(6) Pressure and duration to which the pipeline was tested prior to placing into service.

(7) The minimum pipeline depth of burial from the top of the pipe to the finished grade.

(8) In-service date.

(9) Leak protection and monitoring methods that will be utilized after in-service date.

(10) Any leak detection methods that have been prepared by the owner.

(11) The name of the pipeline gathering system and any other separately named portions thereof.

(12) Accuracy of the geographical information system layer.

b. ~~The requirement to submit a geographical information system layer is not to be construed to be required on flow lines, injection pipelines, pipelines operated by an enhanced recovery unit for enhanced recovery unit operations, or on buried piping utilized to connect flares, tanks, treaters, or other equipment located entirely within the boundary of a well site or production facility.~~

9. Operating requirements.

The maximum operating pressure for all crude oil and produced water underground gathering pipelines may not exceed the manufacturer's specifications of the pipe or the manufacturer's specifications of any other component of the pipeline, whichever is less. The crude oil or produced water underground gathering pipeline must be equipped with adequate controls and protective equipment to prevent the pipeline from operating above the maximum operating pressure.

10. Leak protection, detection, and monitoring.

All crude oil and produced water underground gathering pipeline owners shall file with the commission any leak protection and monitoring plan prepared by the owner or required by the director, pursuant to North Dakota Century Code section 38-08-27.

If any leak detection plan has been prepared by the owner, it must be submitted to the director.

All crude oil or produced water underground gathering pipeline owners shall develop and maintain a data sharing plan. The plan must provide for real-time sharing of data between the operator of the production facility, the crude oil or produced water underground gathering pipeline owner, and the operator at the point or points of disposal, storage, or sale. If a discrepancy in the shared data is observed, the party observing the data discrepancy shall notify all other parties and action must be taken to determine the cause. A record of all data discrepancies must be retained by the crude oil or produced water underground gathering pipeline owner. If requested, copies of such records must be filed with the commission.

11. Spill response.

All crude oil and produced water underground gathering pipeline owners shall maintain a spill response plan during the service life of any crude oil or produced water underground gathering pipeline. The plan should detail the necessary steps for an effective and timely response to a pipeline spill. The spill response plan should be tailored to the specific risks in the localized area. Response capabilities should address access to equipment and tools necessary to respond, as well as action steps to protect the health and property of impacted landowners, citizens, and the environment.

12. Corrosion control.

a. Underground gathering pipelines must be designed to withstand the effects of external corrosion and maintained in a manner that mitigates internal corrosion.

b. All metallic underground gathering pipelines installed must have sufficient corrosion control.

c. All coated pipe must be electronically inspected prior to placement using coating deficiency (i.e. holiday) detectors to check for any faults not observable by visual examination. The holiday detector must be operated in accordance with manufacturer's instructions and at a voltage level appropriate for the electrical characteristics of the pipeline system being tested. During installation all joints, fittings, and tie-ins must be coated with materials compatible with the coatings on the pipe. Coating materials must:

(1) Be designed to mitigate corrosion of the buried pipeline;

(2) Have sufficient adhesion to the metal surface to prevent under film migration of moisture;

(3) Be sufficiently ductile to resist cracking;

(4) Have enough strength to resist damage due to handling and soil stress;

(5) Support any supplemental cathodic protection; and

(6) If the coating is an insulating type, have low moisture absorption and provide high electrical resistance.

d. Cathodic protection systems must meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers standard practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems.

e. If internal corrosion is anticipated or detected, the underground gathering pipeline owner shall take prompt remedial action to correct any deficiencies, such as increased pigging, use of corrosion inhibitors, internal coating of the pipeline (e.g. an epoxy paint or other plastic liner), or a combination of these methods. Corrosion inhibitors must be used in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect.

13. Pipeline integrity.

A crude oil or produced water underground gathering pipeline owner may not operate a pipeline unless it has been pressure tested and demonstrated integrity. In addition, an owner may not return to service a portion of pipeline which has been repaired, replaced, relocated, or otherwise changed until it has demonstrated integrity.

a. The crude oil and produced water underground gathering pipeline owner shall notify the commission <u>at least forty-eight hours</u> prior to commencement of any pipeline integrity test to allow a representative of the commission to witness the testing process and results. The notice shall include the pipeline integrity test procedure.

b. ~~An independent inspector's certificate of hydrostatic or pneumatic testing of a crude oil or produced water underground gathering pipeline must be submitted~~ The crude oil and produced water underground gathering pipeline owner must submit within sixty days of the underground gathering pipeline being placed into service ~~and~~ the integrity test results which must include the following:

(1) The name of the pipeline gathering system and any other separately named portions thereof;

(2) The date of the test;

(3) The duration of the test;

(4) The length of pipeline which was tested;

(5) The maximum and minimum test pressure;

(6) The starting and ending pressure;

(7) A copy of the chart recorder or digital log results; ~~and~~

(8) A geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the centerline of the portion of the pipeline that was tested~~.~~;

(9) A copy of the test procedure used; and

(10) A third-party inspector certificate summarizing the pipeline has been pressure tested and whether it demonstrated integrity, including the identification of any leaks, ruptures, or other integrity issues encountered, and an explanation for any substantial pressure gain or losses during the integrity test, if applicable.

c. All crude oil and produced water underground gathering pipeline owners shall maintain a pipeline integrity demonstration plan during the service life of any crude oil or produced water underground gathering pipeline. The director, for good cause, may require a pipeline integrity demonstration on any crude oil or produced water underground gathering pipeline.

14. Pipeline repair.

Each owner, in repairing an underground gathering pipeline or pipeline system, shall ensure that the repairs are made in a manner that prevents damage to persons or property.

An owner may not use any pipe, valve, or fitting, for replacement or repair of an underground gathering pipeline, unless it is designed to meet the maximum operating pressure.

a. At least forty-eight hours prior to any underground gathering pipeline repair or replacement, the underground gathering pipeline owner shall notify the commission, as provided by the director, except in an emergency.

b. Within one hundred eighty days of repairing or replacing any underground gathering pipeline the owner of the pipeline shall file with the director a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the centerline of the repaired or replaced pipeline and an affidavit of completion containing the following information:

(1) A statement that the pipeline was repaired in compliance with section 43-02-03-29.1.

(2) The reason for the repair or replacement.

(3) The length of pipeline which was repaired or replaced.

(4) Pressure and duration to which the pipeline was tested prior to returning to service.

c. Clamping or squeezing as a method of repair for any produced water underground gathering pipeline must be approved by the director. Prior to clamping or squeezing the pipeline, the owner shall file a sundry notice (form 4) with the director and obtain approval of the clamping or squeezing plan. The notice must include documentation that the pipeline can be safely clamped or squeezed as prescribed by the manufacturer’s specifications. If an emergency requires clamping or squeezing, the owner or the owner’s agent shall obtain verbal approval from the director and the notice shall be filed within seven days of completing the repair. Any damaged portion of a produced water underground gathering pipeline that has been clamped or squeezed must be replaced before it is returned to service.

15. Pipeline abandonment.

<u>a. At least forty-eight hours prior to abandoning any underground gathering pipeline, the underground gathering pipeline owner shall verbally notify the director.</u>

~~a.~~ b. When an underground gathering pipeline or any part of such pipeline is abandoned as defined under subsection 1 of North Dakota Century Code section 38-08-02 after March 31, 2014, the owner shall leave such pipeline in a safe condition by conducting the following:

(1) Disconnect and physically isolate the pipeline from any operating facility, associated above ground equipment, or other pipeline.

(2) Cut off the pipeline or the part of the pipeline to be abandoned below surface at pipeline level.

(3) Purge the pipeline with fresh water, air, or inert gas in a manner that effectively removes all fluid.

(4) Remove cathodic protection from the pipeline.

(5) Permanently plug or cap all open ends by mechanical means or welded means.

(6) The site of all associated above ground equipment must be reclaimed pursuant to section 43-02-03-34.1.

(7) If the bury depth is not at least three feet below final grade, such portion of pipe must be removed.

~~b.~~ c. Within one hundred eighty days of completing the abandonment of an underground gathering pipeline the owner of the pipeline shall file with the director a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the pipeline centerline and an affidavit of completion containing the following information:

(1) A statement that the pipeline was abandoned in compliance with section 43-02-03-29.1.

