

NORTH DAKOTA ADMINISTRATIVE CODE

(Pages 1 - 82)

Supplement 306

December 2004

**Prepared by the Legislative Council staff
for the
Administrative Rules Committee**

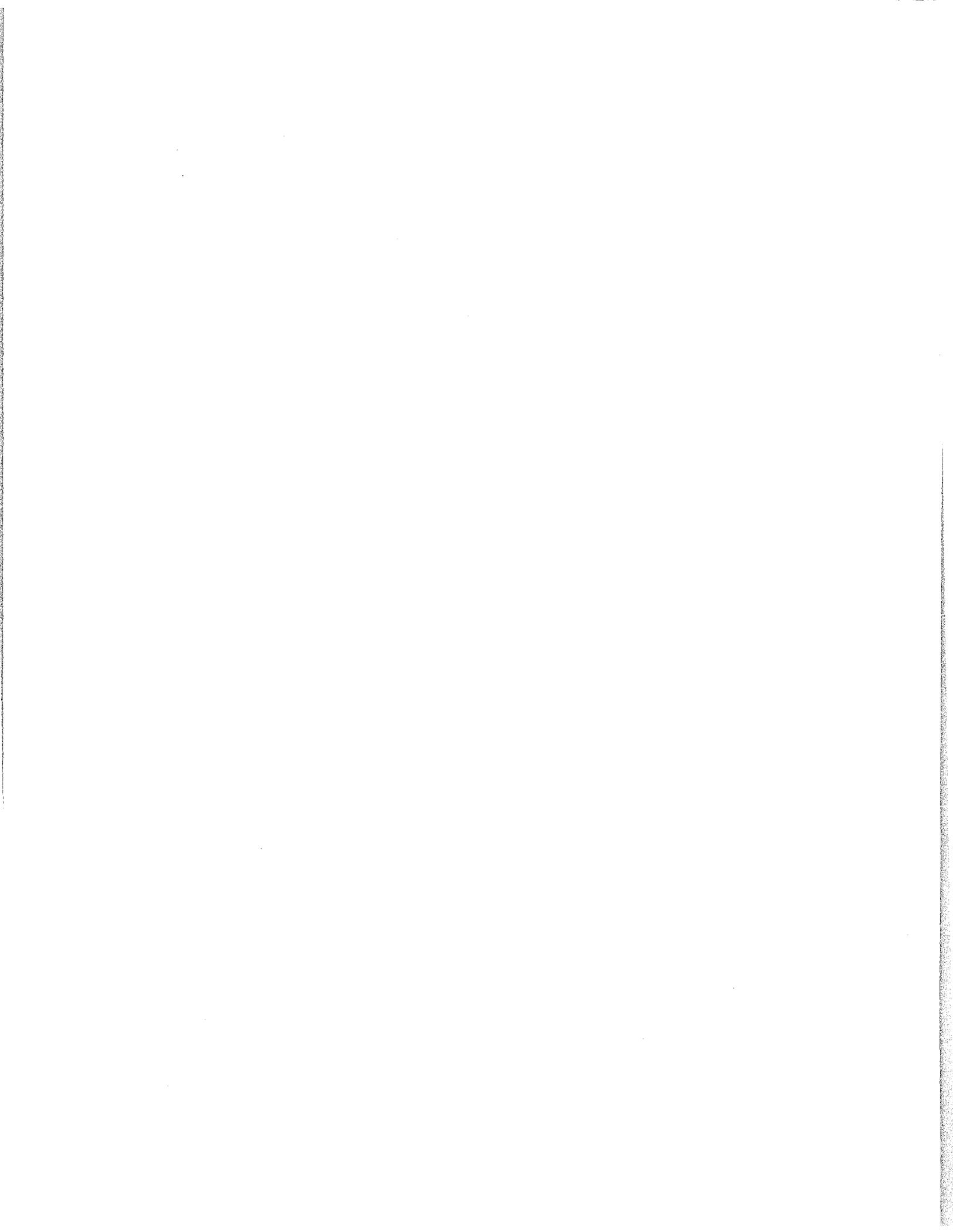
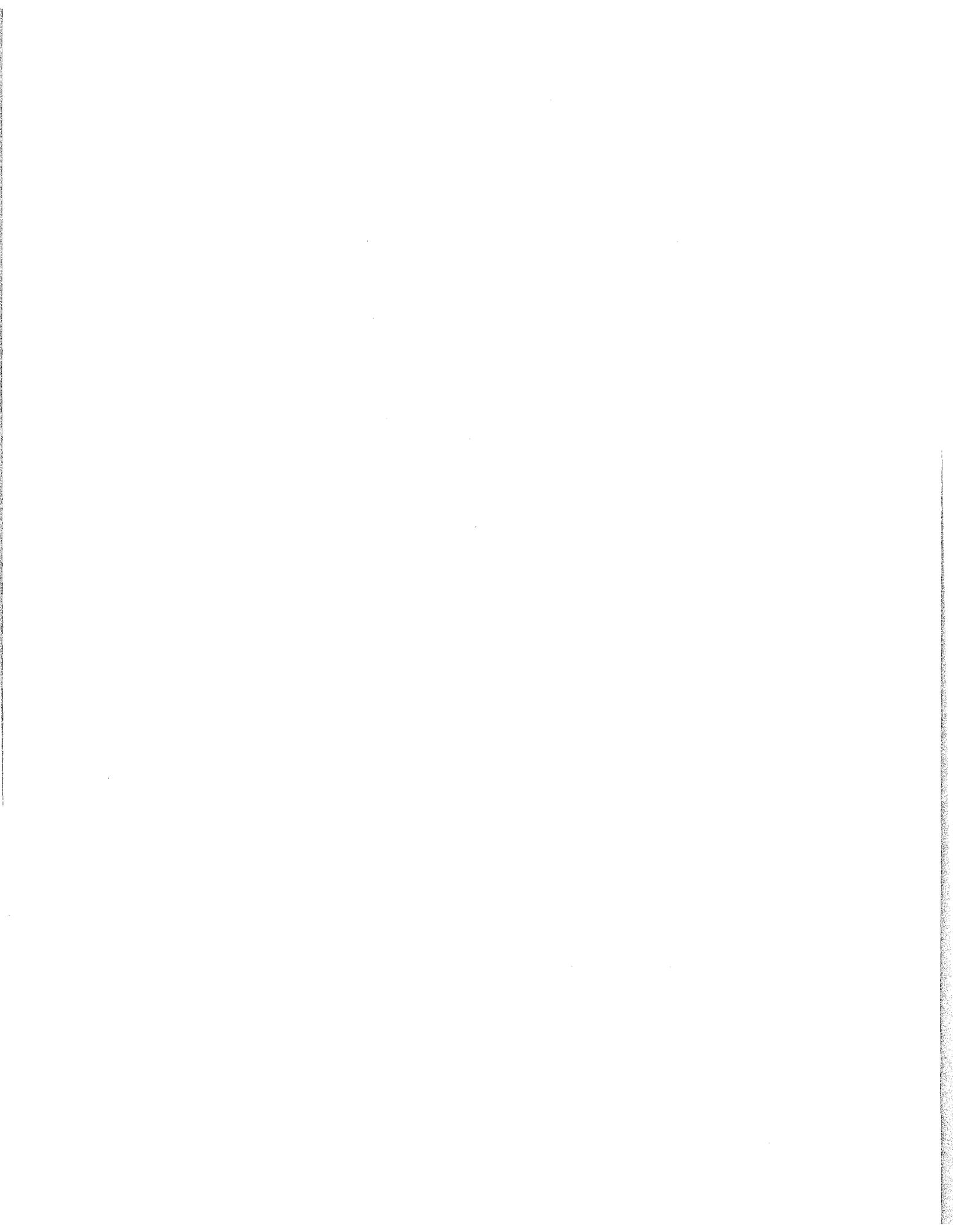


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TITLE 24
ELECTRICAL BOARD

DECEMBER 2004

CHAPTER 24-01-01

24-01-01-01. Organization of electrical board.

1. **History and functions.** In 1917 legislation was approved which created a state board of electricians. In 1949 the name of the board was changed to the state electrical board. The board is charged with the responsibility to examine applicants and issue licenses to those having the necessary qualifications and knowledge in the laws of electricity and electrical codes. The board has jurisdiction over all electrical installations. Electrical inspectors authorized by the board may condemn installations hazardous to life and property and order electric service to be discontinued.
2. **Board membership.** The board consists of five members appointed by the governor for terms of five years. Terms are arranged so that one term expires each year. To provide equal representation on the board, one member is selected from the master electricians, one from the journeymen electricians, another from the investor-owned utilities, the fourth shall be a consumer member of a rural electric cooperative, and the fifth member represents the public and cannot be directly associated with the electrical industry.
3. **Executive director.** The executive director has full responsibility for directing and supervising the operation of the department under the direction of the board.
4. **Director of inspections.** The director of inspections supervises electrical inspectors to carry out an effective inspection program. The director is responsible for reviewing plans and specifications that are submitted on various projects.
5. **Inspection districts.** The state is divided into six districts. Each electrical inspector is assigned to a district. A map showing the six districts is attached as an appendix to this chapter and by this reference is herein incorporated.

6. **Inquiries.** All inquiries and communication relating to licensing, electrical wiring, and inspections shall be directed to:

North Dakota State Electrical Board
P.O. Box 857
Bismarck, ND 58502
Phone (701)328-9522
Fax (701)328-9524
E-mail: electric@state.nd.us

Inquiries or proposals for amendments to the rules and wiring standards shall be directed to the executive director.

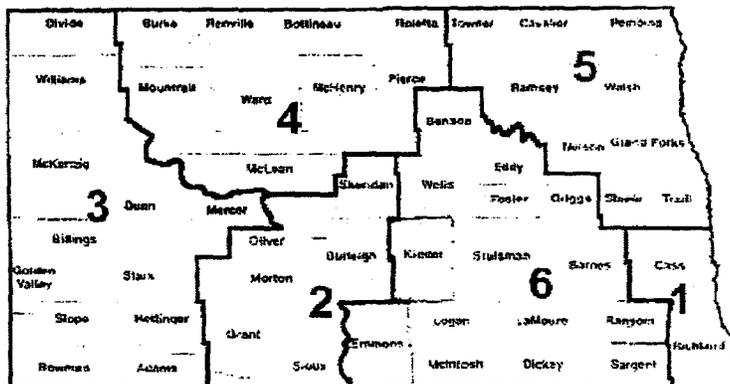
History: Amended effective November 1, 1981; January 1, 1984; October 1, 1987; January 1, 1992; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 28-32-02.1

Law Implemented: NDCC 28-32-02.1

SEB Inspection Districts (EFFECTIVE JANUARY 1, 2005)

The state is divided into six districts. Each electrical inspector is assigned to a district.



EXECUTIVE DIRECTOR – DONALD OFFERDAHL
RICH WOLFE - DIRECTOR OF INSPECTIONS

District Inspectors

District 1
Mike Craik
PO Box 8024
Fargo ND 58109-8024
701.239.7108
ndseb1@state.nd.us

District 2
Vernon Hertz
9204 119 St. SE
Bismarck, ND 58504
701.328.9531
ndseb2@state.nd.us

District 3
Brad Steier
PO Box 335
Dickinson, ND 58602
701.227.7405
ndseb3@state.nd.us

District 4
Ronald Ihmels
P.O. Box 1746
Minot, ND 58702
701.857.7713
ndseb4@state.nd.us

District 5
James Smithberg
2603 19th St NE
Manvel ND 58256
701.696.2013
ndseb5@state.nd.us

District 6
F. Al Schrader
P.O. Box 1346
Jamestown, ND 58402
701.253.3908
ndseb6@state.nd.us

City Inspectors

Bismarck	Electrical Inspectors	701.258.2070
Fargo	Dan Offerdahl	701.241.1565
Grand Forks	Robert Kvitne	701.746.2637
Jamestown	Robert Lulay	701.252.6900
Minot	Ross Rubbelke	701.857.4102

CHAPTER 24-02-01

24-02-01-01. Definitions. The terms used throughout this chapter have the same meaning as in the National Electrical Code except:

1. "Correction order" means a notice, written by an electrical inspector to the person responsible for the electrical installation, stating violations and noncompliance of rules and regulations as listed, shall be corrected within a designated time.
2. "E-cert" is an electronic version of a wiring certificate.
3. "Kitchen" means an area where food is prepared that includes a sink and one or more permanent cooking appliances.
4. "Qualified person" means a person licensed by the North Dakota state electrical board.
- 3- 5. "Recreational vehicle site" means any plot of ground intended for the connection of recreational vehicles.
6. "Service" means the conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.
7. "Service point" means the point of demarcation between the serving utility and the premises wiring. The service point is the point on the wiring system where the serving utility ends and the premises wiring begins. The serving utility generally specifies the location of the service point.
- 4- 8. "Wiring certificate" means a document consisting of one or more copies certifying that ~~certain~~ certifies electrical wiring and equipment was installed ~~in conformity with the rules and regulations of the electrical board~~ on premises and was done in strict compliance with all the provisions of North Dakota Century Code chapter 43-09 and all the requirements of the state electrical board.

History: Amended effective January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-02. General statement of policy and interpretative rules.

There are three categories of licensed electricians recognized by the electrical board.

1. Licensed electricians and the qualifications required for each to apply for examination:

- a. A master electrician shall have at least one year's experience working as a licensed journeyman electrician under the supervision of a contracting master electrician.
- b. A journeyman electrician shall have at least four years' (8,000 hours total, maximum 2,000 hours per year) experience registered as an apprentice electrician (of which up to eighteen months may apply under the qualifications of a class B electrician) under the supervision of a contracting master licensed electrician in an area where electrical construction work is done in the jurisdiction regulating similar rules of the state of North Dakota. One year's credit will be granted for a graduate of a two-year or more electrical school ~~approved~~ accepted by the state electrical board. The person shall have the necessary qualifications, training, and technical knowledge to wire, install, and repair electrical apparatus and equipment in accordance with the standard rules and regulations of the National Electrical Code.
- c. A class B electrician shall have at least eighteen months' (3,000 hours total, maximum 2,000 hours per year) experience in farmstead or residential wiring under the supervision of a master or class B electrician.

Commercial wiring experience will not be credited for experience toward a class B license. Six months' credit will be granted for a graduate of a two-year electrical school approved by the state electrical board.

