

Little Blue Natural Resources District

Rules for Implementing Chemigation Program

Adopted January 13, 2015

Chapter 13, CHEMIGATION RULES

Section 1: Authority

These rules and regulations are adopted pursuant to the authority granted in Neb. Rev. Stat. §§46-701-754, the Nebraska Ground Water Management and Protection Act, and Neb. Rev. Stat. §§46-1101-1148, the Nebraska Chemigation Act and Title 195 N.A.C. These rules and regulations are intended to apply district-wide.

Section 2: Definitions

1. Applicator shall mean any person engaged in the application of chemicals by means of chemigation. Applicator shall include any person operating equipment used for chemigation whether for himself or herself or on behalf of the permitholder for the land on which the chemigation will take place.
2. Chemical shall mean any fertilizer, herbicide, or pesticide mixed with the water supply.
3. Chemigation shall mean any process whereby chemicals are applied to land or crops in or with water through an on farm irrigation distribution system.
4. Council shall mean the Environmental Quality Council.
5. Department shall mean the Department of Environmental Quality.
6. Director shall mean the Director of Environmental Quality.
7. District shall mean Little Blue Natural Resources District.
8. Fertilizer shall mean any formulation or product used as a plant nutrient which is intended to promote plant growth and contains one or more plant nutrients recognized by the Association of American Plant Food Control Officials in its official publication.
9. Injection location shall mean each site where chemicals will be applied through an irrigation distribution system.
10. Irrigation distribution system shall mean any device or combination of devices having a hose, pipe, or other conduit, which connects directly to any source of ground or surface water, through which water or a mixture of water and chemicals is drawn and applied for agricultural or horticultural purposes. Irrigation distribution system shall not include any hand-held hose sprayer or other similar device which is constructed so that an interruption in water flow automatically prevents any backflow to the water source.
11. Open discharge system shall mean a system in which the water is pumped or diverted directly into a ditch or canal in such a manner that the force of gravity at the point of discharge into the ditch or canal cannot cause water to flow back to the point from which the water was pumped or diverted.
12. Permitholder shall mean the owner or operator of land who applies or authorizes the application of chemicals to such land by means of chemigation. The permitholder shall be the party primarily responsible for any liability arising from chemigation on the property.

13. Pesticide shall mean any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, insect, rodent, nematode, fungus, weed, or other form of plant or animal life or virus, except viruses on or in living humans or animals, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.
14. Restricted Use Pesticide shall mean a pesticide classified as a restricted-use pesticide by the United States Environmental Protection Agency, a state-limited-use pesticide, or any pesticide for which an exemption under section 136p of the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136, et seq., has been granted.
15. Working day shall mean Monday through Friday but shall not include Saturday, Sunday, or a federal or state holiday.

Section 3: Chemigation Application

No person shall chemigate, or authorize the application of chemicals to land or crops through the use of chemigation, unless such person obtains authorization from the District, via permit, authorizing such chemigation. No permit is required to pump or divert water to or through an open discharge system. Each injection location must be permitted on an annual basis, using forms provided by the District. Each permit expires on June 1 of each year, and the permit holder is solely responsible for renewal.

An application for a chemigation permit shall be considered received by the District on the date it is either hand delivered or received by mail, so long as the application is properly completed as per Nebraska Administrative Code Title 195 and these rules.

The completed permit application must include the following information:

1. Permitholder name and/or company with complete address.
2. Phone number (preferably cell phone number).
3. License applicator with certification number and expiration date.
4. Signature by permitholder, and certified applicator if not the same individual.
5. The requisite fee describes in Section 10: Chemigation Permit Fee Schedule.

Any incomplete, unsigned, or unpaid applications will be returned to the applicant.

Section 4: Certification

Pursuant to Title 195, Chapter 13, Nebraska Department of Environmental Quality, all chemigation applicators must undergo and maintain certification. Training programs shall be offered through the University of Nebraska Cooperative Extension Service. The director shall issue a certificate acknowledging the competency, determined through the use of a written examination prepared and administered by the department. Each applicator's certificate, shall be valid for a period of four years, and shall expire on January 1 of the fourth year after the date of issuance.

Section 5: Original Permit Process

- A. The District shall review each completed permit application, conduct an inspection, and approve or deny the application within 45 days after the application is filed.
- B. No chemigation permit, except a Special permit, shall be issued or renewed by the district, if any of the following conditions occur:
 - a. The applicant has failed to provide the required information, as specified in Title 195, Chapter 2, 002, Nebraska Department of Environmental Quality on the application form;
 - b. The irrigation distribution system does not comply with the equipment standards set forth in Title 195, Chapters 9 and 10, Nebraska Department of Environmental Quality;
 - c. The applicator has not been certified as a chemigation applicator by the Department; or
 - d. Failure of the applicant to remit the appropriate fee
- C. Changes in application information shall be provided to the District within 10 days.