(2) The type of fluid used to purge the pipeline.

(3) The date of pipeline abandonment.

(4) The length of pipeline abandoned.

History: Effective January 1, 2017; ; amended effective ___.

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

43-02-03-30. NOTIFICATION OF FIRES, LEAKS, SPILLS, OR BLOWOUTS. All persons controlling or operating any well, pipeline and associated above ground equipment, receiving tank, storage tank, treating plant, or any other receptacle or production facility associated with oil, gas, or water production, injection, processing, or well servicing, shall verbally notify the director immediately and follow up utilizing the online initial notification report within twenty-four hours after discovery of any fire, leak, spill, blowout, or release of fluid. The initial report must include the name of the reporting party, including telephone number and address, date and time of the incident, location of the incident, type and cause of the incident, estimated volume of release, containment status, waterways involved, immediate potential threat, and action taken. If any such incident occurs or travels offsite of a facility, the persons, as named above, responsible for proper notification shall within a reasonable time also notify the surface owners upon whose land the incident occurred or traveled. Notification requirements prescribed by this section do not apply to any leak or spill involving only freshwater or to any leak, spill, or release of crude oil, produced water, or natural gas liquid that is less than one barrel total volume and remains onsite of a site where any well thereon was spud before September 2, 2000, or on a facility that was constructed before September 2, 2000, and do not apply to any leak or spill or release of crude oil, produced water, or natural gas liquid that is less than ten barrels total volume cumulative over a fifteen-day time period, and remains onsite of a site where all wells thereon were spud after September 1, 2000, or on a facility that was constructed after September 1, 2000. The initial notification must be followed by a written report within ten days after cleanup of the incident, unless deemed unnecessary by the director. Such report must include the following information: the operator and description of the facility, the legal description of the location of the incident, date of occurrence, date of cleanup, amount and type of each fluid involved, amount of each fluid recovered, steps taken to remedy the situation, root cause of the incident unless deemed unnecessary by the director, and action taken to prevent reoccurrence, and if applicable, any additional information pursuant to subdivision e of subsection 1 of North Dakota Century Code section 37-17.1-07.1. The signature, title, and telephone number of the company representative must be included on such report. The persons, as named above, responsible for proper notification shall within a reasonable time also provide a copy of the written report to the surface owners upon whose land the incident occurred or traveled.

The commission, however, may impose more stringent spill reporting requirements if warranted 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; January 1, 2008; April 1, 2010; April 1, 2014; October 1, 2016; April 1, 2018; ___.

General Authority	Law Implemented
NDCC 38-08-04	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 or form provided by the commission) 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. Within six months of reaching total depth and prior to completing the well, the operator shall cause to be run a log from which the presence and quality of bonding of cement can be determined in every well in which production or intermediate casing has been set. The obligation to log may be waived or postponed by the director if the necessity 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. All logs run shall be submitted to the director free of charge. Logs shall be submitted as one digital TIFF (tagged image file format) copy and one digital LAS (log ASCII) formatted copy, or a format approved by the director. In addition, operators shall file ~~two copies~~ one copy of drill stem test reports and charts, formation water analyses, core analyses, geologic reports, and noninterpretive lithologic logs or sample descriptions if compiled by the operator.

All information furnished to the director on permits, except the operator name, well name, location, permit date, confidentiality period, spacing or drilling unit description, spud date, rig contractor, central tank battery number, any production runs, or volumes injected into an injection well, shall be kept confidential ~~for not more than six months if requested~~ from the time a request by the operator is received in writing until the six-month confidentiality period has ended. 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. The director may release such confidential completion and production data to health care professionals, emergency responders, and state, federal, or tribal environmental and public health regulators if the director deems it necessary to protect the public’s health, safety, and welfare.

All information furnished to the director on recompletions or reentries, except the operator name, well name, location, permit date, confidentiality period, spacing or drilling unit description, spud date, rig contractor, any production runs, or volumes injected into an injection well, 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; January 1, 2008; April 1, 2010; April 1, 2012; October 1, 2016; ___.

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

D. PLUGGING OF WELLS

43-02-03-34.1. RECLAMATION OF SURFACE.

1. Within a reasonable time, but not more than one year, after a well is plugged, or if a permit expires, has been canceled or revoked, or a treating plant or saltwater handling facility is decommissioned, the site, access road, and other associated facilities constructed shall be reclaimed as closely as practicable to original condition pursuant to North Dakota Century Code section 38-08-04.12. 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. The operator or operator’s agent shall provide a copy of the proposed reclamation plan to the surface owner at least ten days prior to commencing the work unless waived by the surface owner. Verbal approval to reclaim the site may be given. The notice shall include:

    a. The name and address of the reclamation contractor;

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

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

    d. Reseeding plans, if applicable.

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

All equipment, waste, and debris shall be removed from the site. ~~Flow lines~~ All pipelines shall be purged and abandoned pursuant to section 43-02-03-29.1. Flow lines shall be removed if buried less than three feet [91.44 centimeters] below final contour.

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

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

4. A site assessment may be required by the director, before and after reclamation of the site.

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 or treating plant or saltwater handling facility is decommissioned and shall record documentation of the waiver with the recorder of the county in which the site or road is located.

History: Effective April 1, 2012; amended effective April 1, 2014; October 1, 2016; April 1, 2018; ___.

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

43-02-03-38.1. PRESERVATION OF CORES AND SAMPLES. Unless waived by the director, operators shall have a well site geologist or mudlogger on location for at least the first well drilled on a multi-well pad to collect sample cuttings and to create a mudlog and geologic report. Sample cuttings of formations, taken at intervals prescribed by the state geologist, in all wells drilled for oil or gas or geologic information in North Dakota, shall be washed and packaged in standard sample envelopes which in turn shall be placed in proper order in a standard sample box; carefully identified as to operator, well name, well file number, American petroleum institute number, location, depth of sample; and shall be sent free of cost to the state core and sample library within thirty days after completion of drilling operations.

The operator of any well drilled for oil or gas in North Dakota, during the drilling of or immediately following the completion of any well, shall inform the director of all intervals that are to be cored, or have been cored. Unless specifically exempted by the director, all cores taken shall be preserved, placed in a standard core box and the entire core forwarded to the state core and sample library, free of cost, within one hundred eighty days after completion of drilling operations. The director may grant an extension of the one hundred eighty-day time period for good reason. If an exemption is granted, the operator shall advise the state geologist of the final disposition of the core.

This section does not prohibit the operator from taking such samples of the core as the operator may desire for identification and testing. The operator shall furnish the state geologist with the results of all identification and testing procedures within thirty days of the completion of such work. The state geologist may grant an extension of the thirty-day time period for good reason.

The size of the standard sample envelopes, sample boxes, and core boxes shall be determined by the director and indicated in the cores and samples letter.

History: Effective October 1, 1990; amended effective January 1, 2006; April 1, 2014; ___.

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

E. OIL PRODUCTION OPERATING PRACTICES

43-02-03-40. GAS-OIL RATIO TEST. Each operator shall take a gas-oil ratio test within thirty days following the completion or recompletion of an oil well. Each test shall be conducted using standard industry practices unless otherwise specified by the director. The initial gas-oil ratio must be reported on the well completion or recompletion report (form 6 <u>or form provided by the commission</u>). Subsequent gas-oil ratio tests must be performed on producing wells when the producing pool appears to have reached bubble point. After the discovery of a new pool, each operator shall make additional gas-oil ratio tests as directed by the director or provided for in field rules. During tests each well shall be produced at a maximum efficient rate. The director may shut in any well for failure to make such test until such time as a satisfactory test can be made, or satisfactory explanation given. The results of all gas-oil ratio tests shall be submitted to the director on form 9, which shall be accompanied by a statement that the data on form 9 is true and correct.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000; October 1, 2016.

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

43-02-03-48.1. CENTRAL PRODUCTION FACILITY - COMMINGLING OF PRODUCTION.

1. The director shall have the authority to approve requests to consolidate production equipment at a central location. <u>The applicant shall provide all information</u>

requested by the director. The director may impose such terms and conditions as the director deems necessary.