- d. Upon receiving an application for an electrician's license from an applicant, the state electrical board shall forward an employment verification record to the appropriate parties listed in the application. Upon receiving verification of electrical construction experience as outlined under this section and upon final approval of the application by the state electrical board, the applicant shall be sent an invitation to take the examination. The invitation shall outline the available testing dates for the year. Upon receiving the invitation, the applicant shall contact the state electrical board and inform the board as to the date chosen to take the examination.

2. Apprentice electricians. There are two categories of apprentice electricians.
 - a. Apprentice electricians under the joint apprenticeship training committee training program approved by the department of labor.
 - b. Electrician trainees who may not be eligible for the joint apprenticeship training committee program and other persons desiring to accumulate a sufficient time and capability in the

electrical trade to qualify them to apply for permission to take the examination for the journeyman electrician's license.

Any person may work as an apprentice under a licensed master or class B electrician, but the master or class B electrician shall not allow an apprentice to work on any installation without direct constant supervision by a North Dakota licensed electrician working with the apprentice at the worksite. A licensed electrician shall supervise not more than three apprentices.

Electrical contractors shall maintain records of all employees who are or will be performing electrical work for that electrical contractor and shall permit the electrical board to examine and copy all such records as required by this section.

Any master or class B electrician who fails or refuses to comply with this section or who fails or refuses to comply or demonstrate compliance with this section at the request of the board or its representative shall subject that person's license to nonrenewal, suspension, or revocation by the board.

3. Master and class B electricians. A master or class B electrician may exercise that person's privileges as a licensed master or class B electrician for no more than one shop or business, and shall comply with provisions as required for contracting with the secretary of state's office as stated in North Dakota Century Code chapter 43-07. A master or class B electrician shall notify the state electrical board office immediately upon changing from contracting status to noncontracting status for the shop or business they represent.
4. Maintenance personnel regularly employed by the owner may maintain or make minor repairs to existing electrical wiring devices and appliances, but are precluded from extending or changing the characteristics of existing circuits, feeders, or other electrical apparatus.
5. Purpose and scope. The purpose of these standards is the practical safeguarding of persons and of buildings and building contents from electrical hazards arising from the use or control of electricity for light, heat, power, and control thereof and of the fire detection system. It covers the electrical conductors and equipment installed within or on public and private buildings and other premises, including yards, carnival and parking lots, railroad right of way and, also the conductors that supply streetlighting, with the associated equipment necessary to its safe operation.

These standards, based on the National Electrical Code, are the result of years of experience and research to meet the demand for uniform standards to govern electrical wiring in North Dakota, and provide basic rules for intelligent and uniform installation and inspection.

All requirements contained herein shall be given careful consideration to ensure greatest permanence, convenience, and safety. These standards do not constitute a design specification for any particular installation, nor an instruction manual for untrained persons. Skill and experience are necessary factors for a safe and adequate wiring installation. In cases where these requirements differ or are in conflict with the requirements of the ~~2002 edition, National Electrical Code, the 2000 edition, Life Safety Code NFPA no. 101~~ NFPA 70 2005 edition National Electrical Code and NFPA 101 2003 edition Life Safety Code, and applicable articles in currently adopted state building code pertaining to fire detection, fire alarms, fire communications, and smoke detectors, the more restrictive requirements shall be the minimum.

6. Administrative powers and duties. The executive director of the state electrical board, under the direction of the board, shall administer laws, rules, and wiring standards of this state, the electrical requirements of the ~~2002 edition, National Electrical Code, the 2000 edition, Life Safety Code NFPA no. 101~~ NFPA 70 2005 edition National Electrical Code and NFPA 101 2003 edition Life Safety Code, and applicable articles in currently adopted state building code pertaining to fire detection, fire alarms, fire communications, and smoke detectors. In all cases when any action is taken by the executive director to enforce the provisions of any sections contained in these electrical regulations, the ~~2002 edition, National Electrical Code, and the 2000 edition, Life Safety Code NFPA no. 101~~ NFPA 70 2005 edition National Electrical Code and NFPA 101 2003 edition Life Safety Code, such acts shall be done in the name of and on behalf of the state.

The electrical regulations of these standards, the ~~2002 edition, National Electrical Code, and the 2000 edition, Life Safety Code NFPA no. 101~~ NFPA 70 2005 edition National Electrical Code and NFPA 101 2003 edition Life Safety Code, may be modified or waived by special permission in particular cases when such modification or waiver is specifically permitted or in particular cases when an advancement in the technology of electricity makes such modification or waiver advisable in the best interest of the people of North Dakota. Such "special permission" shall, in all cases, be obtained from the executive director in writing prior to the commencement of the work.

Whenever the board is authorized or mandated by law to inspect an electrical installation, the inspector has authority to enter upon land for the purpose of conducting the inspection. Except in emergency circumstances, the inspector shall request permission from the property owner or agent prior to entering a dwelling, other building, or other place so enclosed as manifestly to exclude intruders. If the landowner refuses to give permission, the board may request the district court of the district containing the property for an order authorizing the inspector to enter the property to conduct the inspection. Emergency

circumstances include situations presenting imminent danger to health, safety, or property.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-03. General requirements. Electrical installations shall be planned to provide adequate capacity for the load.

1. Wiring systems shall have conductors of sufficient capacity to furnish each outlet without excessive line loss or voltage drop. The voltage drop shall not exceed five percent at the farthest outlet of power, heating and lighting loads, or combinations of such loads. (See appendix for example.)
2. All wiring materials shall be listed by approved nationally recognized testing laboratories to safeguard life and property. It is the duty of the electrical installer to secure permission from the executive director to use materials, devices, and methods of installation not specifically covered by these standards. Equipment not approved under a testing laboratory category shall be evaluated by a registered professional engineer on state-accepted evaluation forms.
3. All installations shall be made in a workmanlike manner with special attention paid to the mechanical execution of work. All conductors shall be rigidly supported and all fittings securely fastened.
4. When wiring public school buildings, approval shall be received from the department of public instruction and the state electrical board.
5. Overhead conductors shall not cross over water wells or known sites where water wells may be drilled. A minimum distance of twenty feet [6.10 meters] in all directions shall be maintained for overhead conductors.
6. All hospitals, nursing homes, and related patient care areas along with dormitories designed to house more than sixteen people shall be wired in metal raceway. Portable cleaning equipment receptacle outlets shall be installed in corridors and located so that no point in the corridor along the floorline, measured horizontally, is more than twenty-five feet [7.62 meters] from an outlet. Spacing of receptacle outlets for dormitories and assisted living shall be in conformity with section 210-60, ~~2002~~ 2005 edition, National Electrical Code.

7. In the wiring of nursing homes and hospitals, reference shall be made to the state department of health for special requirements pertaining to operating rooms, delivery rooms, and emergency lighting.
8. Aluminum conductors in sizes smaller than no. 6 shall not be used. Aluminum conductors installed and all corresponding materials shall be approved by testing laboratories.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-04. Places of assembly. This section covers all buildings, structures, or portions of buildings designed or intended for the assembly of one hundred or more persons.

Places of assembly include: assembly halls, auditoriums, including auditoriums in schools; mercantile, business, and other occupancies; exhibition halls; armories; dining facilities, including restaurants; church chapels; dancehalls; mortuary chapels; museums; skating rinks; gymnasiums and multipurpose rooms; bowling lanes; poolrooms; clubrooms; places of awaiting transportation; courtrooms; drinking establishments; and conference rooms.

Occupancy of any room or space for assembly purposes by less than one hundred persons in a building of other occupancy, and incidental to such other occupancy, shall be classed as part of the other occupancy and subject to the applicable provisions.

When such building structures or portions thereof contain a projection booth or stage platform or area for the presentation of theatrical or musical production, either fixed or portable, the wiring for that area shall comply with all applicable provisions of article 520, ~~2002~~ 2005 edition, National Electrical Code.

(For methods of determining population capacity, see occupant load value table, section 24-02-01-16.)

1. **Hazardous (classified) locations.** Hazardous areas located in any assemblage occupancy shall be installed in accordance with article 500, ~~2002~~ 2005 edition, National Electrical Code, hazardous locations.
2. **Wiring methods.** The fixed wiring method including fire alarms shall be metal raceway (and metal boxes) or nonmetallic raceway encased in not less than two inches [5.08 centimeters] of concrete.

Exception 1: As provided in article 640, ~~2002~~ 2005 edition, National Electrical Code, sound reproduction and similar equipment; in article 800, ~~2002~~ 2005 edition, National Electrical Code, communication

circuits; and in article 725, ~~2002~~ 2005 edition, National Electrical Code, for ~~class 1~~, class 2; and class 3 remote control and signaling circuits.

Exception 2: Listed two-hour fire-rated cables as permitted in article ~~695-3e~~ 695.6e and article 700-9, ~~2002~~ 2005 edition, National Electrical Code.

Adjacent areas separated by a fire barrier shall be considered a separate building and may be wired in any approved wiring method in chapter 3 of the ~~2002~~ 2005 edition, National Electrical Code. For the purpose of this section, a fire barrier is defined as a continuous assembly, vertical or horizontal, in accordance with ~~current state-adopted~~ currently adopted state building code. In no case shall it be less than two-hour fire-rated.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-05. Hazardous locations.

1. Hazardous locations shall be wired in accordance with articles 500-516. For classifications of oilfield installations refer to RP 500, Classification of Locations for Electrical Installations at Petroleum Facilities, second edition, November 1997.
2. Electrical wiring in grain elevators shall conform with code requirements, class II, division 1, under article 500, ~~2002~~ 2005 edition, National Electrical Code. ~~All enclosures and electrical equipment mounted in rooms containing grinders, cleaners, roller mills, hoppers, open conveyors or spouts, mixers, and other dust-producing machinery shall be approved for class II, division 1 location, including motor controllers of the type in which starting and running contractors are oil immersed. General purpose enclosures may only be installed in dust-free locations.~~
 - a. Surge arrestors shall be provided for all services in grain elevators.
 - b. Hot bearing or other similar detection systems shall be installed in accordance with articles 500-516, ~~2002~~ 2005 edition, National Electrical Code.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-06. Grounding. Grounding shall conform to article 250, ~~2002~~ 2005 edition, National Electrical Code.

1. At motor connections, a bonding jumper sized in accordance with table 250-122, ~~2002~~ 2005 edition, National Electrical Code, shall be provided around all flexible conduit in sizes one-half inch [12.70 millimeters] and larger. The bonding jumper is not required where a separate grounding conductor is included.
2. Grounding of metal outdoor lighting standards. Definition of lighting standard is a pole exceeding twelve feet [3.66 meters] in height measured from the bottom of the base or from the intended grade level of poles.
 - a. Circuits run in nonmetallic conduit or buried directly in the ground: the metal lighting standard shall be grounded by use of an equipment grounding conductor, not the neutral conductor. This equipment grounding conductor shall be run continuously throughout the system and properly bonded to each standard by use of lugs.
 - b. The metal lighting standard shall be connected to a one-half inch [12.70 millimeters] by ten-foot [3.05-meter] copperweld ground rod by the means of a bonding jumper. The ten-foot [3.05-meter] ground rod shall be driven in the center of the metal standard base and project slightly above the base. Both ground rod and equipment grounding conductor shall be connected to the metal standards. The bonding jumper shall be in accordance with ~~2002~~ 2005 edition, National Electrical Code, and in no case smaller than no. 8 copper or no. 6 aluminum.
3. The grounding electrode conductor shall be connected to the grounded service conductor in the enclosure for the service disconnect.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-07. Branch circuits and feeders. Branch circuits and feeders shall comply with articles 210 and 215, ~~2002~~ 2005 edition, National Electrical Code.

1. The total connected load shall be divided as evenly as practicable, between the two ungrounded conductors of a three-wire system and three conductors of a four-wire wye system.
2. A separate circuit with disconnect shall be provided for the purpose of operating or controlling electrical equipment on heating units. Wiring

requirements for fixed electrical space heating equipment is provided under article 424, ~~2002~~ 2005 edition, National Electrical Code.

3. Dwelling occupancies having built-in baking or cooking units installed separately shall have an individual disconnect and overcurrent protective device. Conductors supplying these units shall have a carrying capacity according to nameplate rating.
4. A minimum of six 20-amp small appliance branch circuits shall be installed for counter receptacles in kitchens that may be used to serve public gatherings at schools, churches, lodges, and similar buildings. Any island counter in public gatherings shall have at least one receptacle.
5. Dwelling occupancies. A minimum of three 20-amp small appliance branch circuits shall be installed to supply receptacle outlets in kitchen, pantry, dining room, and breakfast room. These circuits shall not supply other outlets and shall have conductors not smaller than no. 12. Two of these circuits shall supply receptacle outlets on or near work counter area and so arranged that adjacent receptacles are not on the same circuit.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-08. Services. Electrical services shall comply with article 230, ~~2002~~ 2005 edition, National Electrical Code.

1. Perpendicular mast used for support of a service shall not be less than two-inch [5.08-centimeter] galvanized rigid steel conduit or intermediate metal conduit, fitted with storm collar flashing.
2. To eliminate moisture condensation, a suitable, ~~pliable~~ compound shall be installed to prevent circulation of air from a warmer to a colder section of the raceway (see section 300-7, ~~2002~~ 2005 edition, National Electrical Code).
3. ~~Lighting, appliance, and power panel boards shall not be located in bathrooms, clothes closets, stairways, or crawl space.~~
 - a- Outside switch location. In no case shall the equipment be mounted lower than two feet [.6096 meter] above grade level unless listed for such purpose.
 - b-

All services in one-family and two-family dwellings shall be located in a single accessible location.

Exception: Special permission may be granted by the electrical inspector for a second service location to be added where there is no available space for the service equipment. The second service location shall be installed in accordance with article 230-2, ~~2002~~ 2005 edition, National Electrical Code.

4. Rating of service switch. Any new or old single-family dwelling where the main house ~~service~~ panel is altered, the dwelling is moved, or where the dwelling is rewired, a minimum one hundred ampere service-rated panel shall be installed.
 - a. A one hundred ampere ~~service~~ main house panel shall be installed using ungrounded conductors rated at one hundred amperes. The panel shall contain provisions for a minimum of twenty full-sized branch circuit spaces.
 - b. A two hundred ampere or larger main house panel shall be installed using ungrounded conductors sized for the proper ampacity. The panel or panels shall contain provisions for a minimum of forty full-sized branch circuit spaces.
 - c. Service and feeder calculation for electric heating loads shall be sized to one hundred twenty-five percent of the full load rating.
5. Underground services. Underground service shall comply with article 230, part ~~Ⓒ~~ III, ~~2002~~ 2005 edition, National Electrical Code. Cables or individual conductors on outside of buildings or poles shall be protected where subject to mechanical ~~injury~~ damage. Where rigid metal conduit is used, a bushing shall be used on both ends. Sufficient slack conductor shall be left to allow for ground settling next to foundations. Past experience indicates that the ground next to a foundation has settled as much as three feet [.914 meter].