Section 6: Renewal Process

All permits expire on June 1st and must be renewed annually to maintain active status. If a renewal form has not been completed and filed by May 31 with the required renewal fee (see Section 10: Chemigation Permit Fee Schedule), the permit will terminate and an original application form and fee must be filed. Each application for renewal is subject to inspection of equipment and site to determine compliance with the Chemigation Act and these rules and regulations. If an inspection reveals noncompliance, renewal shall be refused, suspended, or revoked until compliance is achieved, as determined by the District. Under no circumstances may a permit be transferred.

Section 7: Special Permits

If the chemigation system does not need all the safety equipment specified in Section 13, as determined by District inspection, the District shall forward such information to the Department for review. If the Department agrees with the District's inspection, the Department shall grant the District authority to issue a special permit.

Before issuing any special permit, the District shall obtain information for special permits specified by N.A.C. Title 195, Ch. 5.

Section 8: Emergency Chemigation Permit Approval

A person may file an application for an emergency permit as established in Title 195, Chapter 6, Nebraska Department of Environmental Quality. The District shall have two working days to review the permit before issuing or denying. In computing two working days, the day of receipt of the permit is not included and the last day of the two working days is included.

Emergency permits shall be valid for a period of forty five (45) days from the date of issuance.

Any holder of an emergency permit or an applicator applying chemicals pursuant thereto who violates any of the provisions of the Nebraska Chemigation Act or standards, rules and regulations adopted under it, shall have such permit automatically revoked by the district or the Department, without a hearing and shall be guilty of a Class II misdemeanor

Section 9: Permit Revocation

The District shall immediately suspend any and all permitted chemigation systems if there is an actual or imminent threat of danger to the public or environment due to the operation of the chemigation system.

The District shall suspend or deny any and all permits if: A permit was obtained fraudulently; A permitholder fails to notify the district of equipment replacement or alteration within seventy-two hours; Applicator or permitholder fails to notify the District and Department of actual or suspected spill or accident within 24 hours; Permitholder fails to carry out cleanup measures developed by the Department within the time specified.

Should a violation of the Nebraska Chemigation Act or rules and regulations promulgated pursuant to the Act occur, the District shall notify the person in violation. The violator has 10 days to remedy the violation or request a hearing before the District's Board of Directors. If the violation has not been corrected in the 10-day period, the District shall notify the Department of the violation. If after a preliminary investigation, the Department determines there is a violation, then the person's permit shall be revoked until compliance is met. For systems operated by a permitholder, the District may, but shall not be required to, establish a compliance schedule in lieu of the 10-day compliance deadline.

A permitted chemigation system can come into compliance by meeting all the requirements of Section 3, 10, and 13 of these rules, and after an inspection by the District.

Section 10: Chemigation Permit Fee Schedule

As required by Title 195, Chapter 3, Nebraska Department of Environmental Quality, the District shall review applications, conduct inspections, and approve or deny permits. No permit may be approved without payment of the requisite permit fee, which shall reflect the cost of administration and inspections.

- A. An original application fee of \$60 for each new permit shall be paid to the District, of which \$5.00 shall be paid to the Department.
- B. A special permit application fee of \$60 shall be paid to the District, of which \$5.00 shall be paid to the Department.
- C. The annual renewal fee of \$20 shall be paid to the District, of which \$2.00 shall be paid to the Department.
- D. An emergency permit application fee of \$250 shall be paid to the District, of which \$10.00 shall be paid to the Department.

The district shall forward the appropriate fees for the first half of the calendar year to the Department by September 1 of the calendar year and the fees for the last half of the calendar year by March 1 of the following year.

Section 11: Inspections

District and Department employees shall have reasonable access to inspect all chemigation systems and to otherwise carry out their duties pursuant to the Act; specifically, Neb. Rev.Stat. § 46-1124. The District shall conduct an inspection of each injection location for which the permit is sought in order to ensure compliance with the equipment standards set forth herein and in Title 195, Chapters 9 and 10, Nebraska Department of Environmental Quality.

The District shall conduct an inspection of replaced or altered equipment and shall approve the continuance of chemigation so long as the inspected equipment is deemed to be in compliance with the Act. The District shall not collect a new fee for an inspection of previously approved injection locations.

Timing of inspections:

- Inspections for original applications shall be conducted within 45 days of filing.
- Inspections for special permits shall be conducted prior to permit renewal.
- Inspections for an emergency permit shall be conducted during the 45 day effective period if no inspection was conducted prior to the permit issuance.
- The District has the right to inspect any location up for renewal to determine compliance. Should an inspection determine noncompliance with the Act, the District shall refuse the application until compliance with the Act is demonstrated.