2. Commingling of production from two or more wells in a central production facility is prohibited unless approved by the director. There are two types of central production facilities in which production from two or more wells is commingled that may be approved by the director.

a. A central production facility in which all production going into the facility has common ownership ~~(working interests, royalty interests, and overriding royalties)~~. For purposes of this section, production with common ownership is defined as production from wells that do not have diverse ownership.

b. A central production facility in which production going into the facility has diverse ownership. For purposes of this section, production with diverse ownership is defined as production from wells that are (i) in different drilling or spacing units and (ii) which have different mineral ownership.

3. The commingling of production in a central production facility from two or more wells having common ownership may be approved by the director provided the production from each well can be accurately determined at reasonable intervals. Commingling of production in a central production facility from two or more wells having diverse ownership may be approved by the director provided the production from each well is accurately metered prior to commingling. Commingling of production in a central production facility from two or more wells having diverse ownership that is not metered prior to commingling may only be approved by the commission after notice and hearing.

a. Common ownership central production facility. The application for permission to commingle oil and gas in a central production facility with common ownership must be submitted on a sundry notice (form 4) and shall include the following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) An affidavit executed by a person who has knowledge ~~as to the state of title indicating ownership is common~~ indicating that common ownership as defined above exists.

(4) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed at least once every three months.

A copy of all tests are to be filed with the director on form 11 within thirty days after the tests are completed.

b. Diverse ownership central production facility. The application for permission to commingle oil and gas in a central production facility having diverse ownership must be submitted on a sundry notice (form 4) and shall include the following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well, and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) The name of the manufacturer, size, and type of meters to be used. The meters must be proved at least once every three months and the results reported to the director within thirty days following the completion of the test.

(4) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed monthly.

A copy of all tests are to be filed with the director on form 11 within thirty days after the tests are completed.

4. Any changes to a previously approved central production facility must be reported on a sundry notice (form 4) and approved by the director.

History: Effective May 1, 1992; September 1, 2000; May 1, 2004; ___.

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

43-02-03-49. OIL PRODUCTION EQUIPMENT, DIKES, AND SEALS. Storage of oil in underground or partially buried tanks or containers is prohibited. Surface oil tanks and production equipment must be devoid of leaks and constructed of materials resistant to the effects of produced fluids or chemicals that may be contained therein. Unused tanks and production equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

Dikes must be erected around oil tanks, flowthrough process vessels, and recycle pumps at any new production facility prior to completing any well. Dikes must be erected and maintained around oil tanks at all facilities unless a waiver is granted by the director. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes around oil tanks must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid production. Dikes around flowthrough process vessels must be of sufficient dimension to contain the total capacity of the vessel. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction.

Within one hundred eighty days from the date the operator is notified by the commission, a perimeter berm, at least six inches [15.24 centimeters] in height, must be constructed and maintained. The berm must be constructed of sufficiently impermeable material to provide emergency containment and to divert surface drainage away from the site around all storage facilities and production sites that include storage tanks, have a daily throughput of more than one hundred barrels of fluid per day, and include production equipment or load lines that are not contained within secondary containment dikes. The director may consider an extension of time to implement these requirements if conditions prevent timely construction, or a modification of these requirements if other factors are present that provide sufficient protection from environmental impacts. Prior to removing any perimeter berm, the operator or owner shall obtain approval by the director.

Numbered weather-resistant security seals shall be properly utilized on all oil access valves and access points to secure the tank or battery of tanks.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000; July 1, 2002; May 1, 2004; April 1, 2010; April 1, 2012; January 1, 2017; April 1, 2018.

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

43-02-03-51. TREATING PLANT. No treating plant may be constructed or site or access road construction commenced without obtaining a permit from the commission after notice and hearing. A written application for a treating plant permit shall state in detail the location, type, capacity of the plant contemplated, method of processing proposed, and the plan of operation for all plant waste. The ~~commission~~ director shall give the county auditor notice at least fifteen days prior to the hearing of any application in which a request for a treating plant is received.

History: Amended effective January 1, 1983; May 1, 1990; May 1, 1992; September 1, 2000; April 1, 2012; April 1, 2014; ___.

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

43-02-03-51.1. TREATING PLANT PERMIT REQUIREMENTS.

1. The treating plant permit application shall be submitted on form 1tp and shall include at least the following information:

   a. The name and address of the operator.

   b. An accurate plat certified by a registered surveyor showing the location of the proposed treating plant and the center of the site with reference to true north and the nearest lines of a governmental section. The plat shall also include the latitude and longitude of the center of the proposed treating plant location to the nearest tenth of a second, and the ground elevation. The plat shall also depict the outside perimeter of the treating plant and verification that the site is at least five hundred feet [152.4 meters] from an occupied dwelling.

   c. A schematic drawing of the proposed treating plant site, drawn to scale, detailing all facilities and equipment, including the size, location, and purpose of all tanks, the height and location of all dikes, the location of all flow lines, and the location of the topsoil stockpile. It shall also include the proposed road access to the nearest existing public road and the authority to build such access.

   d. Cut and fill diagrams.

   e. An affidavit of mailing identifying each owner of any permanently occupied dwelling within one-quarter mile of the proposed treating plant and certifying that such owner has been notified of the proposed treating plant.

   f. Appropriate geological data on the surface geology <u>and its suitability for fluid containment</u>.

   g. Schematic drawings of the proposed diking and containment, including calculated containment volume and all areas underlain by a synthetic liner.

   h. Monitoring plans and leak detection for all buried or partially buried structures <u>and any concrete structure upon which waste or product is in direct contact with</u>.

   i. The capacity and operational capacity of the treating plant.

   <u>j. A narrative description of the process and how the waste and recovered product streams travel through the treating plant.</u>

   <u>k. A review of the surficial aquifers within one mile of the proposed treating plant site or surface facilities.</u>

   <u>l. Any other information required by the director to evaluate the proposed treating plant or site.</u>

2. Permits may contain such terms and conditions as the ~~commission~~ director deems necessary.

3. Any permit issued under this section may be revoked by the commission after notice and hearing if the permittee fails to comply with the terms and conditions of the permit, any directive of the ~~commission~~ director, or any applicable rule or statute. Any permit issued under this section may be suspended by the director for good cause.

4. Permits are transferable only with approval of the ~~commission~~ director.

5. Permits may be modified by the ~~commission~~ director.

6. A permit shall automatically expire one year after the date it was issued, unless dirtwork operations have commenced to construct the site.

7. If the treating plant is abandoned and reclaimed, the permit shall expire and be of no further force and effect.

History: Effective April 1, 2014; amended effective October 1, 2016; ___.

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

43-02-03-51.3. TREATING PLANT CONSTRUCTION AND OPERATION REQUIREMENTS.

1. Before construction of a treating plant, treating plant site, or access road begins, the operator shall file with the ~~commission~~ director a surety bond or cash bond conditioned upon compliance with all laws, rules and regulations, and orders of the commission. The bond amount shall be specified in the commission order authorizing the treating plant and shall be based upon the location, type, and capacity of the plant, processing method, and plan of operation for all plant waste approved in the commission order and shall be payable to the industrial commission. In no case shall the bond amount be set lower than fifty thousand dollars.

2. Treating plant sites and associated facilities or appropriate parts thereof shall be fenced if required by the director. All fences installed within or around any facility must be constructed in a manner that promotes emergency ingress and egress.

3. All storage tanks shall be kept free of leaks and in good condition. Storage tanks for saltwater shall be constructed of, or lined with, materials resistant to the effects of saltwater. Open tanks are allowed if approved by the director.

4. All waste, recovered solids, and recovered fluids shall be stored and handled in such a manner to prevent runoff or migration offsite.

5. Dikes of sufficient dimension to contain the total capacity of the maximum volume stored must be erected and maintained around all storage and processing tanks. Dikes as well as the base within the diked area must be lined with a synthetic impermeable liner to provide emergency containment. All processing equipment shall be underlain by a synthetic impermeable material, unless waived by the director. The site shall be sloped and diked to divert surface drainage away from the site. The operations of the treating plant shall be conducted in such a manner as to prevent leaks, spills, and fires. All discharged fluids and wastes shall be promptly and properly removed and shall not be allowed to remain standing within the diked area or on the treating plant premises. All such incidents shall be properly cleaned up, subject to approval by the director. All such reportable incidents shall be promptly reported to the director and a detailed account of any such incident must be filed with the director in accordance with section 43-02-03-30.