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-09. Overcurrent protection. Overcurrent protection shall comply with article 240, ~~2002~~ 2005 edition, National Electrical Code. Exterior overcurrent devices shall be located at a height of no less than two feet [.6096 meter] above grade level to the bottom of the enclosure.

Lighting, appliance, and power panel boards may not be located in bathrooms, clothes closets, stairways, or crawl space.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-10. Wiring methods.

1. Agricultural buildings. This section covers all buildings housing livestock, poultry, and other areas of similar or like nature. All electrical panel boards, wiring devices, and equipment shall be installed in accordance with the provisions of article 547, ~~2002~~ 2005 edition, National Electrical Code.

A site-isolating device shall be permitted to be installed at the distribution point where two or more agricultural building structures are supplied from the distribution point.

2. Electric metallic tubing shall not be used in concrete below grade, in concrete slab or masonry in direct contact with earth. A vapor barrier, if used, will have no effect on the requirements of the section. Electric metallic tubing shall not be embedded in earth or fill.
3. Aluminum conduit shall not be installed in contact with earth or embedded in concrete.
4. The installation of rigid nonmetallic conduit shall comply with the provision of article ~~347~~ 352, ~~2002~~ 2005 edition, National Electrical Code. Expansion fittings for rigid nonmetallic conduit shall be provided to compensate for thermal expansion and contraction in accordance with section ~~347-9~~ 352.44, ~~2002~~ 2005 edition, National Electrical Code. When installed outdoors and above grade, one hundred forty degrees Fahrenheit [60 degrees Celsius] shall be considered the minimum change in degrees.
5. Fertilizer rooms, meatpacking plants, salt processing plants, and similar locations are judged to be occupancies where severe corrosive conditions are likely to be present. It is recommended that nonmetallic conduit with nonmetallic boxes and fittings be used as the wiring method for such occupancies. Ferrous and nonferrous metal raceways

shall be used providing the raceway, boxes, and fittings are properly protected against corrosion.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-10.1. Electrical Water-damaged electrical equipment submerged in water. Electrical wiring and equipment exposed to water damage shall comply with the following:

1. All breaker panel boards, breakers, fuses, disconnect switches, controllers, receptacles, switches, light fixtures, and electric heaters that have been submerged shall be replaced or all electrical equipment, switchgear, motor control centers, boilers and boiler controls, electric motors, transformers, and other similar equipment such as appliances, water heaters, dishwashers, ovens, and ranges that have been submerged shall be reconditioned by the original manufacturer or by its approved representative or replaced.
2. Electrical wiring may require replacement depending on the type of wire or cable and what application it was listed for.
3. Splices and terminations shall be checked to make sure they comply with article 110-14, ~~2002~~ 2005 edition, National Electrical Code.

Other recommendations can be found in "Guidelines for Handling Water Damaged Electrical Equipment" published by the national electrical manufacturers association (NEMA).

History: Effective January 1, 1999; amended effective April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-12. Boxes and fittings. Not more than one extension ring may be used on outlet boxes unless special permission has been obtained from the electrical inspector having jurisdiction. Boxes or conduit bodies shall be installed at each opening, splice, or connection, except as provided in article 604, ~~1999~~ 2005 edition, National Electrical Code.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-14.1. Mobile home parks and recreational vehicle parks. Mobile homes, manufactured homes, and mobile home parks shall comply with ~~article~~ articles 550 and 551; ~~2002~~ 2005 edition, of the National Electrical Code.

Service equipment may be installed on manufactured homes as required in ~~550-23(b)~~ article 550.32(b) if the following requirements are met:

1. The mobile home is located on property owned by homeowner and not in mobile home park.
2. The mobile home is secured to a permanent foundation that complies with currently adopted state building code.

History: Effective April 1, 2002; amended effective April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-16. Marking of means of egress, illumination of means of egress, and emergency lighting. The purpose of this section is to provide exit and emergency lighting requirements in accordance with Life Safety Code, NFPA 101, ~~2000~~ 2003 edition, in simple and condensed form. For occupancies or items not covered in this condensed version, refer to NFPA 101, ~~2000~~ 2003 edition, for complete details. In the wiring of institutional occupancies, governmental agencies may use other codes, which may be more stringent, especially when federal funds are involved.

1. Marking of means of egress. All required exits and access to exits shall be marked by readily visible signs with For externally illuminated signs, letters shall be not less than six inches [15.24 centimeters] high and. Internally illuminated signs shall be listed per UL 924 which assures proper letter size. Chevron-shaped arrows indicating are required to indicate direction to exits. Every sign shall be suitably illuminated. See For externally illuminated signs see section 5-10-3 7.10.6, Life Safety Code, NFPA 101, 2000 2003 edition and for internally illuminated signs see section 7.10.7.
2. Illumination of means of egress. Illumination of means of egress shall provide continuous, dependable, illumination of not less than one foot-candle at floor level for all areas such as corridors, stairways, and exit doorway, providing a lighted path of travel to the outside of the building and public way during all times that the means of egress is available for use. For new stairs, the required minimum illumination level is ten foot-candle during conditions of stair use. Illumination shall be from a source of reasonable assured reliability and may be supplied from normal lighting circuits or special circuits with switching controlled by authorized personnel. Illumination required for exit marking shall also serve for illumination of means of egress and shall be so arranged that failure of a single unit such as burning out of a single bulb will not leave any area in darkness.

3. **Emergency lighting.** Emergency lighting systems shall be so arranged to provide the required illumination automatically in event of any interruption or failure of the normal power supply. An acceptable alternate source of power may be an electric generator or approved battery. In occupancies where emergency lighting is required, the circuits supplying exit marking and illumination of means of egress shall be supplied by the emergency system. Other areas of the facilities only requiring exit marking and illumination of means of egress may be supplied by the normal source.
4. **Classification of occupancy based on chapter 4 6, Life Safety Code, NFPA 101, ~~2000~~ 2003 edition.**

Note: Check with local building official to determine occupancy and ~~occupancy~~ occupant load.

Assembly. Assembly occupancies include all buildings or portions of buildings used for gathering together fifty or more persons for such purposes as deliberation, worship, entertainment, eating, drinking, amusement, or awaiting transportation. Assembly occupancies also include special amusement buildings regardless of occupant load.

Assembly occupancies include the following:

Armories	Libraries
Assembly halls	Mortuary chapels
Auditoriums	Motion picture theaters
Bowling lanes	Museums
Clubrooms	Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
College and university classrooms, fifty persons and over	Places of religious worship
Conference rooms	Poolrooms
Courtrooms	Recreation piers
Dancehalls	Restaurants
Drinking establishments	Skating rinks
Exhibition halls	Theaters
Gymnasiums	

Occupancy of any room or space for assembly purposes by fewer than fifty persons in a building or other occupancy and incidental to such other occupancy shall be classified as part of the other occupancy and shall be subject to the provisions applicable thereto.

Educational. Educational occupancies include all buildings or portions of buildings used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than twelve hours per week.

Educational occupancies include the following:

Academies	Nursery schools
Kindergartens	Schools

Other occupancies associated with educational institutions shall be in accordance with the appropriate part of Life Safety Code, NFPA 101, ~~2000~~ 2003 edition.

In cases when instruction is incidental to some other occupancy, the section of Life Safety Code, NFPA 101, ~~2000~~ 2003 edition, governing such other occupancy applies. For example:

- Classrooms under fifty persons - business occupancy
- Classrooms fifty persons and over - assembly
- Instructional building - business occupancy
- Laboratories, instructional - business occupancy
- Laboratories, noninstructional - industrial

Day care. Day care occupancies include all buildings or portions of buildings in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than twenty-four hours per day.

Day care occupancies include the following:

- Child day care occupancies
- Adult day care occupancies, except where part of a health care occupancy
- Nursery schools
- Day care homes
- Kindergarten classes that are incidental to a child day care occupancy

In cases when public schools offer only half-day kindergarten programs, many child day care occupancies offer state-approved kindergarten classes for children who require full day care. As these classes are normally incidental to the day care occupancy, the requirements of the day care occupancy should be followed.

Residential occupancies are treated separately in Life Safety Code, NFPA 101, ~~2000~~ 2003 edition, in the following groups:

- One-family and two-family dwellings
- Lodging or rooming houses
- Hotels, motels, and dormitories
- Apartment buildings
- ~~Lodging or rooming houses~~
- ~~One-family and two-family dwellings~~
- Board Residential board and care facilities

Mercantile. Mercantile occupancies include stores, markets, and other rooms, buildings, or structures for the display and sale of merchandise.

Mercantile occupancies include the following:

- Auction rooms
- Shopping centers
- Department stores
- Supermarkets
- Drugstores

Office, storage, and service facilities incidental to the sale of merchandise and located in the same building are included with mercantile occupancy.

Business. Business occupancies are those used for the transaction of business other than those covered under mercantile, for the keeping of accounts and records, and for similar purposes.

Business occupancies include the following:

- Air traffic control towers (ATCTs)
- Doctors' offices
- City halls
- General offices
- College and university instructional buildings, classrooms under fifty persons, and instructional laboratories
- Outpatient clinics, ambulatory
- Courthouses
- Townhalls
- Dentists' offices

Doctors' and dentists' offices are included unless of such character as to be classified as ambulatory health care occupancies.

Industrial. Industrial occupancies include factories making products of all kinds and properties devoted to operations such as processing, assembling, mixing, packaging, finishing or decorating, and repairing.

Industrial occupancies include the following:

Drycleaning plants	Power plants
Factories of all kinds	Pumping stations
Food processing plants	Refineries
Gas plants	Sawmills
Hangars (for servicing or maintenance)	Telephone exchanges
Laundries	

In evaluating the appropriate classification of laboratories, the authority having jurisdiction should determine each case individually based on the extent and nature of the associated hazards. Some laboratories may be classified as occupancies other than industrial, for example, a physical therapy laboratory or a computer laboratory.

Storage. Storage occupancies include all buildings or structures utilized primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals.

Storage occupancies include the following:

Barns	Hangars (for storage only)
Bulk oil storage	Parking structures
Cold storage	Stables
Freight terminals	Truck and marine terminals
Grain elevators	Warehouses

Storage occupancies are characterized by the presence of relatively small numbers of persons in proportion to the area. Any new use that increases the number of occupants to a figure comparable with other classes of occupancy changes the classification of the building to that of the new use.

~~Day care. Day care occupancies include all buildings or portions of buildings in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than twenty-four hours per day.~~

~~Day care occupancies include the following:~~

~~Child day care occupancies~~ ~~Day care homes~~
~~Adult day care occupancies, except where part of a health care occupancy~~ ~~Kindergarten classes that are incidental to a child day care occupancy~~
~~Nursery schools~~

~~In cases when public schools offer only half-day kindergarten programs, many child day care occupancies offer state-approved kindergarten classes for children who require full-day care. As these classes are normally incidental to the day care occupancy, the requirements of the day care occupancy should be followed.~~

Mixed occupancies. Where two or more classes of occupancy occur in the same building or structure and are intermingled so that separate safeguards are impracticable, means of egress facilities, construction, protection, and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved.

5. Occupant load ~~value~~ factor table.

<u>Occupancy Use</u>	Square Feet Per Person
Assembly <u>use</u>	15 net*
Areas of concentrated use without fixed seating	7 net
Waiting space	3 net
Bleachers, pews, and similar bench-type seating	Note 1
Fixed seating	Note 2
Kitchens	100 gross**
Libraries	
In stack areas	100 gross
In reading rooms	50 net
Swimming pools	
Water surface	50 gross
Pool decks	30 gross
Stages	15 net
<u>Educational occupancies use</u>	
Classroom area	20 net
Shops, laboratories, and similar vocational areas	50 net
<u>Day care use</u>	

<u>Maximum number of persons intended to occupy that floor, but not less than</u>	35 net
<u>Health care use</u>	
Sleeping departments	120 gross
Inpatient departments	240 gross
<u>Detention and correctional use</u>	
Maximum number of persons intended to occupy that floor, but not less than	120 gross
<u>Residential use</u>	
Hotels, motels, dormitories, apartment buildings:	
Maximum probable population, but not less than	200 gross
Lodging or roominghouses:	
Sleeping accommodations for a total of sixteen or fewer persons on either a transient or permanent basis, with or without meals, but without separate cooking facilities or individual occupants	No requirements
One-family and two-family dwellings	No requirements
Residential board and care occupancies <u>use</u>	Note 3
<u>Mercantile use (including malls)</u>	
Street level and below (sales)	30 gross
Upper floor (sales)	60 gross
Office areas	100 gross
Storage, receiving, or shipping (not open to the general public)	300 gross
Assembly areas	See "Assembly"
<u>Business use</u>	
Business purposes	100 gross
Other purposes	Note 4
<u>Industrial use</u>	
Maximum number of persons intended to occupy that floor but not less than	100 gross
<u>Storage use</u>	
No occupant load factor specified	

Day-care

Maximum number of persons intended to occupy that floor, but not less than

35 net

* Net floor area is the actual occupied area, not including accessory unoccupied areas or thickness of walls.

** Gross floor area is the floor area within the inside perimeter of the outside walls of the building under consideration with no deduction for hallways, stairs, closets, thickness of interior walls, columns, or other features.

Notes to occupant load table.

Note 1. Bleachers, pews, and similar bench-type seating: one person per eighteen linear inches [45.72 centimeters].

Note 2. Fixed seating. The occupant load of an area having fixed seats shall be determined by the number of fixed seats installed. Required aisle space serving the fixed seats shall not be used to increase the occupant load.

Note 3. Refer to chapters ~~22 and 23~~ 32 and 33 of Life Safety Code, NFPA 101, ~~2000~~ 2003 edition.

Note 4. Occupant load factors associated with the use.