Section 12: District Follow-up Procedures

- A. Spot Checks: The District will make area wide selective and periodic inspections of systems with active permits to ensure compliance with the Nebraska Chemigation Act and these rules and regulations. The District will also investigate complaints concerning systems for which a permit has been issued.
- B. Non-Permitted Systems: The District will make area wide selective and periodic inspections of systems for which no permit has been issued, or on which a complaint has been filed. In cases of non-cooperation by an irrigator, the District may apply to the district or county court of the county in which the irrigation system is located for an inspection warrant to allow the employee entry onto his/her land to carry out duties under the Nebraska Chemigation Act.
- C. If after an inspection, a permit is not issued, it is the responsibility of the person making the permit application to request a re-inspection from the District.
- D. In the event that after two inspections have been made, the permit denied, suspended or revoked, the District will require reapplication for a new permit and payment of \$60.00 prior to the next inspection.
- E. Either the applicator/permitholder is required to be present during an inspection and to operate chemigation equipment. The inspector will not operate irrigation or chemigation equipment.

Applicators/permitholders are responsible for removal of the vacuum relief valve, if used as inspection port, and the chemical injection check valve. The inspector may assist in removal of either valve if so requested by the applicator/permitholder. The District will replace, at District expense, a chemical injection check valve only if damaged during the testing process. The District will not replace a chemical injection check valve damaged in removal or reattachment thereof or by any defects in the valve.

- F. A start-up and shut-down of the chemigation system during inspection is required by the permit holder or his designee.
- G. District employees will carry for sale a limited number of chemical injection check valves and other pieces of chemigation equipment as needed to improve the inspection process in the event of equipment malfunction while on the site. The applicator/permitholder will not be required to purchase equipment from the inspector.
- H. On occasion, during an inspection for an applicator/permitholder who chemigates along natural resources district boundaries, it may be convenient for neighboring natural resources district staff to cross over the boundary and inspect systems in this District.

The District will allow such inspections of our District's chemigation systems by neighboring district staff as meeting the requirements of this District's Rules and Regulations provided a reciprocity agreement has been made with the neighboring District.

Section 13: Equipment

Irrigation distribution systems with chemigation capabilities shall be equipped with the following devices installed in accordance with the manufacturer's specifications and at the location specified:

- A. **Irrigation pipeline check valve.** Each irrigation distribution system used for chemigation shall contain a check valve located in the pipeline between the irrigation pump and the point of chemical injection into the irrigation pipeline and remain installed at all times. Its purpose is to prevent a mixture of water and chemical from draining or siphoning back into the irrigation water source.
1. Existing irrigation distribution systems which, as of the date of these rules and regulations, are equipped with a properly located check valve shall be considered in compliance if the valve provides a watertight seal against reverse flow.
 2. Irrigation distribution systems which are not equipped with a check valve or contain a check valve which after repair cannot meet the requirement in Section 13.A.1 above, shall be equipped with a check valve which provides a watertight seal against reverse flow.
 3. The valve body and all components must be constructed of corrosion resistant materials or otherwise coated or protected to prevent corrosion. The valve must contain a sealing mechanism designed to close prior to or at the moment water stops flowing in the downstream direction.
 4. All check valves installed on an irrigation distribution system shall be in accordance with any rules and regulation adopted by the District and shall be models approved by the Department.
- B. **Vacuum relief valve.** Each irrigation distribution system used for chemigation shall contain a vacuum relief valve located on the pipeline between the irrigation pump and the irrigation pipeline check valve. Its purpose is to prevent creation of a vacuum when the water flow stops. If the valve connection will also serve as the inspection port, the permitholder will ensure removal of the valve at the time of inspection.

C. **Inspection port.** Each irrigation distribution system used for chemigation shall contain an inspection port or other viewing device located on the pipeline between the irrigation pump and the irrigation pipeline check valve. In many cases, the vacuum relief valve connection can serve as the inspection port.

1. The inspection port or viewing device shall be situated in such a manner that the inlet to the low pressure drain can be observed.
2. A minimum 4 inch diameter orifice or viewing area will be required for systems without an existing ports or devices.

D. **Low-pressure drain.** Each irrigation distribution system used for chemigation shall contain a low-pressure drain located on the bottom of the horizontal pipe between the irrigation pump and the irrigation pipeline check valve. Its purpose is to drain any mixture of water and chemical away from the irrigation water source.

1. The drain shall be constructed of corrosion resistant material or otherwise coated or protected to prevent corrosion.
2. The drain shall have an orifice of at least 3/4 inch diameter and shall not extend into the horizontal pipe beyond the inside surface of the bottom of the pipe.
3. If tube or pipe is used as the conduit, it will be at least 3/4 inches diameter the entire length and remain installed during chemigation.
4. When the pipeline water flow stops, the drain will automatically open. A tube, pipe, or similar conduit shall be used to discharge the solution at least 20 feet away from the irrigation water source.