6. A perimeter berm, at least six inches [15.24 centimeters] in height, must be constructed of sufficiently impermeable material to provide emergency containment around the treating plant and to divert surface drainage away from the site if deemed necessary by the director.

7. Within thirty days following construction or modification of a treating plant, a sundry notice (form 4) must be submitted detailing the work and the dates commenced and completed. The sundry notice must be accompanied by a schematic drawing of the treating plant site drawn to scale, detailing all facilities and equipment, including the size, location, and purpose of all tanks; the height and location of all dikes as well as a calculated containment volume; all areas underlain by a synthetic liner; any leak detection system installed; the location of all flowlines; the stockpiled topsoil location and its volume; and the road access to the nearest existing public road.

8. Immediately upon the commencement of treatment operations, the operator shall notify the ~~commission~~ director in writing of such date.

9. The operator of a treating plant shall provide continuing surveillance and conduct such monitoring and sampling as the ~~commission~~ director may require.

10. Storage pits, waste pits, or other earthen storage areas shall be prohibited unless authorized by an appropriate regulatory agency. A copy of said authorization shall be filed with the ~~commission~~ director.

11. Burial of waste at any treating plant site shall be prohibited. All residual water and waste, fluid or solid, shall be disposed of in an authorized facility.

12. The operator shall take steps to minimize the amount of residual waste generated and the amount of residual waste temporarily stored onsite. Solid waste shall not be stockpiled onsite unless authorized by an appropriate regulatory agency. A copy of said authorization shall be filed with the ~~commission~~ director.

13. If deemed necessary by the director, the operator shall cause to be analyzed any waste substance contained onsite. Such chemical analysis shall be performed by a certified

laboratory and shall adequately determine if chemical constituents exist which would categorize the waste as hazardous by state department of health standards.

14. Treating plants shall be constructed and operated so as not to endanger surface or subsurface water supplies or cause degradation to surrounding lands and shall comply with section 43-02-03-28 concerning fire hazards and proximity to occupied dwellings.

15. The beginning of month inventory, the amount of waste received and the source of such waste, the volume of oil sold, the amount and disposition of water, the amount and disposition of residue waste, fluid or solid, and the end of month inventory for each treating plant shall be reported monthly on form 5p with the director on or before the first day of the second succeeding month, regardless of the status of operations.

16. Records necessary to validate information submitted on form 5p shall be maintained in North Dakota.

17. All proposed changes to any treating plant must have prior approval by the director.

18. The operator shall comply with all applicable rules and orders of the commission. All rules in this chapter governing oil well sites shall also apply to any treating plant site.

19. The operator shall immediately cease operations if so ordered by the director for failure to comply with the statutes of North Dakota, <u>commission</u> ~~or~~ rules~~,~~ <u>or</u> orders, ~~and~~ <u>or</u> directives of the ~~commission~~ <u>director</u>.

History: Effective April 1, 2014; amended effective October 1, 2016; January 1, 2017; April 1, 2018; ___.

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

43-02-03-53. SALTWATER HANDLING FACILITIES.

1. A saltwater handling facility may not be constructed without obtaining a permit from the ~~commission~~ <u>director</u>. Saltwater handling facilities in existence prior to October 1, 2016, which are not currently bonded as an appurtenance to a well or treating plant, have ninety days from the date notified by the ~~commission~~ <u>director</u> that a permit is required to submit the required information in order for the ~~commission~~ <u>director</u> to approve such facility.

2. All saltwater liquids or brines produced with oil and natural gas shall be processed, stored, and disposed of without pollution of freshwater supplies.

3. Underground injection of saltwater liquids and brines shall be in accordance with chapter 43-02-05.

4. The permitting and bonding requirements for a saltwater handling facility set forth in sections 43-02-03-53, 43-02-03-53.1, and 43-02-03-53.3 are not to be construed to be required if the facility is bonded as a well or treating plant appurtenance. Such facilities will be considered in the permit application for the well or treating plant.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000; July 1, 2002; May 1, 2004; April 1, 2010; April 1, 2012; October 1, 2016; ___.

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

43-02-03-53.1. SALTWATER HANDLING FACILITY PERMIT REQUIREMENTS.

1. A permit for construction of a saltwater handling facility, saltwater handling facility site, or access road must be approved by the ~~commission~~ director prior to construction. The saltwater handling facility permit application must be submitted on a sundry notice (form 4) and include at least the following information:

   a. The name and address of the operator.

   b. An accurate plat certified by a registered surveyor showing the location of the proposed saltwater handling facility and the center of the site with reference to true north and the nearest lines of a governmental section. The plat also must include the latitude and longitude of the center of the proposed saltwater handling facility location to the nearest tenth of a second and the ground elevation. The plat also must depict the outside perimeter of the saltwater handling facility and verification that the site is at least five hundred feet [152.4 meters] from an occupied dwelling.

   c. A schematic drawing of the proposed saltwater handling facility site, drawn to scale, detailing all facilities and equipment, including the size, location, and purpose of all tanks, the height and location of all dikes, the location of all flow lines, and the location and thickness of the stockpiled topsoil. The schematic drawing also must include the proposed road access to the nearest existing public road and the authority to build such access.

   d. Cut and fill diagrams.

   e. Schematic drawings of the proposed diking and containment, including calculated containment volume and all areas underlain by a synthetic liner, as well as a description of all containment construction material.

   f. The anticipated daily throughput of the saltwater handling facility.

   g. A review of the surficial aquifers within one mile of the proposed treating plant site or surface facilities.

h. Any other information required by the director to evaluate the proposed saltwater handling facility or site.

2. Permits may contain such terms and conditions as the ~~commission~~ director deems necessary.

3. Any permit issued under this section may be revoked by the commission after notice and hearing if the permittee fails to comply with the terms and conditions of the permit, any directive of the ~~commission~~ director, or any applicable rule or statute. Any permit issued under this section may be suspended by the director for good cause.

4. Permits are transferable only with approval of the ~~commission~~ director.

5. Permits may be modified by the ~~commission~~ director.

6. A permit automatically expires one year after the date it was issued, unless dirtwork operations have commenced to construct the site.

7. If the saltwater handling facility is abandoned and reclaimed, the permit expires and is of no further force and effect.

History: Effective October 1, 2016; amended effective ____.

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

43-02-03-53.3. SALTWATER HANDLING FACILITY CONSTRUCTION AND OPERATION REQUIREMENTS.

1. Bond requirement. Before construction of a saltwater handling facility, saltwater handling facility site, or access road begins, the operator shall file with the ~~commission~~ director a surety bond or cash bond conditioned upon compliance with all laws, rules and regulations, and orders of the commission. The bond must be in the amount of fifty thousand dollars and must be payable to the industrial commission. The commission, after notice and hearing, may require a higher bond amount. Such additional amounts for bonds must be related to the economic value of the facility and the expected cost of decommissioning and site reclamation, as determined by the commission. The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with all laws, rules and regulations, and orders of the commission; if a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

2. Saltwater handling facility sites or appropriate parts thereof must be fenced if required by the director. All fences installed within or around any facility must be constructed in a manner that promotes emergency ingress and egress.

3. All waste, recovered solids, and fluids must be stored and handled in such a manner to prevent runoff or migration offsite.

4. Surface tanks may not be underground or partially buried, must be devoid of leaks, and constructed of, or lined with, materials resistant to the effects of produced saltwater liquids, brines, or chemicals that may be contained therein. The above materials requirement may be waived by the director for tanks presently in service and in good condition. Unused tanks and equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

5. Dikes must be erected and maintained around saltwater tanks at any saltwater handling facility. Dikes must be erected around saltwater tanks at any new facility prior to introducing fluids. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid throughput. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction. The operations of the saltwater handling facility must be conducted in such a manner as to prevent leaks, spills, and fires. Discharged liquids or brines must be properly removed and may not be allowed to remain standing within or outside of any diked areas. All such incidents must be properly cleaned up, subject to approval by the director. All such reportable incidents must be promptly reported to the director and a detailed account of any such incident must be filed with the director in accordance with section 43-02-03-30.

6. Within one hundred eighty days from the date the operator is notified by the commission, a perimeter berm, at least six inches [15.24 centimeters] in height, must be constructed of sufficiently impermeable material to provide emergency containment around the facility and to divert surface drainage away from the site. The director may consider an extension of time to implement these requirements if conditions prevent timely construction or a modification of these requirements if other factors are present that provide sufficient protection from environmental impacts.

