

NEBRASKA ADMINISTRATIVE CODE

TITLE 130 - NEBRASKA DEPARTMENT OF WATER, ENERGY, AND ENVIRONMENTAL QUALITY

Chapter 10 - DISPOSAL THROUGH AN IRRIGATION DISTRIBUTION SYSTEM; EQUIPMENT REQUIREMENTS

001 An animal feeding operation proposing to use an irrigation distribution system for disposal shall submit a plan to the Department for its approval detailing the type and location of mechanical devices to be installed. The plan shall clearly indicate whether or not there are any water source connections (such as well heads or surface water diversions), show the location of the water source, indicate whether or not the system will be completely disconnected from the water source when the irrigation system is used for land application, and detail the type and location of all piping and mechanical devices.

002 Any irrigation distribution system through which livestock wastes are distributed shall be equipped with the mechanical devices specified in Section 004 below. These devices are not required for systems not connected to a source of ground or surface water; or for open discharge systems, if livestock waste is introduced at a point in the system where the force of gravity cannot cause water and waste to flow back to the point from which the water was pumped or diverted. The equipment shall be installed in accordance with the manufacturer's specifications and at the location specified in Section 004 below.

003 The Department may rely on inspections conducted by the Natural Resources Districts, pursuant to Title 195 (Nebraska Administrative Code) – Rules and Regulations Pertaining to Chemigation, to help verify compliance with the requirements of this Chapter.

004 The irrigation distribution system mechanical devices shall consist of an irrigation pipeline check valve, vacuum relief valve, inspection port and low pressure drain.

004.01 The irrigation pipeline check valve shall be located in the pipeline between the irrigation pump and the point of livestock waste injection into the irrigation pipeline and provide a watertight seal. An irrigation distribution system not equipped with a check valve or with a check valve that provides a watertight seal against reverse flow shall be equipped with a check valve model certified to the Director as meeting the leakage test requirements in Appendix I of Title 195 (Nebraska Administrative Code) – Rules and Regulations Pertaining to Chemigation.

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004.02 The vacuum relief valve shall be 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.

004.03 The inspection port or other viewing device shall be 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.

004.03A The inspection port or viewing device shall be situated in such a manner that the inlet to the low pressure drain can be observed.

004.03B A minimum four-inch diameter orifice or viewing area is required.

004.04 The low-pressure drain shall be 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 livestock waste away from the irrigation water source.

004.04A The drain shall be constructed of corrosion resistant material or otherwise coated or protected to prevent corrosion.

004.04B The drain shall have an orifice of at least three-quarter inch diameter and shall not extend into the horizontal pipe beyond the inside surface of the bottom of the pipe; and

004.04C When the pipeline water flow stops, the drain shall automatically open. A tube, pipe or similar conduit shall be used to discharge the solution at least 20 feet from the irrigation water source.

Enabling Legislation: Neb. Rev. Stat. § 81-1504(10)(11)(12)(13)(20)(21); § 81-1505(10)(11); §§ 54-2416 to 54-2438

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