6. Building classification table.

x - indicates required
o - indicates not required

Occupancy	Marking of Means Egress	Illumination of Means Egress	Emergency Lighting
Assembly	x	x	x
Educational	x Note 4	x	x
Interior stairs and corridors	x	x	x
Normally occupied spaces	x	x	x Note 6
Flexible and open plan buildings	x	x	x
Interior or windowless portions of buildings	x	x	x
Shops and laboratories	x	x	x
<u>Day care</u>	x	x	x
<u>Interior stairs and corridors</u>	x	x	x
<u>Normally occupied spaces</u>	x	x	x <u>Note 6</u>
<u>Flexible and open plan buildings</u>	x	x	x
<u>Interior or windowless portions of buildings</u>	x	x	x
<u>Shops and laboratories</u>	x	x	x

<u>Family day care homes (more than three but fewer than seven persons)</u>	o	x	o	
<u>Group day care homes (seven to twelve persons)</u>	o	x	o	
Health care occupancies (Note 1) (for complete details see Article 517 of NEC and NFPA Standard 99)	x	x	x	
Detention and correctional	x	x	x	
Residential				
Hotels and dormitories	x	x	o	
More than twenty-five rooms	x	x	x	Note 2
Apartment buildings				
Twelve or less apartments	x	x	o	Note 3
More than twelve apartments or greater than three floors	x	x	x	Note 3
Residential board and care				
More than sixteen	x	x	x	
Mercantile				
Class A - over thirty thousand square feet [2787.09 square meters]	x	x	x	
Class B - three thousand to thirty thousand square feet [278.71 square meters to 2787.09 square meters]	x	x	x	
Class C - under three thousand square feet [278.71 square meters]	x	Note 7	x	o
Malls	x	x	x	
Business	x	x	o	
Two or more stories above exit discharge	x	x	x	
Fifty or more persons above or below level of exit discharge	x	x	x	
Three hundred or more persons	x	x	x	
All windowless and underground	x	x	x	
Industrial	x	x	Note 8	x
Storage	x	x	Note 10	x
				Notes 8 & 9
				Notes 10 & 11
Day care				
Interior stairs and corridors	x	x	x	
Normally occupied spaces	x	x	x	Note 6
Flexible and open plan buildings	x	x	x	
Interior or windowless portions of buildings	x	x	x	
Shops and laboratories	x	x	x	
Family day care homes (more than three but fewer than seven persons)	o	x	o	
Group day care homes (seven to twelve persons)	o	x	o	

Special structures (refer to chapter ~~32~~ 11, Life Safety Code, NFPA 101, ~~2000~~ 2003 edition).

Mixed occupancies (Note 5).

NOTES:

Note 1. Exception: Power supply for exit and emergency lighting shall conform to NFPA 110.

Note 2. Exception: Where each guest room or guest suite has an exit direct to the outside of the building at street or ground level emergency lighting is not required.

Note 3. Exception: Buildings with only one exit need not be provided with exit signs.

~~Note 4. Exception: Signs are not required in situations where locations of exits are otherwise obvious and familiar to all occupants, such as in small elementary school buildings.~~

Note 5. Exception: Where the same means of egress serve multiple-use or combined occupancies, exit lighting, exit signs, and emergency lighting shall be provided for the occupancy with the most stringent lighting requirements. The occupant load of each type of occupancy shall be added to arrive at the total occupant load.

Note 6. Exception: ~~Administrative areas, general classrooms, mechanical rooms, and storage areas.~~ Rooms with windows to outside (other than assembly use spaces) exempted from emergency lighting requirement.

Note 7. Exception: Where an exit is immediately apparent from all portions of the sales area, the exit marking is not required.

Note 8. Exception: Special purpose industrial occupancies without routine human habitation.

Note 9. Exception: Structures occupied only during daylight hours, with skylights or windows arranged to provide the required level of illumination on all portions of the means of egress during these hours.

Note 10. Exception: Storage occupancies do not require emergency lighting when not normally occupied.

Note 11. Exception: In structures occupied only during daylight hours, with skylights or windows arranged to provide the required level of illumination of

all portions of the means of egress during these hours, emergency lighting is not required.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-17. Carnivals. This section provides standards for temporary outdoor installations of portable electrical wiring and equipment for carnivals and celebrations consisting of overhead and underground installations for lighting and power to tents, stands, concessions, and amusement rides and shall comply with article 525, ~~2002~~ 2005 edition, National Electrical Code.

1. All temporary outdoor installations shall be approved by the electrical inspector before usage.
2. Inspection and fees for outdoor carnivals and concessions. Each outdoor amusement enterprise or carnival operating or intending to operate in North Dakota shall notify the North Dakota State Electrical Board, Box 857, Bismarck, North Dakota 58502-0857, each year of its itinerary and make application for the initial inspection thirty days before the first engagement in the state. Failure to notify the state electrical board may result in the outdoor amusement enterprise or carnival being responsible for expenses incurred for excess time and travel to inspect these installations.
 - a. Fees - \$10.00 each ride or concession
\$10.00 reinspection fee on each unit, if required
\$40.00 each transformer or generator truck
 - b. The fee shall be paid to the inspector at the first engagement or inspection. Each ride or concession will be issued a certification of inspection so that "en route" inspection shall be recorded by each inspector.
 - c. Each ride or concession wired properly will be issued a certification of compliance, serving for an entire carnival season, subject to subsequent inspections.
 - d. Each ride or concession having minor code violations will be issued a correction order with instructions to correct the same, before a following engagement, which will require a reinspection with a ten dollar reinspection fee.

- e. The electrical inspector is empowered to write a correction order for immediate compliance should the inspector find a condition dangerous to life and property.

History: Amended effective October 1, 1987; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-19. Inspection fees.

1. All electrical installations, including new jobs and additional work on old installations, made in this state, shall have an electrical wiring certificate or e-cert properly executed by the master or class B electrician supervising the installation of electrical wiring. The state electrical board shall prescribe such form and shall have on hand a supply of such certificates for distribution to master and class B electricians. Such certificate shall consist of the original and five copies.
2. Before work commences on any electrical installation where a new entrance is installed, an existing entrance is altered, a building is moved, where a mobile home feeder is installed, or where the cost of the repair work or additional installation exceeds three hundred dollars, the master or class B electrician supervising such installation shall execute an electrical wiring certificate and distribute the various copies as directed. The goldenrod copy of the certificate shall be forwarded to the state electrical board or city electrical inspection authority having jurisdiction and the canary copy to the power company before work is commenced.

Within fifteen days of completion, use, or occupancy, whichever is foremost, the white and green copies shall be forwarded to the office of the state electrical board, along with the proper fee. The pink copy shall be retained by the master or class B electrician and the manila copy shall be left in, or on the panel or given to the owner. All six copies shall contain a description of the work and the legal description of the location. Certificates with job cost of five ten thousand dollars or less are valid twelve months from the original filing date. The wiring certificate shall be submitted with a proper description of work completed and with the proper fee. A new wiring certificate shall be filed on all unfinished work.

3. The electric wiring certificates are available from the state electrical board at Bismarck, North Dakota, upon request of any master or class B electrician holding a proper current license from the electrical board. The master or class B electrician shall be held responsible for all certificates issued to that person. A charge of fifteen dollars to cover board costs shall be imposed on each lost wiring certificate.

4. A copy of an electrical wiring certificate shall be filed with the power supplier before an electrical installation may be energized.
5. Inspection fees shall be as follows:

Job Cost	Inspection Fee
Up to \$300.00	\$15.00 <u>\$25.00</u> (minimum fee)
\$300.00 to \$3,000.00	\$15.00 <u>\$25.00</u> for the first \$300.00 plus 2% on balance up to \$3,000.00
\$3,000.00 to \$10,000.00	\$69.00 <u>\$79.00</u> for the first \$3,000.00 plus 1.5% on balance up to \$10,000.00
\$10,000.00 to \$15,000.00	\$174.00 <u>\$184.00</u> for the first \$10,000.00 plus 1% on balance up to \$15,000.00
\$15,000.00 to \$100,000.00	\$224.00 <u>\$234.00</u> for the first \$15,000.00 plus 1/2 of 1% on balance up to \$100,000.00
Over \$100,000.00	\$649.00 <u>\$659.00</u> for the first \$100,000.00 plus 1/4 of 1% on balance

Inspection fees shall accompany the copies of wiring certificates which shall be forwarded to the State Electrical Board, Box 857, Bismarck, North Dakota 58502.

6. Whenever an electrical installation made by or under the supervision of a master or class B electrician is commenced or in use without submitting an electrical wiring certificate, as directed in subsection 2, the certificate may be considered late and the normal inspection fee, as required under this section, is increased in the amount of fifty dollars. In addition, when time and travel are expended by employees of the board to obtain a late certificate, an investigative fee may be charged to cover the costs incurred. Costs are to be calculated at a rate of fifty dollars per hour and ~~twenty-five cents~~ mileage rates currently allowed by North Dakota Century Code section 54-06-09 per mile of travel.
7. Corrections. Whenever a correction order is written and corrections are not completed within the allotted time, there shall be an administration charge of fifty dollars, which shall be paid to the board by the master or class B electrician.
8. All reinspections shall be paid for by the electrical contractors at a cost of fifty dollars per hour with a minimum charge of one hundred dollars.
9. The electrical inspection fee shall be based on the total amount of the electrical contract or total cost to the owner including extras.
10. The following items need not be included in the cost:

- a. Appliances, including dishwashers, heat pumps, air-conditioners, disposals, and similar equipment.
 - b. Heating, ventilating, and air-conditioning (HVAC) units.
 - c. Electric motors, PLC, generators; and
 - d. Industrial machines.
11. The electrical contractor is responsible to collect the proper inspection fee on each installation. When the owner furnishes the material and the electrical contractor furnishes the labor, the owner shall provide the electrical contractor with the total amount expended for electrical materials used in connection with the installation, and the electrical contractor shall then calculate and collect the necessary inspection fee from the owner. Whenever electrical materials are donated or removed from an existing installation and placed at another location or labor is donated to an installation, the electrical contractor shall estimate the cost of these materials and labor and include the amount in the job cost for the purpose of calculating the proper inspection fee.
12. The inspection fee for all electrically driven irrigation machines and motor-driven passenger or freight elevators and dumbwaiters installed in North Dakota shall be as follows:

Elevators and dumbwaiters having horsepower rating up to 5 horsepower - \$20.00

Elevators and dumbwaiters having horsepower rating 5 horsepower through 15 horsepower - \$40.00

Elevators and dumbwaiters having horsepower rating over 15 horsepower - \$60.00

Electrically driven irrigation machines - \$50.00

The master electrician (restricted) having supervision of elevator or dumbwaiter installations shall obtain electrical wiring certificates from the state electrical board. The certificate form shall be completed, signed by the master electrician (restricted), and forwarded to the state electrical board, Bismarck, North Dakota, with the inspection fee.

The companies having supervision of electrically driven irrigation machine installations shall submit reports to the state electrical board. The report shall be completed, signed by owner or manager, and forwarded to the state electrical board, Bismarck, North Dakota, with the inspection fee within fifteen days of completion or use, whichever is first.

13. ~~Electrically driven irrigation machines. For each center pivot system, there is a flat fee of fifty dollars. For all other work, the fee shall be based on the cost of electrical materials and labor.~~
44. Requested inspections. For inspections not covered in this section or special services, the fee shall be fifty dollars per hour, including travel time, plus ~~twenty-five cents~~ mileage rates currently allowed by North Dakota Century Code section 54-06-09 per mile traveled.
45. 14. For self-wire inspections on wiring done by the owner, the inspection fee shall be as stated in this section, except the minimum shall be fifty dollars. Owner wiring shall be done on residential and farmstead property occupied by the owner. Certification and inspection are required as stated in subsection 1. The owner is required to notify the state electrical board or authority having jurisdiction before work commences. Requests for inspection of owner-wired installations shall be in writing and shall be accompanied by a print or drawing depicting the wiring to be done.

History: Amended effective January 1, 1981; January 1, 1984; October 1, 1987; January 1, 1990; March 1, 1990; January 1, 1993; February 1, 1996; January 1, 1999; April 1, 2002; April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24-02-01-22. Continuing education requirements.

1. Each master, journeyman, and class B electrician license shall not be renewed unless the continuing education requirements of North Dakota Century Code section 43-09-15.1 are met, of which a minimum of fifty percent of the hours shall be based on the ~~4999~~ 2005 edition, National Electrical Code. The remaining credits shall be subjects related to the electrical industry. Approval of the course curriculum is at the discretion of the North Dakota state electrical board.
 - a. Electrical continuing education programs will be accepted from technical or trade schools or colleges, electrical trade associations, or individual commercial providers.
 - b. Courses, seminars, and instructors shall have prior approval by the North Dakota state electrical board to receive credit. Request for approval of courses, seminars, and instructors shall be made no later than ten days prior to the board meeting. Board approval of courses, seminars, and instructors accepted expires when the state electrical board adopts an updated edition of the National Electrical Code.
 - c. Application for approval of courses and instructors shall be on a form provided by the North Dakota state electrical board. A

complete description (detailed curriculum outlining the subject matter along with the time and sequence of each item) or copies of all materials provided to the attendants shall be submitted.

- d. Continuing education programs held in other states and not granted prior approval according to this section may be considered for credit if the board is provided with evidence that the educational programs meet the requirements of the state electrical board and are approved for required continuing education credits by the public authority for licensing electricians in that state. ~~Continuing education credit for correspondence courses approved by other states is not accepted.~~
 - e. The board shall be notified in writing no later than fifteen days prior to the date, time, and location of the presentation. A representative of the North Dakota state electrical board shall be able to attend without charge and have the authority to audit or review continuing education presentations.
 - f. The board shall withdraw approval of any educational program not in compliance with this section.
 - g. The provider of the presentation shall forward an attendance list to the board on a form supplied by the board within fifteen days following the presentation but no later than March thirty-first of that year. A certificate of completion shall also be provided to each licensee in attendance. Each certificate of completion and attendance list shall include the name of the provider, the name of the instructor, the course identification number, the date and location of presentation, the number of code and noncode hours of instruction for continuing education units, the electrician's name, and the electrician's license number or social security number. It is the responsibility of the licensee to have a copy of this certificate of completion. The certificates shall be sent to the board only if requested to do so by the board.
 - h. Continuing education credits are valid for a period up to two license renewal periods.
2. Instructors shall submit their qualifications to the state electrical board prior to the presentation of the course or seminar. Courses will not be approved unless the instructor has one or more of the following qualifications:
- a. A master electrician with at least one year's experience in electrical inspection.
 - b. A journeyman or master electrician who is certified as an instructor through a vocational education department.