7. The operator shall take steps to minimize the amount of solids stored at the facility.

8. Within thirty days following construction or modification of a saltwater handling facility, a sundry notice (form 4) must be submitted detailing the work and the dates commenced and completed. The sundry notice must be accompanied by a schematic drawing of the saltwater handling facility site drawn to scale, detailing all facilities and equipment including, the size, location, and purpose of all tanks; the height and location of all dikes as well as a calculated containment volume; all areas underlain by a synthetic liner; any leak detection system installed; the location of all flowlines; the stockpiled topsoil location and its volume; and the road access to the nearest existing public road.

9. Immediately upon the commissioning of the saltwater handling facility, the operator shall notify the ~~commission~~ <u>director</u> in writing of such date.

10. The operator of a saltwater handling facility shall provide continuing surveillance and conduct such monitoring and sampling as the ~~commission~~ director may require.

11. Storage pits, waste pits, or other earthen storage areas must be prohibited unless authorized by an appropriate regulatory agency. A copy of said authorization must be filed with the ~~commission~~ director.

12. Burial of waste at any saltwater handling facility site is prohibited. All residual water and waste, fluid or solid, must be disposed of in an authorized facility.

13. If deemed necessary by the director, the operator shall cause to be analyzed any waste substance contained onsite. Such chemical analysis must be performed by a certified laboratory and must adequately determine if chemical constituents exist which would categorize the waste as hazardous by state department of health standards.

14. Saltwater handling facilities must be constructed and operated so as not to endanger surface or subsurface water supplies or cause degradation to surrounding lands and must comply with section 43-02-03-28 concerning fire hazards and proximity to occupied dwellings.

15. All proposed changes to any saltwater handling facility are subject to prior approval by the director.

16. Any salable crude oil recovered from a saltwater handling facility must be reported on a form 5 SWD.

17. The operator shall comply with all laws, rules and regulations, and orders of the commission. All rules in this chapter governing oil well sites also apply to any saltwater handling facility site.

18. The operator shall immediately cease operations if so ordered by the director for the failure to comply with the statutes of North Dakota, ~~or~~ commission rules or~~,~~ orders, ~~and~~ or directives of the ~~commission~~ director.

History: Effective October 1, 2016; amended effective January 1, 2017; April 1, 2018; ___.

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

43-02-03-55. ABANDONMENT OF WELLS, TREATING PLANTS, OR SALTWATER HANDLING FACILITIES - SUSPENSION OF DRILLING.

1. The removal of production equipment or the failure to produce oil or gas, or the removal of production equipment or the failure to produce water from a source well, for one year constitutes abandonment of the well. The removal of injection equipment or the failure to use an injection well for one year constitutes abandonment of the well. The failure to plug a stratigraphic test hole within one year of reaching total depth

constitutes abandonment of the well. The removal of treating plant equipment or the failure to use a treating plant for one year constitutes abandonment of the treating plant. The removal of saltwater handling facility equipment or the failure to use a saltwater handling facility for one year constitutes abandonment of the saltwater handling facility. An abandoned well must be plugged and its site must be reclaimed, an abandoned treating plant must be removed and its site must be reclaimed, and an abandoned saltwater handling facility must be removed and its site must be reclaimed, pursuant to sections 43-02-03-34 and 43-02-03-34.1. A well not producing oil or natural gas in paying quantities for one year may be placed in abandoned-well status pursuant to subsection 1 of North Dakota Century Code section 38-08-04. If an injection well is inactive for extended periods of time, the commission may, after notice and hearing, require the injection well to be plugged and abandoned.

2. The director may waive for one year the requirement to plug and reclaim an abandoned well by giving the well temporarily abandoned status <u>for good cause</u>. This status may only be given to wells that are to be used for purposes related to the production of oil and gas <u>within the next seven years</u>. 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 and each extension may be approved for up to one year. A fee of one hundred dollars shall be submitted for each application to extend the temporary abandonment status of any well. A surface owner may request a review of a well temporarily abandoned for at least seven years pursuant to subsection 1 of North Dakota Century Code section 38-08-04.

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 43-02-03-34.1.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; August 1, 1999; January 1, 2008; April 1, 2010; April 1, 2012; April 1, 2014; October 1, 2016; April 1, 2018; ___.

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

G. OIL PRORATION AND ALLOCATION

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 or form provided by the commission) has been filed with the director.

The discovery well of any pool hereafter discovered shall be allowed to produce at a maximum efficient rate until such time as proper spacing is set for the pool, and shall produce thereafter, only pursuant to the general proration rules and regulations of the commission.

History: Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000; January 1, 2008; ___.

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

UNDERGROUND INJECTION CONTROL
CHAPTER 43-02-05

43-02-05-04. PERMIT REQUIREMENTS.

1. No underground injection may be conducted, or site or access road construction commenced, without obtaining a permit from the ~~commission~~ director after notice and hearing. The application shall be on a form 14 or form provided by the ~~commission~~ director and shall include at least the following information:

   a. The name and address of the operator of the injection well.

   b. The surface and bottom hole location.

   c. Appropriate geological data on the injection zone and the ~~top~~ upper and ~~bottom~~ lower confining zones including geologic names, lithologic descriptions, thicknesses, and depths.

   d. The estimated bottom hole fracture pressure of the ~~top~~ upper confining zone.

   e. Average and maximum daily rate of fluids to be injected.

   f. Average and maximum requested surface injection pressure.

   g. Geologic name and depth to base of the lowermost underground source of drinking water which may be affected by the injection.

   h. Existing or proposed casing, tubing, and packer data.

   i. Existing or proposed cement specifications including amounts and actual or proposed top of cement.

   ~~i.~~j. A plat and maps depicting the area of review~~,~~ (one-quarter-mile [402.34-meter] radius) and detailing the location, well name, and operator of all wells in the area of review. The plat and maps ~~should~~ must include all injection wells, producing wells, plugged wells, abandoned wells, drilling wells, dry holes, permitted wells, ~~and~~ water wells, surface bodies or water, and other pertinent surface features such as occupied dwellings and roads. ~~The plat should also depict faults, if known or suspected.~~

   k. A review of the surficial aquifers within one mile of the proposed injection well site or surface facilities.

   ~~j.~~l. ~~The need for corrective action on wells penetrating the injection zone in the area of review.~~ A tabulation of data on all wells within the area of review that penetrate the proposed injection zone. Such data must include a description of each well's type, construction, date drilled, location, depth, record of plugging and completion, and any additional information the director may require. A detail of any corrective action necessary for any of the wells not properly cemented or plugged to prevent the movement of fluid out of the injection zone must also be included.

m. If faults are known or suspected, a cross section that includes a depiction of the fault at depth.

~~k.~~n. Proposed injection program including method of transportation of the fluid to the injection facility and the injection well.

~~l.~~o. ~~Quantitative~~ A tabulation of all freshwater wells and domestic freshwater sources within the area of review. Each freshwater well and domestic freshwater source must be identified by owner, location by quarter-quarter, section, township, and range, type of well or source, depth, and current status. A quantitative analysis from a state-certified laboratory of freshwater from the two nearest freshwater wells within a one-mile [1.61-kilometer] radius must be submitted. ~~Location of the wells by quarter-quarter, section, township, and range must also be submitted.~~ This requirement may be waived by the director in certain instances.

~~m.~~p. Quantitative analysis from a state-certified laboratory of a representative sample of water to be injected. A compatibility analysis with the receiving formation may also be required.

~~n.~~q. List identifying all source wells or sources of injectate.

~~o.~~r. A legal description of the land ownership within the area of review in both tabular and plat form.

~~p.~~s. An affidavit of mailing, and proof of service, certifying that all landowners within the area of review have been notified of the proposed injection well. A copy of the letter sent to each landowner must be attached to the affidavit.

If the proposed injection well is within an area permit authorized by a commission order, the notice shall inform the landowners within the area of review that comments or objections may be submitted to the commission within thirty days and shall include a contact person and phone number for the applicant and a contact person and phone number for the commission.