E. **Chemical injection line check valve.** Each irrigation distribution system used for chemigation shall contain a chemical injection line check valve located between the point of chemical injection into the irrigation pipeline and the chemical injection pump. Its purpose is to prevent flow of water from the irrigation system into the chemical supply tank, and to prevent gravity flow from the chemical supply tank into the irrigation pipeline

1. The valve shall be constructed of chemically resistant materials.
2. The valve shall be designed to prevent irrigation water under operating pressure from entering the chemical injection line.
3. The valve shall be designed to have a minimum opening (cracking) pressure of 10 psi. When the chemical injection pump is shut down, the valve shall prevent any leakage from the chemical supply tank into the irrigation pipeline.
4. The valve may be moved from site to site.

- F. **Simultaneous interlock device.** Each irrigation distribution system used for chemigation shall contain a simultaneous interlock device located between the irrigation pumping plant and the chemical injection pump so that if the pumping plant stops, the injection pump will also stop. Its purpose is to prevent pumping chemicals into the irrigation pipeline after the irrigation pump stops.

All subsurface drip irrigation systems that use chemigation must be outfitted with the same equipment as specified above, unless approved by the District with concurrence of DEQ.

All equipment shall be in compliance with Title 195, Chapters 9 & 10, Nebraska Department of Environmental Quality and any rules and regulations promulgated by the District.

All permit holders shall maintain the above listed equipment in good working condition at all times of chemigation.

Section 14: Posting

All permit holders shall post signs on chemigated fields when using any herbicide or pesticide, or a chemical for which the label requires posting. A sign with the words, "KEEP OUT, CHEMICAL APPLICATION THROUGH IRRIGATION WATER SYSTEM" shall be posted by the permit holder at each point of entry into the treated area, adjoining farmstead, or residential area, along any public road where public exposure may occur, and at the point of chemical inject if such point is outside the treated area. The signs shall conform to District rules and regulations as well as Title 195, Chapter 12, 002.04, Nebraska Department of Environmental Quality.

The letters on the sign shall be a color which clearly contrasts with the background and the letters shall be at least 2½ inches in height. Each sign shall be posted and maintained during the chemigation period and until the end of re-entry period as specified by the chemical label. The sign shall be posted no sooner than 48 hours prior to the start of chemigation and shall be removed, covered, or otherwise made illegible, no later than 48 hours after the end of re-entry period.

Section 15: Enforcement

The District shall enforce the provisions of Neb. Rev. Stat. §§ 46-601, 46-602.01, the Groundwater Management and Protection Act, the Nebraska Chemigation Act, and all its own orders and rules and regulations adopted pursuant thereto through the issuance of a formal notice of an alleged violation, cease and desist orders issued and enforced against operators or landowners, as determined by the Board of Directors, and/or by bringing an appropriate action in the district court in the county where the violation occurs for the reasons and by the procedures as follows. Absent an immediate threat, the District shall give 3 days' notice to the affected

person and an opportunity to be heard before issuing a cease and desist order to enforce the Ground Water Management Protection Act or the Chemigation Act.

In the event the District finds an adverse effect caused by an actual or suspected accident related to chemigation, the District may require the permit holder to carry out a cleanup and recovery plan pursuant to Neb. Rev. Stat. §46-1131.

The District shall make reasonable efforts to obtain voluntary compliance before compelling compliance through the legal system.

Section 15: Reporting

The applicator or permit holder shall report any actual or suspected accident related to the use of chemigation in his or her system to the Department and the District within twenty-four hours of its discovery. Notification shall be made by telephone to the Department and the District during office hours, from 8:00 a.m. to 5:00 p.m., Monday through Friday. After hours, weekdays, and holidays, reports shall be made to the Nebraska State Patrol. All information known about the accident at the time of discovery shall be included, such as time of occurrence, quantity and type of material, location and any corrective or cleanup actions presently being taken.

A permit applicant shall notify the District within ten days of any changes in the information provided on the permit application. Failure to notify the District of any such changes shall result in the denial, suspension, revocation of the permit, or refusal for renewal, at the discretion of the District.

Permitholders shall notify the District and the Department of any actual or suspected accident resulting from the use of chemigation within 24 hours of discovery. Failure to do so may result in a civil penalty of not more than five hundred dollars or a guilty verdict of a Class III misdemeanor. Permitholders shall note the District and Department consider each day a single, separate violation.

Permitholders who either replace or alter or authorize such replacement or alteration of chemigation equipment previously approved by the District shall notify the District within 72 hours of such replacement or alteration. The District shall conduct an inspection of the replaced or altered equipment.

These Rules shall become effective on February 11, 2015.

ss: Charles Rainforth
Chairman, Little Blue Natural Resources District