- c. A person with a valid teaching accreditation from a trade or technical school, college, or university teaching an electrical curriculum.
- d. A registered or licensed electrical engineer with at least four years' experience in design of premise electrical wiring systems.
- e. A representative from the national fire prevention association, testing laboratories, international association of electrical inspectors, and other product manufacturer representatives with five years' practical experience in the subject taught.
- f. Instructor of an apprenticeship training program.

History: Effective January 1, 1999; amended effective April 1, 2005.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

APPENDIX
Short Cut
At 75° C

Voltage Drop Formulas 167° F

Voltage drop = $\frac{K \times L \text{ ft.} \times I}{\text{C.M.A.}}$

C.M.A.

or

C.M.A. = $\frac{K \times L \text{ ft.} \times I}{\% \text{ drop} \times \text{voltage}}$

% drop x voltage

L = length in feet, one way

I = load in amps

E = Volts

C.M.A. = circular-mil area

K-factor = 25.8 multiplying factor for copper, 42.4 multiplying factor for aluminum at 75° C.

Percent drop = permissible voltage drop times voltage of circuit as follows:

$$3\% \text{ of } 208 = 208 \times .03 = 6.24 \text{ volts}$$

$$3\% \text{ of } 120 = 120 \times .03 = 3.6 \text{ volts}$$

$$3\% \text{ of } 240 = 240 \times .03 = 7.2 \text{ volts}$$

$$5\% \text{ of } 240 = 240 \times .05 = 12.0 \text{ volts}$$

Example:

240 volts, 1,000 ft. distance, 10 ampere load, 5% drop

$$25.8 \times 1,000 = 25,800 \times 10 = 258,000$$

258,000 divided by 26,250 (C.M.A. of No. 6) = 9.8 volts (less than 5%)

258,000 divided by 16,510 (C.M.A. of No. 8) = 15.6 volts (more than 5%)

120 volts, 8 ampere load, 100 ft. distance, 3% drop

$$25.8 \times 100 = 2,580 \times 8 = 20,640$$

20,640 divided by 6,530 (C.M.A. of No. 12) = 3.16 volts (less than 3%)

20,640 divided by 4,107 (C.M.A. of No. 14) = 5.0 volts (more than 3%)

or

$$25.8 \times 8 \text{ amps} \times 100 \text{ ft.} = 20,640$$

20,640 divided by 3.6 (volts representing 3%) = 5,733 C.M.A. (No. 12)

For 3-phase circuits, use formula, then multiply the results by .86.

Fire Alarm System Condensed Guide
 O - NOT required X - required

Occupancy	Manual Stations	Smoke Detector	Heat Detector	Flow Switch	Fire Station Alarm
Assembly under three hundred	0	0	0	0	0
Assembly over three hundred	X Note 1	0	0	0	0
Amusement buildings	X	X	0	X	X
Hotel-motel					
Nineteen rooms or less	0	X Note 2	0	0	0
Three or more story *	X	X	0	0	0
Hotel-motel					
Twenty rooms or more * and congregate residences	X	X Note 2	X	X	0
Commons area					
Hotels-motels-apartment houses	X	X	X Note 3	Note 5	
Educational					
North Dakota Century Code Section 18-12-16					
Institutional *	X	X	X	X	X
Office - High-rise	X	X	X	X	
Apartments (see #2 above)	0	X	0	0	0
Industrial - Check with the local fire authority or the state fire marshal					
Office building - Check with local jurisdiction					

* State Department of Health department rules.

Note 1. Placement of devices shall be at exit on each level.

Note 2. Detectors required in each sleeping room and one detector for each seventy-five feet [22.86 meters] of hallway.

Note 3. When automatic sprinklers and flow detectors are installed, they shall be connected to the alarm system. Heat detectors are required in mechanical rooms, laundry rooms, and storerooms.

Note 4. Institutional includes hospitals, nursing homes, jails, and similar facilities, including any occupancy where movement is restricted.

Note 5. If equipped with sprinkler.

Note 6. Emergency voice alarm and signal.

Note 7. One hundred or more sprinkler heads.

All signaling devices for all occupancies shall meet Americans with Disabilities Act (ADA) requirements (check ADA requirements).

Smoke detectors in hotels, motels, and apartments are not to be tied to the central alarm system (alarm in room or apartment only).

Central alarm trouble indicator shall be located where it will be heard.

Systems with two or more zones shall have an annunciator panel located at an entrance approved by the local fire department.

Cities shall have additional or more stringent requirements.

Be aware the table is the minimum and the owner or designer shall ask for more.

TITLE 33
STATE DEPARTMENT OF HEALTH

DECEMBER 2004

CHAPTER 33-16-01

33-16-01-01. General - Definitions - Permit effect - Incorporation by reference.

1. **Authority.** The authority for this chapter relating to the control, prevention, and abatement of pollution of natural surface and underground waters is provided by North Dakota Century Code section 61-28-04.
2. **Scope and purpose.** This chapter establishes procedures governing the application for, and the issuance, denial, modification, and revocation of, permits for the discharge of pollutants into the waters of the state, as defined by subsection 6 of North Dakota Century Code section 61-28-02. The establishment of such procedures is required as a condition precedent to participation by North Dakota in the national pollutant discharge elimination system, pursuant to the provisions of section 402(b) of the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.].
3. **Definitions.** As used in this chapter, unless the context otherwise indicates:
 - a. "Administrator" means the administrator of the United States environmental protection agency.
 - b. "Applicable water quality standards" means all water quality standards to which a discharge is subject under the Federal Water Pollution Control Act and which have been:
 - (1) Approved or permitted to remain in effect by the administrator following submission to the administrator pursuant to section 303(a) of the Federal Water Pollution Control Act; or
 - (2) Promulgated by the administrator pursuant to section 303(b) or (c) of the Federal Water Pollution Control Act.

- c. "Biological monitoring" means the determination of the effects on aquatic life, including accumulation of pollutants in tissue, in receiving waters due to the discharge of pollutants:
 - (1) By techniques and procedures, including sampling of organisms representative of appropriate levels of the food chain appropriate to the volume and the physical, chemical, and biological characteristics of the effluent; and
 - (2) At appropriate frequencies and locations.
- d. "Department" means the North Dakota state department of health.
- e. "Discharge" when used without qualification includes a discharge of a pollutant, and a discharge of pollutants.
- f. "Discharge of a pollutant" and "discharge of pollutants" each means any addition of any pollutant to the waters of the state from any source, including the disposal of pollutants into wells.
- g. "Effluent standard" or "effluent limitation" means any restriction established by the department on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into the waters of the state. Such restrictions shall be at least as stringent as standards adopted by the administrator pursuant to the provisions of the Federal Water Pollution Control Act. Such restrictions shall include, but not be limited to, effluent limitations and applicable compliance schedules, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards adopted by the administrator pursuant to the aforesaid Act.
- h. "EPA" means the United States environmental protection agency.
- i. "Industrial user" means a source of indirect discharge as defined in section 33-16-01.1-01.
- j. "Major facility" means any facility or activity subject to regulation under the national pollutant discharge elimination system which has been identified as a major facility by the regional administrator in conjunction with the department.
- k. "Minor discharge" means any discharge from a facility or activity which has not been identified as a major facility.
- l. "Municipality" means a city, county, district, association, or other public body created by or pursuant to state law and having jurisdiction over disposal of wastes, as the term is defined by

subsection 2 of North Dakota Century Code section 61-28-02, or a designated and approved management agency under section 209 of the Federal Water Pollution Control Act.

- m. "National data bank" means a facility or system established or to be established by the administrator for the purposes of assembling, organizing, and analyzing data pertaining to water quality and the discharge of pollutants.
- n. "National pollutant discharge elimination system (NPDES)" means the national system for the issuance of permits under section 402 of the Federal Water Pollution Control Act of 1972 and includes any state or interstate program which has been approved by the administrator pursuant to section 402 of the Federal Water Pollution Control Act.
- o. "National pollutant discharge elimination system application" or "application" means the uniform national forms, including subsequent additions, revisions, or modifications duly promulgated by the administrator pursuant to the Federal Water Pollution Control Act, for application for a national pollutant discharge elimination system permit and any state form that has been approved for use by the administrator.
- p. "National pollutant discharge elimination system form" means any issued national pollutant discharge elimination system permit and any uniform national form developed for use in the national pollutant discharge elimination system and prescribed in regulations promulgated by the administrator and any state form that has been approved for use by the administrator.
- q. "National pollutant discharge elimination system permit" means any permit issued by the department pursuant to its authority under North Dakota Century Code section 61-28-04, and subsequent to approval by the administrator as described in subsection 5 of section 33-16-01-04.
- r. "National pollutant discharge elimination system reporting form" means the uniform national forms, including subsequent additions, revisions, or modifications duly promulgated by the administrator pursuant to the Federal Water Pollution Control Act, for reporting data and information pursuant to monitoring and other conditions of national pollutant discharge elimination system permits and any state form that has been approved for use by the administrator.
- s. "Person" means the state or any agency or institution thereof, any municipality, political subdivision, public or private corporation, individual partnership, association, any agency or instrumentality

of the United States government, or other entity, and includes any officer or governing or managing body of any municipality, political subdivision, or public or private corporation.

- t. "Pollutant" means "wastes" as defined in subsection 2 of North Dakota Century Code section 61-28-02, including dredged spoil, solid waste, incinerator residue, garbage, sewage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.
- u. "Refuse Act application" means the application for a permit under section 13 of the River and Harbor Act of 1899 [33 U.S.C. 407].
- v. "Regional administrator" means the regional administrator of region VIII of the environmental protection agency, which includes within its jurisdiction North Dakota.
- w. "Schedule of compliance" means a schedule of remedial measures, including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard.
- x. "Toxic pollutant" means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions including malfunctions in reproduction, or physical deformations, in such organisms or their offspring.
- y. "Waters of the state" means all water included within the definitions given in subsection 6 of North Dakota Century Code section 61-28-02 or North Dakota Century Code section 61-01-01.

4. Effect of a permit.

- a. Except for any toxic effluent standards and prohibitions and standards for sewage sludge use or disposal, compliance with a permit constitutes compliance with sections 301, 302, 307, 318, 403, and 405(a) and (b) of the Clean Water Act.
- b. The issuance of a permit does not convey any property rights of any sort or any exclusive privilege.

5. Incorporation by reference.

- a. The subchapters, parts, subparts, and appendices of title 40, Code of Federal Regulations, which are incorporated by reference into this chapter shall be treated as if they were published in full in this chapter. Unless otherwise specified, any incorporation by reference shall be as it exists on October 1, 2002.**
- b. Any reference to "waters of the United States" or "waters of the U.S." in any corporation by reference shall include "waters of the state" as defined in this section.**

History: Amended effective October 1, 1989; October 1, 2002; December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-01-01.1. Additional point sources subject to regulation.

1. The 40 Code of Federal Regulations, part 122.23, concentrated animal feeding operations, [40 CFR 122.23], as it exists on February 12, 2003, is incorporated into this chapter by reference. The department regulates livestock operations under chapter 33-16-03, including those which are not subject to this subsection.
2. The 40 Code of Federal Regulations, part 122.24, concentrated aquatic animal production facilities, [40 CFR 122.24] is incorporated into this chapter by reference.
3. The 40 Code of Federal Regulations, part 122.25, aquaculture projects, [40 CFR 122.25] is incorporated into this chapter by reference.
4. The 40 Code of Federal Regulations, part 122.26, storm water discharges, [40 CFR 122.26] is incorporated into this chapter by reference.
5. The 40 Code of Federal Regulations, part 122.27, silvicultural activities, [40 CFR 122.27] is incorporated into this chapter by reference.

History: Effective October 1, 2002; amended effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-01-02. Acquisition of data.

1. Application for a national pollutant discharge elimination system permit. Any person who discharges any waste through a point source into a surface water or conducts any activity which requires a valid permit under North Dakota Century Code section 61-28-06 must file a completed national pollutant discharge elimination system application.

2. Any person who commences discharge of any waste through a point source into a surface water or conduct of any activity which requires a valid permit under North Dakota Century Code section 61-28-06 after the effective date of this chapter shall either:
 - a. File a completed national pollutant discharge elimination system application no less than one hundred eighty days prior to the day on which it is desired to commence operation of the waste disposal operation; or
 - b. File a completed national pollutant discharge elimination system application in sufficient time prior to the commencement of waste disposal operations to allow the department to ensure compliance with any applicable water quality standards and effluent standards and the requirements of sections 306 and 208(b) and (c) of the Federal Water Pollution Control Act.
3. Application requirements.
 - a. All applications must comply with 40 Code of Federal Regulations, part 122.21(f), which is incorporated into this chapter by reference.
 - b. Applications by manufacturing, commercial, mining, and silvicultural dischargers shall comply with 40 Code of Federal Regulations, part 122.21(g), which is incorporated into this chapter by reference.
 - c. Applications by manufacturing, commercial, mining, and silvicultural facilities that discharge only nonprocess wastewater shall comply with 40 Code of Federal Regulations, part 122.21(h), which is incorporated into this chapter by reference.
 - d. Applications by concentrated animal feeding operations and aquatic animal production facilities shall comply with 40 Code of Federal Regulations, part 122.21(i), as it exists on February 12, 2003, which is incorporated into this chapter by reference.
 - e. Applications from publicly owned treatment works shall comply with 40 Code of Federal Regulations, part 122.21(j), which is incorporated into this chapter by reference.
 - f. Applications from new sources shall comply with 40 Code of Federal Regulations, part 122.21(k), which is incorporated into this chapter by reference.
4. The department may require whatever additional information is necessary to complete the processing of the application. No application will be processed by the department until all of the requested information is supplied and the application is complete.

5. When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.
6. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted with an application for a period of at least three years from the date the application is signed.

History: Amended effective October 1, 2002; December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-01-12. Terms and conditions of national pollutant discharge elimination system permits.