If the proposed injection well is not within an area permit authorized by a commission order, the notice shall inform the landowners within the area of review that a hearing will be held at which comments or objections may be directed to the commission, and that written comments or objections to the application may be submitted prior to the hearing date, received by the commission no later than five p.m. on the last business day prior to the hearing date. ~~A copy of the letter sent to each landowner must be attached to the affidavit.~~

~~u.~~t. An affidavit of mailing, and proof of service, certifying that all owners or operators of any usable oil and gas exploration and production well or permit within the area of review have been notified of the proposed injection well. A copy of the letter sent to each owner or operator must be attached to the affidavit.

If the proposed injection well is within an area permit authorized by a commission order, the notice shall include the proposed surface and bottom hole locations of the proposed injection well and inform the owner or operator of any oil and gas exploration and production related well within the area of review that comments or objections may be submitted to the commission within thirty days and shall include a contact person and phone number for the applicant and a contact person and phone number for the commission.

If the proposed injection well is not within an area permit authorized by a commission order, the notice shall include the proposed surface and bottom hole locations of the proposed injection well and inform the owner or operator of any oil and gas production related well within the area of review that a hearing will be held at which comments or objections may be directed to the commission, and that written comments or objections to the application may be submitted prior to the hearing date, received by the commission no later than five p.m. on the last business day prior to the hearing date.

~~q.~~u. All logging and testing data on the well which has not been previously submitted.

~~r.~~v. Schematic or other appropriate drawings and tabulations of the ~~injection system~~ wellhead and surface facilities, including ~~current and proposed well bore construction, surface facility construction, including~~ the size, location, construction, and purpose of all tanks, the height and location of all dikes and containment including a calculated containment volume, all areas underlain by a synthetic liner, ~~and~~ the location of all flow lines and a tabulation of any pressurized flowline specifications. It ~~shall~~ must also include the proposed road access to the nearest existing public road and the authority to build such access.

~~x.~~w. A schematic drawing of the well detailing the proposed well bore construction, including the size of the borehole; the total depth and plug back depth; the casings and tubing sizes, weights, grades, and top and bottom depths; the perforated interval top and bottom depths; the packer depth; the injection zone and upper and lower confining zones' top and bottom depths.

~~s.~~x. Traffic flow diagram of the site, depicting sufficient area to contain all anticipated traffic.

~~t. A review of the surficial aquifers within one mile of the proposed injection well site or surface facilities.~~

y. A detailed drilling prognosis including a drilling, casing, cementing, logging, testing, and coring program, if applicable.

~~u.~~z. ~~Sundry notice detailing~~ A detailed description of the proposed completion or conversion procedure.

aa. Any additional information necessary to demonstrate that injection into the proposed injection zone will not initiate fractures in the confining zone that could allow fluid movement out of the injection zone.

bb. Any other information required by the director to evaluate the proposed well.

2. Permits may contain such terms and conditions as the ~~commission~~ director deems necessary.

3. The corrective action plan for any well in the area of review which is not properly cemented or plugged to prevent the movement of fluid out of the injection zone must be incorporated into the permit as a condition if the plan is deemed adequate by the director. If the director deems the plan inadequate, the director shall require the applicant to revise the plan, prescribe a plan for corrective action as part of the permit, or deny the application. Before injection commences in an injection well, the applicant shall complete any needed corrective action on wells penetrating the injection zone in the area of review to the satisfaction of the director.

~~3.~~4. Any permit issued under this section may be revoked by the commission after notice and hearing if the permittee fails to comply with the terms and conditions of the permit or any applicable rule or statute. Any permit issued under this section may be suspended by the director for good cause.

~~4.~~5. Before a permit for underground injection will be issued, the applicant must satisfy the ~~commission~~ director that the proposed injection well will not endanger any underground source of drinking water.

~~5.~~6. No person shall commence construction of an underground injection well, ~~or~~ site, or access road without prior approval of the director.

~~6.~~7. Permits are transferable only with approval of the ~~commission~~ director.

~~7.~~8. Permits may be modified by the ~~commission~~ director.

8. ~~Before injection commences in an underground injection well, the applicant must complete any needed corrective action on wells penetrating the injection zone in the area of review.~~

9. All injection wells permitted before November 1, 1982, shall be deemed to have a permit for purposes of this section; however, all such prior permitted wells are subject to all other requirements of this chapter.

10. A permit shall automatically expire one year after the date it was issued, unless operations have commenced to complete the well as an injection well.

11. If the permitted injection zone is plugged and abandoned, the permit shall expire and be of no further force and effect.

History: Effective November 1, 1982; amended effective May 1, 1992; May 1, 1994; July 1, 1996; May 1, 2004; January 1, 2006; April 1, 2014; October 1, 2016; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-06. CONSTRUCTION REQUIREMENTS.

1. All injection wells shall be cased and cemented to prevent movement of fluids into or between underground sources of drinking water or into an unauthorized zone. The casing and cement used in construction of each new injection well shall be designed for the life expectancy of the well. A well to be converted to a saltwater disposal well must have surface casing set and cemented at a point not less than fifty feet [15.24 meters] below the base of the Fox Hills formation. In determining and specifying casing and cementing requirements, all of the following factors shall be considered:

   a. Depth to the injection zone and lower confining zone. Longstring casing shall be set at least to the top of the injection zone and cemented at least to the top of the upper confining zone, or to a point approved by the director.

   b. Depth to the bottom of all underground sources of drinking water.

   c. Estimated maximum and average injection pressures.

   d. Fluid pressure.

   e. Estimated fracture pressures.

   f. Physical and chemical characteristics of the injection zone.

2. Appropriate logs and other tests shall be conducted during the drilling and construction of injection wells. Any well drilled or converted to an injection well shall have a log run from which the quality of the cement bond can be determined. Cement bond logs shall contain at least the following elements: a gamma ray curve; a casing collar locator curve; a transit time curve; an amplitude curve; and a variable density curve. A descriptive report interpreting the results of these logs and tests shall be prepared by a qualified log analyst and submitted to the ~~commission~~ director if deemed necessary by the director.

3. All injection wells must be equipped with injection tubing and a packer set in the longstring casing within one hundred feet measured depth of the top perforation, or at a depth approved by the director.

4. After an injection well has been completed, approval must be obtained on a sundry notice (form 4) ~~from~~ or form provided by the director prior to any subsequent perforating.

5. Surface facilities must be constructed pursuant to sections 43-02-03-53, 43-02-03-53.1, 43-02-03-53.2, and 43-02-03-53.3.

History: Effective November 1, 1982; amended effective May 1, 1992; July 1, 1996; May 1, 2004; January 1, 2006; April 1, 2018; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-07. MECHANICAL INTEGRITY.

1. Prior to commencing operations, the operator of a new injection well must demonstrate the mechanical integrity of the well. Prior to performing any workover project on an existing well, during which the packer or other means of annular isolation could be affected, the operator shall obtain approval from the director. All existing injection wells must demonstrate continual mechanical integrity and be tested at least once every five years. Following the completion of any remedial work, the operator must demonstrate the mechanical integrity of the well. The director may require further mechanical integrity tests or other remedial work to ensure the mechanical integrity of the well to prevent the movement of fluid into an underground source of drinking water or an unauthorized zone. Mechanical integrity pressure tests shall be performed at one thousand pounds per square inch for a minimum of fifteen minutes. A mechanical integrity test pressure of less than one thousand pounds per square inch may be approved by the director. Once an injection well is determined to lack mechanical integrity, within ninety days of the determination, it must be repaired and retested or plugged and abandoned.

An injection well has mechanical integrity if:

a. There is no significant leak in the casing, tubing or packer.

b. There is no significant fluid movement into an underground source of drinking water or an unauthorized zone through vertical channels adjacent to the injection bore.

2. One of the following methods must be used to evaluate the absence of significant leaks:

a. Pressure test with liquid or gas.

b. Monitoring of positive annulus pressure following a valid pressure test.

c. Radioactive tracer survey.

3. One of the following methods must be used to establish the absence of significant fluid movement:

a. A log from which cement can be determined or well records demonstrating the presence of adequate cement to prevent such migration.

b. Radioactive tracer survey, temperature log, or noise log.

4. The operator of an injection well shall immediately shut-in the well if mechanical failure indicates fluids are, or may be, migrating into an underground source of drinking water or an unauthorized zone, or if so directed by the director.

History: Effective November 1, 1982; amended effective May 1, 1990; July 1, 1996; May 1, 2004; October 1, 2016; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-08. PLUGGING OF INJECTION WELLS. The proper plugging of an injection well requires the well be plugged with cement or other types of plugs, or both, in a manner which will not allow movement of fluids into an underground source of drinking water. The operator shall file a notice of intention to plug (form 4) or form provided by the director ~~with~~

~~the oil and gas division of the industrial commission~~ and shall obtain the director's approval of the plugging method prior to the commencement of plugging operations.

History: Effective November 1, 1982; amended effective May 1, 1992; May 1, 1994; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-09. PRESSURE LIMITATIONS. Injection pressure at the wellhead shall not exceed a maximum authorized injection pressure which shall be calculated so as to assure that the pressure in the injection zone during injection does not initiate new fracture or propagate existing fractures in the confining ~~zone adjacent to the freshwater resource~~ zones. In no case shall injection pressure initiate fractures in the confining zones or cause the movement of injection or formation fluids into an unauthorized zone or underground source of drinking water.

History: Effective November 1, 1982; amended effective May 1, 1992; April 1, 2018; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-10. CORRECTIVE ACTION. If any monitoring indicates the movement of injection or formation fluids into an unauthorized zone or underground sources of drinking water, the ~~commission~~ director shall prescribe such additional requirements for construction, corrective action, operation, monitoring, or reporting as are necessary to prevent such movement.

History: Effective November 1, 1982; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-12. REPORTING, MONITORING, AND OPERATING REQUIREMENTS.

1. The operator of an injection well shall meter or use an approved method to keep records and shall report monthly to the ~~industrial commission, oil and gas division~~ director, the volume and nature, i.e., produced water, pit water, makeup water, etc., of the fluid injected, the average operating and maximum injection ~~pressure~~ pressures, the maximum injection rate, and such other information as the ~~commission~~ director may require. The operator of each injection well shall, on or before the fifth day of the second month succeeding the month in which the well is capable of injection, file with the director the aforementioned information for each well ~~upon form 16, 16a, 17, or 17a, or approved computer sheets. The operator shall retain all records required by the industrial commission for at least six years~~ in a format provided by the director.

2. Immediately upon the commencement or recommencement of injection, the operator shall notify the ~~oil and gas division~~ director of the injection date verbally and in writing.

3. The operator shall place accurate gauges on the tubing and the tubing-casing annulus. Accurate gauges shall also be placed on any other annuluses deemed necessary by the director.

4. The operator of an injection well shall keep the well, surface facilities, and injection system under continuing surveillance and conduct such monitoring, testing, and sampling as the ~~commission~~ director may require to verify the integrity of the surface facility, gathering system, and injection well to protect surface and subsurface waters. Prior to commencing operations, the saltwater disposal injection pipeline must be pressure tested. All existing saltwater disposal injection pipelines where the pump and the wellhead are not located on the same site are required to be pressure tested annually.

5. The operator of an injection well shall report any noncompliance with regulations or permit conditions to the director ~~orally~~ verbally within twenty-four hours followed by a written explanation within five days. The operator shall cease injection operations if so directed by the director.

6. Within ten days after the discontinuance of injection operations, the operator shall notify the ~~oil and gas division~~ director of the date of such discontinuance and the reason therefor.

7. Upon the completion or recompletion of an injection well or the completion of any remedial work or attempted remedial work such as plugging back, deepening, acidizing, shooting, formation fracturing, squeezing operations, setting liner, perforating, reperforating, tubing repairs, packer repairs, casing repairs, or other similar operations not specifically covered herein, a report on the operation shall be filed ~~on a form 4 sundry notice~~ with the director within thirty days. The report shall present a detailed account of all work done including the reason for the work, the date of such work, the shots per foot and size and depth of perforations, the quantity of sand, crude, chemical, or other materials employed in the operation, the size and type of tubing, the type and location of packer, the result of the packer pressure test, and any other pertinent information or operations which affect the status of the well and are not specifically covered herein.

8. Annular injection of fluids is prohibited.

History: Effective November 1, 1982; amended effective May 1, 1992; May 1, 1994; July 1, 1996; May 1, 2004; April 1, 2018; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-13. ACCESS TO RECORDS. The industrial commission and the ~~commission's authorized agents~~ director shall have access to all injection well records wherever located. All owners, operators, drilling contractors, drillers, service companies, or other persons engaged in drilling, completing, operating, or servicing injection wells shall permit the industrial commission, or ~~its authorized agents~~ the director, to come upon any lease, property, well, or drilling rig operated or controlled by them, complying with state safety rules and to inspect the records and operation of wells and to conduct sampling and testing. Any information so obtained shall be public information. If requested, copies of injection well records must be filed with the commission or director.

History: Effective November 1, 1982; amended effective May 1, 1992; May 1, 1994; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

43-02-05-14. AREA PERMITS.

1. The ~~commission~~ director, after notice and hearing, may issue an area permit providing for the permitting of individual injection wells if the proposed injection wells are:

   a. Within the same field, facility site, reservoir, project, or similar unit in the same state;

   b. Of similar construction;

   c. Of the same class; and

   d. Operated by a single owner or operator.

2. An area permit application shall include at least the following information:

   a. The name and address of the operator.

   b. A plat and maps depicting the area permit and one-quarter mile [402.34 meters] adjacent detailing the location of all anticipated injection wells and the location, well name, and operator of all ~~current~~ producing wells, saltwater disposal wells, injection wells, plugged wells, abandoned wells, drilling wells, dry holes, permitted wells, ~~and~~ water wells, surface bodies of water, and other pertinent surface features such as occupied dwellings and roads. T~~he plat should also depict faults if known or suspected.~~

   c. A review of the surficial aquifers within the proposed area permit boundary and one mile adjacent.

~~c.~~d. Appropriate geological data on the injection zone and the upper and lower confining zones, including geologic names, lithologic descriptions, thicknesses, and depths.

~~d.~~e. Estimated fracture pressure of the ~~top~~ upper confining zone.

~~e.~~f. Estimated maximum injection pressure.

~~f.~~g. Geologic name and depth to base of the lowermost underground source of drinking water which may be affected by the injection.

h. A reference well log, displaying at least a gamma ray curve, from a nearby well.

i. If faults are known or suspected, a cross section that includes a depiction of the fault at depth.

~~g.~~j. Proposed injection program including method of transportation of the fluid to the injection facilities and wells.

~~h.~~k. List identifying all source wells or sources of injectate.

~~i.~~l. Quantitative analysis from a state-certified laboratory of a representative sample of water to be injected. A compatibility analysis with the receiving formation may also be required.

~~j.~~m. Legal description of the land ownership within and one-quarter mile [402.34 meters] adjacent to the proposed area permit in both tabular and plat form.

~~k.~~n. ~~Affidavit~~ An affidavit of mailing, and proof of service, certifying that all landowners within the proposed area permit and one-quarter mile adjacent have been notified of the proposed area permit. A representative copy of the letters sent must be attached to the affidavit. The notice shall inform the landowners that a hearing will be held at which comments or objections may be directed to the commission, and that written comments or objections to the application may be submitted prior to the hearing date, received by the commission no later than five p.m. on the last business day prior to the hearing date.

~~l. Representative example of landowner letter sent.~~

~~m.~~o. Schematic of the proposed injection system including facilities and pipelines.

~~n.~~p. ~~Schematic~~ A schematic drawing of a typical proposed injection well bore construction including the size of the borehole; the total depth and plug back depth; the casings and tubing sizes, weights, grades, and top and bottom depths; the perforated interval top and bottom depths; the packer depth; the injection zone and upper and lower confining zones' top and bottom depths.

q. Any other information required by the director to evaluate the proposal.

3. An area permit authorizes the director to approve individual injection well permit applications within the permitted area. The application shall be ~~on a form 14~~ made in a format provided by the ~~commission~~ director and shall include at least the following information:

a. The name and address of the operator of the injection well.

b. The surface and bottom hole location.

c. Average and maximum daily rate of fluids to be injected.

d. Existing or proposed casing, tubing, and packer data.

e. Existing or proposed cement specifications including amounts and actual or proposed top.