1. The following discharges into the waters of the state are prohibited:
 - a. Any radiological, chemical, or biological warfare agent or high-level radioactive waste.
 - b. Any discharge into the navigable waters that the secretary of the army acting through the chief of engineers finds would substantially impair anchorage and navigation.
 - c. Any discharge to which the regional administrator has objected in writing.
 - d. Any discharge from a point source which is in conflict with a plan or amendment thereto approved pursuant to section 208(b) of the Federal Water Pollution Control Act.
 - e. Any discharge requiring certification under section 401 of the Federal Water Pollution Control Act and 40 Code of Federal Regulations, part 124.53, for which the department has neither granted nor waived the certification.
 - f. Any discharge from a new source or new discharger which causes or contributes to the violation of applicable water quality standards, unless the owner or operator of the new source or new discharger demonstrates that:
 - (1) The existing dischargers to the stream segment are subject to compliance schedules designed to bring the stream segment into compliance; and
 - (2) Remaining pollutant load allocations are sufficient to allow for the discharge.

2. All national pollutant discharge elimination system permits shall contain, either expressly or by reference, the permit conditions listed in 40 Code of Federal Regulations, part 122.41, [40 CFR 122.41], which is incorporated into this chapter by reference.
3. National pollutant discharge elimination system permits shall contain all applicable permit conditions listed in 40 Code of Federal Regulations, part 122.42, [40 CFR 122.42], as it exists on February 12, 2003, which is incorporated into this chapter by reference.
4. National pollutant discharge elimination system permit conditions shall be established in compliance with 40 Code of Federal Regulations, part 122.43, [40 CFR 122.43], which is incorporated into this chapter by reference.
5. National pollutant discharge elimination system permits shall include requirements for recording and reporting of monitoring results in compliance with 40 Code of Federal Regulations, part 122.48, [40 CFR 122.48], which is incorporated into this chapter by reference.

History: Amended effective October 1, 2002; December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-01-14. Effluent limitations in issued national pollutant discharge elimination system permits.

1. Any permit issued by the department shall specify average and maximum daily quantitative limitations for the level of pollutants in the authorized discharge in terms of weight or some other appropriate measure such as pH, temperature, or radiation. When it is at all appropriate the requirement is that the discharge must be expressed in terms of weight. The department may also impose additional quantitative limitations in terms of average or maximum concentration levels.
2. When applicable, permit conditions in national pollutant discharge elimination system permits shall be calculated in compliance with the requirements of 40 Code of Federal Regulations, part 122.45, [40 CFR 122.45], which is incorporated into this chapter by reference.
3. The effluent quality for municipal wastes shall be that required by the department and shall be based on the following:
 - a. Municipal wastes shall receive a minimum of secondary treatment or equivalent in compliance with 40 Code of Federal Regulations, part 133, [40 CFR 133], which is incorporated by reference in section 33-16-01-30.

- b. Wastes shall be effectively disinfected before discharge into state waters if such discharges cause violation of the bacteria criteria as set forth in the standards of water quality for the state of North Dakota, chapter 33-16-02.1. The effluent shall meet the water quality criteria for bacteria except as provided in subdivision c.

 - c. The effluent limitations specified under secondary treatment and bacteria criteria may be adjusted to reflect site-specific considerations as provided in the following:
 - (1) A five-day biochemical oxygen limit of twenty-five milligrams per liter (consecutive thirty-day average) may be applied in instances in which limits expressed in terms of secondary treatment standards would be impractical or deemed inappropriate to protect receiving waters.

 - (2) In certain instances, external circumstances or specific uses of the receiving waters make either attainment or application of the suspended solids or bacteria limitations an ineffective means of controlling water quality. For this reason, the department reserves the right to evaluate the application of these limitations on a case-by-case basis.

 - (3) The pH of natural ground waters and surface waters in some parts of the state (presently used for water supplies with or without treatment) are basic, and the stabilization process of wastewater treatment in lagoon systems can result in more alkaline (increased pH) water. Discharges from waste treatment facilities may exceed the upper pH limit of 9.0 provided in the secondary treatment standard due to these uncontrollable properties. Approval to discharge may be granted, providing the pH of the receiving water is not violated.

 - d. The department may require treatment in addition to that listed in this section if such waste discharges, made during low streamflows, cause violations of stream water quality standards or have a detrimental effect on the beneficial uses of the receiving waters.
4. Industrial waste effluents shall meet all parameters of quality as set forth in section 33-16-01-13 and shall not violate North Dakota water quality standards.

History: Amended effective October 1, 2002; December 1, 2004.
General Authority: NDCC 61-28-04
Law Implemented: NDCC 61-28-04

33-16-01-26.1. General permits.

1. **Coverage.** The department may issue a general permit in accordance with the following:

- a. **Area.** The general permit will be written to cover a category of discharges described in the permit under subdivision b, except those covered by individual permits, within a designated area. The area will correspond to existing geographic or political boundaries or any other appropriate division or combination of boundaries.
- b. **Sources.** The general permit may be written to regulate, within the designated area as described in subdivision a, categories of point sources if the sources all:
 - (1) Involve the same or substantially similar types of operations;
 - (2) Discharge the same types of wastes;
 - (3) Require the same effluent limitations or operating conditions;
 - (4) Require the same or similar monitoring; and
 - (5) In the opinion of the department, are more appropriately controlled under a general permit than under individual permits.
- c. **Storm water.** The general permit may be written to regulate storm water point sources within the designated area as described in subdivision a.

2. **Administration.**

- a. General permits may be issued, modified, revoked and reissued, or terminated in accordance with applicable requirements of chapter 33-16-01.
- b. Requiring an individual permit.
 - (1) The department may require any person authorized by a general permit to apply for and obtain an individual North Dakota pollutant discharge elimination system permit. Any interested person may petition the director to take action under this paragraph. Cases when an individual North Dakota pollutant discharge elimination system permit may be required include the following:
 - (a) The discharge is a significant contributor of pollution as determined by the factors set forth in chapter 33-16-01;

- (b) The discharger is not in compliance with the conditions of the general North Dakota pollutant discharge elimination system permit;
 - (c) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - (d) Effluent limitation guidelines are promulgated for point sources covered by the general North Dakota pollutant discharge elimination system permit;
 - (e) A North Dakota water quality management plan containing requirements applicable to such point sources is approved;
 - (f) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; or
 - (g) The requirements of subsection 1 are not met.
- (2) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under section 33-16-01-02 to the department with reasons supporting the request. The request must be submitted no later than ninety days after the notice by the department in accordance with section 33-16-01-07. The request must be processed under chapter 33-16-01. If the reasons cited by the owner or operator are adequate to support the request, the department may issue an individual permit.
- (3) When an individual North Dakota pollutant discharge elimination system permit is issued to an owner or operator otherwise subject to a general North Dakota pollutant discharge elimination system permit, the applicability of the general permit to the individual North Dakota pollutant discharge elimination system permittee is automatically terminated on the effective date of the individual permit.
- (4) A permittee, excluded from a general permit solely because the permittee already has an individual permit, may request that the individual permit be revoked. The permittee shall then request to be covered by the general permit. Upon

revocation of the individual permit, the general permit shall apply to the source.

3. **Federal requirements.** The 40 Code of Federal Regulations, part 122.28, general permits, [40 CFR 122.28], as it exists on February 12, 2003, is incorporated into this chapter by reference.

History: Effective October 1, 1989; amended effective October 1, 2002; December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-01-31. Effluent guidelines and standards. The 40 Code of Federal Regulations, subchapter N, with the exception of part 403, as it exists on February 12, 2003, is incorporated into this chapter by reference.

History: Effective October 1, 2002; amended effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

**CHAPTER 33-16-03
CONTROL OF POLLUTION FROM CERTAIN LIVESTOCK ENTERPRISES**

[Repealed effective December 1, 2004]

CHAPTER 33-16-03.1
CONTROL OF POLLUTION FROM ANIMAL FEEDING OPERATIONS

<u>Section</u>	
<u>33-16-03.1-01</u>	<u>Authority</u>
<u>33-16-03.1-02</u>	<u>Scope and Purpose</u>
<u>33-16-03.1-03</u>	<u>Definitions</u>
<u>33-16-03.1-04</u>	<u>Designation of Concentrated Animal Feeding Operations</u>
<u>33-16-03.1-05</u>	<u>Operations Requiring a Permit</u>
<u>33-16-03.1-06</u>	<u>No Potential to Pollute Determination</u>
<u>33-16-03.1-07</u>	<u>Permit Application Content and Procedures</u>
<u>33-16-03.1-08</u>	<u>Facility Requirements</u>
<u>33-16-03.1-09</u>	<u>Recordkeeping and Reporting Requirements</u>
<u>33-16-03.1-10</u>	<u>Enforcement and Compliance</u>
<u>33-16-03.1-11</u>	<u>Departmental Inspection</u>
<u>33-16-03.1-12</u>	<u>Prohibited Activities</u>
<u>33-16-03.1-13</u>	<u>Public Participation</u>

33-16-03.1-01. Authority. The North Dakota state department of health has been authorized to provide and administer this chapter relating to the control of pollution from animal feeding operations under the provisions of North Dakota Century Code section 61-28-04.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-02. Scope and purpose. This chapter establishes procedures governing the application for, and the issuance, denial, modification, and revocation of, permits for animal feeding operations to maintain beneficial uses of and prevent degradation of quality of the waters of the state.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-03. Definitions. As used in this chapter, unless the context otherwise indicates:

1. "Animal feeding operation" means a lot or facility, other than an aquatic animal production facility, where the following conditions are met:
 - a. Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of forty-five days or more in any twelve-month period; and
 - b. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

2. "Bedding material" means an absorbent substance applied to dirt or concrete flooring systems, including wood shavings, wood chips, sawdust, shredded paper, cardboard, hay, straw, hulls, sand, and other similar, locally available materials.
3. "Best management practices" means schedules of activities, prohibitions of practices, conservation practices, maintenance procedures, and other management strategies to prevent or reduce the pollution of waters of the state. Best management practices also include treatment requirements, operating procedures, and practices to control production area and land application area runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
4. "Concentrated animal feeding operation" means an animal feeding operation that is defined as a large concentrated animal feeding operation, as a medium concentrated animal feeding operation, or is a small or other type of animal feeding operation designated as a concentrated animal feeding operation in accordance with section 33-16-03.1-04. For purposes of determining animal numbers, two or more feeding operations under common ownership are considered to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes. All concentrated animal feeding operations are required to obtain a North Dakota pollutant discharge elimination system permit pursuant to chapter 33-16-01.
5. "Department" means the North Dakota state department of health.
6. "Discharge of a pollutant" and "discharge of pollutants" each means any addition of any pollutant to the waters of the state from any source, including the disposal of pollutants into wells.
7. "Earthen storage pond" or "pond" means a topographic depression either below or above ground level, manmade excavation, or diked area formed primarily of earthen materials, although it may be lined with manmade materials or other seepage control materials, and used to store manure or process wastewater and runoff from the production area of a livestock facility.
8. "Engineer" means a professional engineer registered to practice in the state of North Dakota.
9. "Facility or livestock facility" has the same meaning as animal feeding operation or concentrated animal feeding operation.
10. "General permit" means a general North Dakota pollutant discharge elimination system permit or a general state animal feeding operation permit. This is a permit issued to cover multiple facilities of the same

or similar type, without requiring each facility to be covered under an individual permit.

11. "Large concentrated animal feeding operation" means any animal feeding operation that stables or confines as many as or more than the numbers of animals specified in any of the following categories:
 - a. Seven hundred mature dairy cows, whether milked or dry;
 - b. One thousand veal calves;
 - c. One thousand cattle other than mature dairy cows or veal calves. For purposes of this subdivision, "cattle" includes heifers, steers, bulls, and cow-calf pairs;
 - d. Two thousand five hundred swine, each weighing fifty-five pounds [24.95 kilograms] or more;
 - e. Ten thousand swine, each weighing less than fifty-five pounds [24.95 kilograms];
 - f. Five hundred horses;
 - g. Ten thousand sheep or lambs;
 - h. Fifty-five thousand turkeys;
 - i. Thirty thousand laying hens or broilers, if the animal feeding operation uses a liquid manure handling system;
 - j. One hundred twenty-five thousand chickens, other than laying hens, if the animal feeding operation uses other than a liquid manure handling system;
 - k. Eighty-two thousand laying hens, if the animal feeding operation uses other than a liquid manure handling system;
 - l. Thirty thousand ducks, if the animal feeding operation uses other than a liquid manure handling system; or
 - m. Five thousand ducks, if the animal feeding operation uses a liquid manure handling system.
12. "Litter" means a mixture of fecal material, urine, animal bedding material, and sometimes waste feed.
13. "Manure" or "livestock manure" means fecal material and urine, animal-housing wash water, bedding material, litter, compost, rainwater,

or snowmelt that comes in contact with fecal material and urine, and raw or other materials commingled with fecal material and urine or set aside for disposal.

14. "Manure handling system" means all of the water pollution control structures used at the production area of a livestock facility.
15. "Manure storage pond" means an earthen storage pond that stores liquid manure and process wastewater from indoor confined animal feeding operations.
16. "Manure storage structure" means any water pollution control structure used to contain or store manure or process wastewater. It includes earthen manure storage ponds; runoff ponds; concrete, metal, plastic, or other tanks; and stacking facilities.
17. "Medium animal feeding operation" means any animal feeding operation that stables or confines the numbers of animals specified within any of the following ranges:
 - a. Two hundred to six hundred ninety-nine mature dairy cows, whether milked or dry;
 - b. Three hundred to nine hundred ninety-nine veal calves;
 - c. Three hundred to nine hundred ninety-nine cattle other than mature dairy cows or veal calves. For purposes of this subdivision, "cattle" includes heifers, steers, bulls, and cow-calf pairs;
 - d. Seven hundred fifty to two thousand four hundred ninety-nine swine, each weighing fifty-five pounds [24.95 kilograms] or more;
 - e. Three thousand to nine thousand nine hundred ninety-nine swine, each weighing less than fifty-five pounds [24.95 kilograms];
 - f. One hundred fifty to four hundred ninety-nine horses;
 - g. Three thousand to nine thousand nine hundred ninety-nine sheep or lambs;
 - h. Sixteen thousand five hundred to fifty-four thousand nine hundred ninety-nine turkeys;
 - i. Nine thousand to twenty-nine thousand nine hundred ninety-nine laying hens or broilers, if the animal feeding operation uses a liquid manure handling system;
 - j. Thirty-seven thousand five hundred to one hundred twenty-four thousand nine hundred ninety-nine chickens, other than laying

- hens, if the animal feeding operation uses other than a liquid manure handling system:
- k. Twenty-five thousand to eighty-one thousand nine hundred ninety-nine laying hens, if the animal feeding operation uses other than a liquid manure handling system:
 - l. Ten thousand to twenty-nine thousand nine hundred ninety-nine ducks, if the animal feeding operation uses other than a liquid manure handling system; or
 - m. One thousand five hundred to four thousand nine hundred ninety-nine ducks, if the animal feeding operation uses a liquid manure handling system.
18. "Medium concentrated animal feeding operation" means a medium animal feeding operation that meets either one of the following conditions:
- a. Pollutants are discharged into waters of the state through a manmade ditch, flushing system, or other similar manmade device; or
 - b. Pollutants are discharged directly into waters of the state which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
19. "North Dakota pollutant discharge elimination system permit" means the permit issued by the department pursuant to chapter 33-16-01 to a concentrated animal feeding operation that the department has determined will not cause, nor likely cause, pollution to waters of the state.
20. "Nutrient management plan" means a written description of the equipment, methods, and schedules by which:
- a. Manure, litter, and process wastewater is beneficially reused in an environmentally safe manner such as being applied to land at appropriate agronomic rates as nutrients or fertilizers; and
 - b. Water pollution and air pollution, including odors, are controlled sufficiently to protect the environment and public health.
21. "Open lot" means livestock pens, feeding, or holding areas at the production area of an animal feeding operation which are outside and not under roof, and where rain can fall directly on the lot area.

22. "Open manure storage structure" means an earthen pond or storage tank for holding liquid manure which is not covered so rainfall can fall directly into the pond or tank.
23. "Operation and maintenance plan" means a written description of the equipment, methods, and schedules for:
- a. Inspection, monitoring, operation, and maintenance of the animal feeding operation, including manure storage structures, water pollution control structures, and the production area; and
 - b. Controlling water pollution and air pollution, including odors, sufficient to protect the environment and public health.
- It includes emergency response actions for spills, discharges, or failure of a collection, storage, treatment, or transfer component.
24. "Operator" means an individual or group of individuals, partnership, corporation, joint venture, or any other entity owning or controlling, in whole or in part, one or more animal feeding operations.
25. "Overflow" means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.
26. "Pollutant" means wastes as defined in North Dakota Century Code section 61-28-02, including dredged spoil, solid waste, incinerator residue, garbage, sewage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.
27. "Process wastewater" means water directly or indirectly used in the operation of the animal feeding operation for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other animal feeding operation facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts, including manure, litter, feed, milk, eggs, or bedding material.
28. "Production area" means those areas of an animal feeding operation used for animal confinement, manure storage, raw materials storage, and waste containment. The animal confinement area includes open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milking rooms, milking centers, cattle yards, barnyards, medication pens, walkers, animal walkways, and stables. The manure

storage area includes lagoons, runoff ponds, storage sheds, stockpiles, under-house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes feed silos, silage bunkers, and bedding materials. The waste containment area includes settling basins, areas within berms, and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility and any area used in the storage, handling, treatment, or disposal of mortalities.

29. "Runoff" means rainwater or snowmelt that comes in contact with manure at an open lot or open manure storage area and, therefore, is defined as manure.
30. "Runoff pond" means an earthen storage pond that is used to collect and store runoff from an open lot or from a manure storage area.
31. "Seepage" means the volume of flow through a manure storage structure.
32. "Sensitive ground water area" means vulnerable hydrogeologic settings as determined by the department such as glacial outwash deposits or alluvial or aeolian sand deposits that are critical to protecting current or future underground sources of drinking water. Areas designated as sensitive ground water areas by the department include alluvial or aeolian sand deposits shown on Geologic Map of North Dakota (Clayton, 1980, North Dakota geological survey) and glacial drift aquifers listed in North Dakota Geographic Targeting System for Groundwater Monitoring (Radig, 1997, North Dakota state department of health), or most recent editions of these publications, with DRASTIC scores greater than or equal to 100 based on methodology described in DRASTIC: A Standardized System for Evaluating Groundwater Pollution Potential (Aller et al., 1987, United States environmental protection agency).
33. "Small animal feeding operation" means any animal feeding operation that stables or confines less than the numbers of animals specified for a medium animal feeding operation.
34. "Small concentrated animal feeding operation" means any animal feeding operation that stables or confines less than the numbers of animals specified for a medium animal feeding operation and is designated as a concentrated animal feeding operation in accordance with section 33-16-03.1-04.
35. "State animal feeding operation permit" means a permit issued by the department pursuant to this chapter to an animal feeding operation that the department has determined will not cause, nor likely cause, pollution to waters of the state.

36. "Surface water" means waters of the state that are located on the ground surface, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, and all other bodies or accumulations of water on the surface of the earth, natural or artificial, public or private.
37. "Unconfined glacial drift aquifer" means a glacial drift aquifer that does not have an impervious soil layer which acts to prevent or minimize movement of water into, through, or out of the aquifer.
38. "Water pollution control structure" means a structure built or used for handling, holding, transferring, or treating manure or process wastewater, so as to prevent it from entering the waters of the state. The term also includes berms, ditches, or other structures used to prevent clean water from coming in contact with manure.
39. "Water quality standards" means the water quality standards contained in chapter 33-16-02.1.
40. "Waters of the state" means all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, and all other bodies or accumulations of water on or under the surface of the earth, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, except those private waters that do not combine or effect a junction with natural surface or underground waters just defined.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-04. Designation of concentrated animal feeding operations.

1. The department may designate any animal feeding operation as a concentrated animal feeding operation upon determining that it is a significant contributor of pollutants to waters of the state. In making this designation, the department shall consider the following factors:
 - a. The size of the animal feeding operation and the amount of wastes reaching waters of the state;
 - b. The location of the animal feeding operation relative to waters of the state;
 - c. The means of conveyance of animal wastes, manure, and process wastewater into waters of the state; and

- d. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes, manure, and process wastewater into waters of the state.
2. No medium or small animal feeding operation shall be designated a concentrated animal feeding operation under this section unless the department has conducted an onsite inspection of the operation and determined that the operation should and could be regulated under chapter 33-16-01. In addition, no small animal feeding operation with numbers of animals below those established in subsection 17 of section 33-16-03.1-03 may be designated as a concentrated animal feeding operation unless:
 - a. Pollutants are discharged into waters of the state through a manmade ditch, flushing system, or other similar manmade device; or
 - b. Pollutants are discharged directly into waters of the state which originate outside the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-05. Operations requiring a permit. The operator of an animal feeding operation shall apply for a permit as follows:

1. Any animal feeding operation that has been defined as a concentrated animal feeding operation in section 33-16-03.1-03 or designated a concentrated animal feeding operation under section 33-16-03.1-04 must obtain a North Dakota pollutant discharge elimination system permit pursuant to chapter 33-16-01.
2. Any medium animal feeding operation where manure or process wastewater from the operation causes or is likely to cause water pollution or those that are located within one-fourth mile [.40 kilometer] of a stream or surface water that contains water, except for infrequent periods of severe drought, must apply for a state animal feeding operation permit pursuant to this chapter or a "no potential to pollute" determination pursuant to section 33-16-03.1-06. Waters completely contained on an owner's property and which do not combine or effect a junction with natural surface or underground waters are not included.
3. A small animal feeding operation shall apply for a state animal feeding operation permit pursuant to this chapter when the department has determined that manure or process wastewater from the operation causes or is likely to cause water pollution.

4. An animal feeding operation which stables or confines animals, other than the types of animals specified in the definition of medium animal feeding operation, shall apply for a state animal feeding operation permit pursuant to this chapter when the department has determined that manure or process wastewater from the operation causes or is likely to cause water pollution.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-06. No potential to pollute determination.

1. The department, upon request, may make a case-specific determination that a livestock facility that is not a concentrated animal feeding operation has no potential to discharge pollutants to waters of the state and does not require a state animal feeding operation permit. The department shall review the determination at least every five years.
2. The department retains the authority to subsequently require a state animal feeding operation permit if circumstances at the facility change, if new information becomes available, or if there are other reasons for the department to determine that the operation has a potential to discharge pollutants into waters of the state.
3. No potential to pollute means the facility is located where there is:
 - a. No discharge of pollutants to ground water and no discharge of pollutants to surface water from a rainfall event that is less than or equal to a twenty-five-year, twenty-four-hour rainfall event; and
 - b. The facility follows a nutrient management plan for the utilization of manure and process wastewater that is consistent with this chapter.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-07. Permit application content and procedures.

1. Any new livestock facility or existing livestock facility that is proposing an increase in the number of livestock above the level allowed in the current permit or above the level at which a permit is required under section 33-16-03.1-05 shall apply for and obtain a state animal feeding operation permit or a North Dakota pollutant discharge elimination system permit prior to construction or expansion. Any livestock facility that is proposing to expand the production area, or update or change the manure handling system, and which requires a permit under section 33-16-03.1-05, shall apply for and obtain a state animal feeding

operation permit or a North Dakota pollutant discharge elimination system permit prior to construction.

2. An existing concentrated animal feeding operation shall submit a permit application pursuant to chapter 33-16-01 by February 12, 2006.
3. An existing medium animal feeding operation shall submit a permit application pursuant to this chapter by July 1, 2008, or earlier if requested by the department because of concerns of potential or actual pollution of waters of the state.
4. Application forms for state animal feeding operation permits are available from the department. An operator shall furnish information requested by the department that is consistent with this chapter. The department will not process an application unless all of the necessary information is provided. The information within or attached to an application must include the following:
 - a. The owner's and operator's name and mailing addresses.
 - b. The facility's legal location and mailing address.
 - c. A topographic map of the area where the facility is or proposes to be located and showing the specific production area.
 - d. Specific information about the number, size, and type of animals proposed for the facility; the number of days per year animals will be handled; and the type of confinement (open or housed under roof).
 - e. The type of containment and storage (anaerobic lagoon, roofed storage shed, ponds, under-floor pits, aboveground storage tanks, underground storage tanks, concrete pad, impervious soil pad, water spreading system, other) and total capacity for manure, litter, and process wastewater storage (tons or gallons), or other measures to meet department requirements to prevent discharge of pollutants to waters of the state.
 - f. The total number of acres under control of the applicant and available for land application of manure, litter, or process wastewater.
 - g. Estimated amounts of manure, litter, and process wastewater generated per year (tons or gallons).
 - h. Estimated amounts of manure, litter, and process wastewater transferred to other persons per year (tons or gallons).

- i. Designs, including location, for all manure storage and water pollution control structures and site-specific background information as specified in the North Dakota Livestock Program Design Manual. Design plans developed by anyone other than the facility owner must be signed by the engineer who prepared or supervised the preparation of the plans under North Dakota Century Code chapter 43-19.1.
- j. Site-specific information on topography, surface water, ground water, and soil geology.
- k. A nutrient management plan or information related to a nutrient management plan as specified in subsections 4 and 5 of section 33-16-03.1-08.
- l. The signatures of individuals responsible for the animal feeding operation.
- m. A description of how dead animals will be handled and disposed of by the facility operator.

In preparing an application, the operator shall follow the North Dakota Livestock Program Design Manual.

The operator of an existing animal feeding operation may reference any information previously submitted to the department rather than resubmitting it. Existing information shall be updated if changes to the operation have been made since the prior application.

- 5. Permit conditions. The department may impose any conditions upon a state animal feeding operation permit to ensure proper operation of the facility to protect water and air quality, including:
 - a. Sampling, testing, and monitoring at or adjacent to the facility of manure, process wastewater, ground water, or runoff.
 - b. Steps to prevent the facility from causing exceedances of water quality standards or air quality standards and to minimize odors during land application of manure.
 - c. Recordkeeping and reporting.
 - d. Compliance schedules for upgrades at facilities to meet the requirements of this chapter.
- 6. If the department determines that the animal feeding operation will not cause nor likely cause pollution of waters of the state, either after upgrades are made or at its current status, and the department determines that it is not likely to exceed air quality standards, a

state animal feeding operation permit or a no potential to pollute determination will be issued.

7. If manure storage or water pollution control structures were required at the facility, the operator shall notify the department within thirty days of construction completion and provide certification from an engineer or the designer that construction of manure storage and water pollution control structures was completed according to designs provided with the application or to department-approved changes.
8. The permit shall be valid until its expiration date as long as the animal feeding operation is not materially changed or waters of the state are not impacted pursuant to chapter 33-16-02.1. If an operator plans to change the type or increase the number of animals or change the facility, including expanding barns or pens or changing manure storage or water pollution control structures, the operator shall inform the department in writing prior to implementation of these changes.
9. Expiration of permits. Every state animal feeding operation permit issued by the department shall have a fixed term not to exceed five years.
10. Renewal of permits. One hundred eighty days prior to the expiration of an existing permit, an application for permit renewal shall be submitted to the department for review. If an operator submits a complete application for a permit renewal at least one hundred eighty days prior to the expiration date, but the department, through no fault of the operator, fails to issue a new permit prior to the expiration of the previous permit, the department may extend the expired permit until the permit is reissued. All conditions and stipulations of permits extended under this subsection remain fully effective and enforceable.
11. Transfer of permits. The holder of a state animal feeding operation permit may not transfer it without prior written approval of the department.
12. General permits. The department may issue a general state animal feeding operation permit covering similar facilities. Any general permit shall comply with all requirements of this chapter and shall identify criteria by which facilities may qualify for the general permit. Facilities that would qualify for a general permit shall apply to the department for coverage under the terms of the general permit. The department may grant a facility's request to construct and operate under a general permit or, at its discretion, issue an individual permit if circumstances warrant.
13. Confidentiality. If the department determines that certain information should be accorded confidential status for reason of being a trade secret, it shall disclose such information to the administrator upon

the latter's request. The administrator shall maintain the disclosed information in confidence, unless the administrator determines that such information, if made public, would not divulge methods of processes entitled to protection as trade secrets.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-08. Facility requirements.