~~e.~~f. A plat and maps depicting the area of review (one-quarter-mile [402.34-meter] radius) and detailing the location, well name, and operator of all wells in the area of review. The plat and/or maps ~~should~~ must include all producing wells, saltwater disposal wells, injection wells, ~~producing wells,~~ abandoned wells, drilling wells, plugged wells, ~~abandoned wells, drilling wells,~~ dry holes, permitted wells, ~~and~~ water wells, surface bodies of water, and other pertinent surface features such as occupied dwellings and roads. T~~he plat should also depict faults if known or suspected.~~

g. A review of the surficial aquifers within one mile of the proposed injection well site or surface facilities.

~~f.~~h. ~~The need for corrective action on wells penetrating the injection zone in the area of review.~~ A tabulation of data on all wells within the area of review that penetrate the proposed injection zone. Such data must include a description of each well's type, construction, date drilled, location, depth, record of plugging and completion, and any additional information the director may require. A detail of any corrective action necessary for any of the wells not properly cemented or plugged to prevent the movement of fluid out of the injection zone must also be included.

~~g.~~i. ~~Location of the two nearest freshwater wells by quarter-quarter, section, township, and range within a one-mile [1.61 kilometer] radius and the dates sampled.~~ A tabulation of all freshwater wells and domestic freshwater sources within the area of review. Each freshwater well and domestic freshwater source must be identified by owner, location by quarter-quarter, section, township, and range, type of well or source, depth, and current status. A quantitative analysis from a state-certified laboratory of ~~the samples~~ freshwater from the two nearest freshwater wells within a one-mile radius must be submitted ~~with the application or within thirty days of sampling~~. This requirement may be waived by the director in certain instances.

~~h.~~j. All logging and testing data on the well which has not been previously submitted.

~~i.~~k. ~~Schematic drawings of the current well bore construction and proposed well bore and surface facility construction.~~ A schematic drawing of the well detailing the proposed well bore construction, including the size of the borehole; the total depth and plug back depth; the casings and tubing sizes, weights, grades, and top and bottom depths; the perforated interval top and bottom depths; the packer depth; the injection zone and upper and lower confining zones top and bottom depths.

l. A schematic or other appropriate drawings and tabulations of the wellhead and surface facilities including the size, location, construction, and purpose of all tanks, the height and location of all dikes and containment including a calculated containment volume, all areas underlain by a synthetic liner, the location of all flowlines, and a tabulation of any pressurized flowline specifications. It must also include the proposed road access to the nearest existing public road and the authority to build such access.

m. Traffic flow diagram of the site, depicting sufficient area to contain all anticipated traffic, if applicable.

n. A detailed drilling prognosis including a drilling, casing, cementing, logging, testing, and coring program, if applicable.

~~j.~~o. ~~Sundry notice detailing~~ A detailed description of the proposed completion or conversion procedure.

p. Any additional information necessary to demonstrate that injection into the proposed injection zone will not initiate fractures in the confining zone that could allow fluid movement out of the injection zone.

q. Any other information required by the director to evaluate the proposed well.

4. The director is authorized to approve individual injection well permit applications within an area permit provided:

a. The additional well meets the area permit criteria.

b. The cumulative effects of drilling and operating additional injection wells are acceptable to the director.

5. If the director determines that any additional well does not meet the area permit requirements, the director may modify or terminate the permit or take enforcement action.

6. If the director determines the cumulative effects are unacceptable, the permit may be modified.

7. Area and individual injection well permits may contain such terms and conditions as the ~~commission~~ director deems necessary.

8. The corrective action plan for any well in the area of review which is not properly cemented or plugged to prevent the movement of fluid out of the injection zone must be incorporated into the permit as a condition if the plan is deemed adequate by the director. If the director deems the plan inadequate, the director shall require the applicant to revise the plan, prescribe a plan for corrective action as part of the permit, or deny the application. Before injection commences in an injection well, the applicant shall complete any needed corrective action on wells penetrating the injection zone in the area of review to the satisfaction of the director.

~~8.~~9. Any permit issued under this section may be revoked by the commission after notice and hearing if the permittee fails to comply with the terms and conditions of the permit or any applicable rule or statute. Any permit issued under this section may be suspended by the director for good cause.

~~9.~~10. Before a permit for underground injection will be issued, the applicant must satisfy the ~~commission~~ director that the proposed injection well will not endanger any underground source of drinking water.

~~10.~~11. No person shall commence construction of an underground injection well, site, or access road until the ~~commission~~ director has issued a permit for the well.

~~11.~~12. Area and individual injection well permits are transferable only with approval of the ~~commission~~ director.

~~12.~~13. Individual injection well permits may be modified by the ~~commission~~ director.

~~13. Before injection commences in an underground injection well, the applicant must complete any needed corrective action on wells penetrating the injection zone in the area of review.~~

14. Individual injection well permits shall automatically expire one year after the date issued, unless operations have commenced to complete the well as an injection well.

15. If the permitted injection zone is plugged and abandoned, the permit shall expire and be of no further force and effect.

History: Effective November 1, 1982; amended effective May 1, 1992; May 1, 2004; January 1, 2006; ___.

General Authority	Law Implemented
NDCC 38-08-04(2)	NDCC 38-08-04(2)

ROYALTY STATEMENTS
CHAPTER 43-02-06

43-02-06-01. ROYALTY OWNER INFORMATION STATEMENT. Whenever payment is made for oil or gas production to an interest owner, whether pursuant to a division order, lease, servitude, or other agreement, all of the following information must be included on the check stub or on an attachment to the form of payment, unless the information is otherwise provided on a regular monthly basis:

1. The lease, property, or well name or any lease, property, or well identification number used to identify the lease, property, or well; provided, that if a lease, property, or well identification number is used, the royalty owner must initially be provided the lease, property, or well name to which the lease, property, or well name refers.

2. The month and year during which sales occurred for which payment is being made.

3. One hundred percent of the corrected volume of oil, regardless of ownership, which is sold measured in barrels, and one hundred percent of the volume of either wet or dry gas, regardless of ownership, which is sold or removed from the premises for the purpose of sale, or sale of its contents and residue, measured in thousand cubic feet.

4. Price.

   a. Oil. Weighted average price per barrel received by the producer for all oil sold during the period for which payment is made. The price must be the net price received by the producer after all deductions. ~~All deductions are to be explained pursuant to subsection 6.~~

   b. Gas and natural gas liquids. Weighted average price per thousand cubic feet [28.32 cubic meters] received by the producer for all gas sold and weighted average price per gallon received by the producer for all natural gas liquids sold during the period for which payment is made. The price must be the net price received by the producer after all deductions. ~~All deductions are to be explained pursuant to subsection 6.~~

5. Total amount of state severance and other production taxes.

~~8.~~ 6. ~~Net~~ Producer's net value of total sales after taxes and deductions.

~~6.~~ 7. The amount and purpose of each owner deduction made, identified as transportation, processing, compression, or administrative costs.

~~7.~~ 8. The amount and purpose of each owner adjustment or correction made.

9. Owner's interest in sales from the lease, property, or well expressed as a decimal.

10. Owner's share of the total value of sales prior to removing any ~~tax~~ taxes~~, deductions~~. The value can be calculated before or after removing owner's deductions if it is clearly noted on the royalty statement or included on an attachment to the royalty statement.

11. Owner's share of sales value less taxes and deductions.

12. An address where additional information may be obtained and any questions answered. If information is requested by certified mail, the answer must be mailed by certified mail within thirty days of receipt of the request.

History: Effective November 1, 1983; amended effective April 1, 1984; November 1, 1987; May 1, 1992; April 1, 2018; ___.

General Authority	Law Implemented
NDCC 38-08-06.3	NDCC 38-08-06.3

43-02-06-01.1. OWNERSHIP INTEREST INFORMATION STATEMENT. Within one hundred twenty days after the end of the month of the first sale of production from a well or change in the spacing unit of a well or a decimal interest in a mineral owner, the operator or payor shall provide the mineral owner with a statement identifying the spacing unit for the well, and the effective date of the spacing unit change or decimal interest change if applicable, the net mineral acres owned by the mineral owner, the gross mineral acres in the spacing unit, and the mineral owner's decimal interest that will be applied to the well.

History: Effective April 1, 2018; amended effective ___.

General Authority	Law Implemented
NDCC 38-08-06.3	NDCC 38-08-06.3