1. A livestock facility requiring a permit under this chapter must be located, designed, built, maintained, and operated to limit or prevent pollution of or the discharge of pollutants into waters of the state consistent with the North Dakota Livestock Program Design Manual, best professional judgment, best management practices, and pursuant to the requirements of North Dakota Century Code chapter 61-28, this chapter, and the facility's state animal feeding operation permit.
2. All concentrated animal feeding operations must be located, designed, built, maintained, and operated to limit or prevent pollution of or the discharge of pollutants into waters of the state consistent with the North Dakota Livestock Program Design Manual, best professional judgment, best management practices, and pursuant to the requirements of North Dakota Century Code chapter 61-28, North Dakota Administrative Code chapter 33-16-01, this chapter, and the operation's North Dakota pollutant discharge elimination system permit.
3. Nutrient management plan. A nutrient management plan must be developed and a copy maintained onsite by the owner or operator of any livestock facility that land applies manure, litter, or process wastewater to cropland or grassland and is required to obtain a permit or a no potential to pollute determination pursuant to this chapter or chapter 33-16-01. These facilities must land apply manure litter or process wastewater in accordance with the current properly developed nutrient management plan. At a minimum the nutrient management plan must contain the following information:
 - a. Description of the land to which an operator has access for applying manure or process wastewater, or both, and adequate information to demonstrate that manure or process wastewater, or both, will be applied at agronomic rates. The agronomic rate for nitrogen must not exceed the plant utilization rate for the cropping year. Phosphorous must not be applied at rates exceeding the recommendations based on either the North Dakota phosphorous index, the North Dakota state university extension service soil tests, or other risk assessment methods approved by the department.

- b. The proposed method and timing of land application of manure and process wastewater.
 - c. The precautions that will be taken to:
 - (1) Prevent manure and process wastewater from reaching waters of the state or areas where they have the potential to impact waters of the state; and
 - (2) Minimize odors to residences and public areas where people are present during transport and land application of manure.
 - d. Other information specified in the North Dakota Livestock Program Design Manual.
4. Of the facilities identified in subsection 3, the following facilities must submit a copy of their current nutrient management plans to the department along with their application or design, or both, plans:
- a. Concentrated animal feeding operations;
 - b. Livestock facilities that plan to apply manure on frozen ground;
 - c. Livestock facilities with land that is designated for manure application and which also has soil phosphorous levels that meet or exceed the very high levels for crop production based on North Dakota state university extension service information;
 - d. Livestock facilities that daily haul and land apply manure; and
 - e. Livestock facilities from which the department requests a copy of the nutrient management plan be submitted.
5. Livestock facilities identified in subsection 3, which do not meet conditions in subsection 4, must submit to the department, along with their application or design, or both, plans, the following information:
- a. An indication that the facility has a nutrient management plan that meets the department requirements;
 - b. The name of the individual who developed the nutrient management plan and the organization with which that individual is affiliated;
 - c. The amount of land available for land application of manure;
 - d. The type of crops or vegetation grown on this land;

- e. The typical manure application rate for each crop or vegetation grown;
 - f. The method and timing of application;
 - g. The precautions used to prevent manure from reaching waters of the state; and
 - h. The precautions, if needed, used to minimize odors to residences and public areas where people are present during transport and land application of manure.
6. Manure storage structures. All livestock facilities requiring permits under chapter 33-16-01 and this chapter, which are constructed or expanded after the effective date of the respective rule, must meet the following requirements:
- a. All facilities regulated under this chapter shall have manure storage structures designed and constructed to store runoff from a twenty-five-year, twenty-four-hour rainfall event, except swine, chicken, turkey, and veal calf facilities which shall be designed and constructed to store runoff from a one hundred-year, twenty-four-hour rainfall event. In addition, all facilities shall collect and store all manure, process wastewater, and runoff for a minimum of two hundred seventy days. Overflows from a properly operated manure storage structure due to a chronic or catastrophic rainfall event in excess of those specified or seepage from the storage structure that is within the standards as specified in the North Dakota Livestock Program Design Manual are not considered violations of this chapter.
 - b. A ground water site assessment is required for all manure storage structures.
 - c. All manure storage structures must be designed and maintained to withstand natural forces, to prevent impacts to waters of the state, and minimize seepage.
 - d. All earthen storage ponds shall have a properly designed and constructed liner to minimize seepage, unless the department has determined a liner is not necessary based on site conditions.
 - e. Other manure storage structure requirements specified in the North Dakota Livestock Program Design Manual must be met.
 - f. The department may specify additional design or monitoring requirements as needed to ensure facilities will satisfactorily prevent pollution to waters of the state.

7. Liquid storage facilities. All livestock facilities requiring permits under this chapter and all concentrated animal feeding operations requiring permits under chapter 33-16-01 which store liquid manure, process wastewater, or manure-contaminated runoff must meet the following requirements:
 - a. New facilities, expanding facilities significantly increasing their number of livestock, or those facilities that have not housed livestock within five years must not be located over an unconfined glacial drift aquifer unless approved by the department.
 - b. All livestock facilities requiring permits under chapter 33-16-01 or this chapter, which are constructed or expanded after the effective date of the respective rule, must be designed by the facility owner or designed by or under the direct supervision of an engineer. If designed by an engineer, all final drawings, specifications, plans, reports, or other engineering documents, when issued, shall be signed by the engineers or land surveyors who supervised the preparation of these documents under North Dakota Century Code chapter 43-19.1. After construction completion, an engineer or the designer shall certify that the construction was completed according to the design plan.
 - c. Other requirements specified in the North Dakota Livestock Program Design Manual.
8. Odor management. An operator shall manage a facility to minimize the impact of odors on neighboring residents and public areas and comply with the odor requirements of North Dakota Century Code section 23-25-11, North Dakota Administrative Code chapter 33-15-16, and the North Dakota Livestock Program Design Manual.
9. Best management practices. An operator of a livestock facility requiring a permit under this chapter or a concentrated animal feeding operation requiring a permit under chapter 33-16-01 is responsible for applying best management practices to ensure compliance with the requirements of this chapter and the permit and to prevent pollution of waters of the state. The best management practices used must be included in the design plans or in the nutrient management plan.
10. Additional requirements which the department may require for livestock facilities requiring permits under this chapter and concentrated animal feeding operations requiring permits under chapter 33-16-01. The department may:
 - a. Require the operator to install and collect routine samples from monitoring wells to ensure that potentially usable ground water resources are not adversely impacted.

- b. Require odor control for manure storage and livestock housing areas and require steps to minimize odors to residences or public areas during transport and land application of manure.
- c. Based on site-specific conditions, specify additional design or monitoring requirements as needed to ensure the facility will satisfactorily prevent pollution of waters of the state.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-09. Recordkeeping and reporting requirements.

- 1. The operator of a livestock facility requiring a permit under this chapter shall record and maintain the following for a period of not less than three years:
 - a. Any sampling, testing, and monitoring results as required by this chapter or by the department;
 - b. Maintenance and inspection records for water pollution control structures;
 - c. Reports and data required by this chapter, the North Dakota Livestock Program Design Manual, and the permit; and
 - d. A copy of this permit.

This period of record retention shall be extended if requested by the department or during the course of any unresolved litigation regarding the discharge of pollutants by the operation. The information shall be provided to department representatives upon request. A concentrated animal feeding operation must keep records as required under chapter 33-16-01.

- 2. Reports shall be submitted to the department in accordance with the schedule prescribed and on the appropriate forms supplied by the department or in a manner specified by the department if required as a condition of the state animal feeding operation permit or the North Dakota pollutant discharge elimination system permit for concentrated animal feeding operations or based on site-specific conditions. Information requested may include sampling, testing, and monitoring results; maintenance and inspection records; records related to facility operation; or nutrient management plan information or records.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-10. Enforcement and compliance.

1. The department shall evaluate all reports, notifications, and data submitted by an operator in compliance with this chapter and the state animal feeding operation permit. The department shall investigate all apparent violations for possible enforcement action pursuant to North Dakota Century Code section 61-28-08.
2. No person may knowingly make a false statement, representation, or certification in any application, record, report, plan, or other document filed or required under this chapter or the permit. No person may knowingly falsify, tamper with, or provide inaccurate information regarding a monitoring well or other device required under this chapter or the permit.
3. Operators of permitted facilities that are not operating properly shall update those facilities to achieve compliance with this chapter and the conditions of the permit within a timeframe approved by the department.
4. If the department finds that a facility, which has not been covered by a state animal feeding operation permit or a North Dakota pollution discharge elimination system permit within the last five years, is causing or is likely to cause pollution of waters of the state, or poses a significant threat to public health or safety, the operator will be notified that actions shall be taken to prevent the pollution.
5. Within one hundred twenty days following the notification described in subsection 4, the operator shall submit a compliance plan to prevent the facility from impacting waters of the state.
 - a. The compliance plan shall be prepared in accordance with the minimum requirements of this chapter and the North Dakota Livestock Program Design Manual. The plan shall contain adequate information to enable the department to determine whether the proposed measures will abate or prevent pollution of waters of the state. The operator also shall present a proposed schedule for plan implementation and completion.
 - b. If the compliance plan allows for operation of the facility in a manner that will not cause nor likely cause pollution of waters of the state, the department will issue a permit with a compliance schedule for construction. Approval of the permit shall be contingent upon any changes which may be required by the department after its review of the proposed plan. The construction must be completed within the timeframe specified in the compliance schedule.
 - c. If the approved compliance plan needs to be modified or amended during construction, the operator shall notify the department prior

to making any modifications or amendments and they must be approved by the department.

6. If the department revokes a state animal feeding operation permit for cause, the operator can finish feeding the animals for up to one hundred twenty days from the date of revocation, provided public and environmental health are not threatened. The operator will not be allowed to bring any other animals into the facility until the requirements of the permit, this chapter, and the North Dakota Livestock Program Design Manual have been met as approved by the department.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-11. Departmental inspection. Authorized representatives of the department may request access to a facility site under authority of North Dakota Century Code section 61-28-04. The owner or operator of a livestock facility may request to see the representatives' credentials. Authorized representatives of the department shall be allowed:

1. To enter the facility site or area in which any records required to be kept under terms and conditions of the permit are stored;
2. To have access to and copy any records required to be kept under terms and conditions of the permit;
3. To inspect any monitoring equipment or water pollution control structures at the facility; or
4. To sample any discharge of pollutants.

The department representatives will abide by all security measures implemented by the owner or operator to protect the health and safety of the workers and the animals at the facility.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-12. Prohibited activities. It shall be unlawful for any person:

1. To feed any livestock on the ice cover of streams or lakes.
2. To create or maintain an immediate threat to human, public, or environmental health.
3. To dispose of an animal carcass along or in any stream, lake, river, or other surface water; to bury the carcass near any such surface water;

to dispose of a carcass in an area that will discharge into waters of the state; to dispose of a carcass in any structure used to store or treat liquid manure, process wastewater, or storm water unless the department-approved system is designed for such a purpose; or to dispose of a carcass in a manner that is in violation of North Dakota Administrative Code article 33-20 or North Dakota Century Code chapter 36-14.

4. To cause pollution of waters of the state or to place or cause to be placed any wastes in a location where they are likely to cause pollution of waters of the state.
5. To discharge any pollutants into waters of the state thereby reducing the quality so as not to comply with the water quality standards established by the department, except facilities that are in compliance with subsection 6.
6. To discharge manure or process wastewater from a livestock facility except:
 - a. The overflow of a properly operated manure storage structure due to a chronic or catastrophic rainfall greater than a twenty-five-year, twenty-four-hour event or greater than a one hundred-year, twenty-four-hour event for swine, chicken, turkey, or veal calf facilities; or
 - b. Seepage from the manure storage structures that is within the standards as specified in the North Dakota Livestock Program Design Manual.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

33-16-03.1-13. Public participation.

1. If the department determines a significant degree of public interest exists, the department shall issue a public notice requesting comment on applications for both individual permits and general state animal feeding operation permits.
2. The department shall provide a period of not less than thirty days during which time interested persons may submit comments. The period of comment may be extended at the discretion of the department.
3. The public notice must be placed in the official county newspaper or other daily or weekly newspaper circulated in the area of the proposed animal feeding operation. In the case of draft general permits, the public notice will be placed in applicable official county newspapers.

The department may also use any other reasonable means to provide the public notice information to parties potentially affected.

4. The public notice must include at least the following:
 - a. Name, address, and telephone number of the agency issuing the public notice.
 - b. Name and address of the applicant and a brief description of the application information, including the proposed location of the facility. The exception would be draft general permits for which there is no specific applicant.
 - c. The date, time, and location of any scheduled public meeting or hearing.
 - d. An explanation of how to view or obtain materials (e.g., copy of design plans) related to the application and the department's review.
 - e. An explanation of how to submit comments.
5. The department shall send copies of the public notice to the applicant and to local governmental entities which have jurisdiction over the area where the facility is located or is proposed to be located.
6. The department shall hold a public meeting or hearing as it deems appropriate to allow additional public input or to provide information to the public concerning the department's review of the facility.
7. In making its final decision on the application or draft permit, the department shall consider all comments submitted within a timeframe specified in the public notice and all comments received at any public hearing. Within twenty days of the close of the public comment period, the applicant, if any, may submit a written response to the public comments. The department shall consider the applicant's response in making its final decision.
8. Pursuant to the requirements of this chapter and within sixty days of the applicant's response to the public comments, the department shall make a final determination as to whether the permit should be approved, approved with conditions, or denied.
9. The department shall notify the applicant in writing of its final determination and provide to the applicant a copy of the final permit, if issued. Upon request, other interested individuals may also obtain copies of the final permit.

10. Once finalized, information on general permits and their availability must be provided to potentially eligible or affected facilities.

History: Effective December 1, 2004.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04

TITLE 87
VETERINARY MEDICAL EXAMINERS, BOARD OF

DECEMBER 2004

CHAPTER 87-01.1-01

87-01.1-01-02. Examination application fee. An applicant who takes the examination must file with the board a completed application, a copy of the applicant's diploma or other official proof of graduation, and an examination fee of fifty dollars. The examination fee will not be refunded. All required material and money must be submitted thirty days prior to the examination date. Candidates for initial licensure in North Dakota must submit their application at least ~~sixty~~ ninety-two days prior to the opening of the testing window for the North American veterinary licensing examination.

History: Effective January 1, 1999; amended effective November 1, 2000; December 1, 2004.

General Authority: NDCC 43-29-07.2

Law Implemented: NDCC 43-29-07.2

CHAPTER 87-02-01

87-02-01-01. License renewal notice. Prior to June first of each year, the executive secretary shall mail to each registered veterinarian the following notice:

Annual renewal of your license to practice veterinary medicine in North Dakota becomes due July 1, _____. The fee is ~~thirty-five~~ forty-five dollars. You are reminded that if you do not renew your license and practice veterinary medicine after the expiration of your license, you are in violation of North Dakota Century Code chapter 43-29. If your license lapses for two years, it may not be renewed but you may make application for a new license.

History: Amended effective January 1, 1999; December 1, 2004.

General Authority: NDCC 43-29-03

Law Implemented: NDCC 43-29-07.3