



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL GUIDANCE DOCUMENT

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What Are Dewatering Days?

“Dewatering days” means those days that have suitable weather and soil conditions for land application of accumulated liquid livestock wastes.

The proper land application of liquid waste from a lagoon, holding pond, or liquid slurry storage facility through irrigation equipment requires evaluation of soil and weather conditions, in addition to evaluation of the irrigation system capabilities.

Soil Conditions

Liquids should not be applied in an amount that exceeds the ability of the soil to store or hold the moisture. The ability of soil to store water is determined by the difference between its moisture content and its moisture-holding capacity. Both should be evaluated over the crop root profile. Refer to University of Nebraska NebGuide G-84-690 for information on evaluating the soil moisture and available moisture-holding capacities of various soil textures. Suitable soil conditions do not exist if the minimum amount to be applied through the irrigation system exceeds the capacity of the soil to store the moisture.

Suitable soil conditions also do not exist if the application rate exceeds the rate of water movement into the soil (soil infiltration rate). High soil moisture or frozen soil conditions will reduce soil infiltration rates. If the infiltration rate is less than the minimum application rate, runoff is likely. Application right after a significant precipitation event or to frozen soils is not generally recommended because of runoff concerns due to reduced soil infiltration..

Weather Conditions

Weather conditions, such as freezing temperatures, precipitation, or likely precipitation, should be carefully evaluated. Freezing temperatures can adversely affect irrigation equipment. Frozen or snow-covered ground likely will result in runoff of liquid waste -- either at the time of application or later when thawing occurs. Carefully monitor the application process to prevent over-application of waste and pools of liquid waste on the surface in order to minimize the likelihood of waste runoff due to precipitation. Land application normally should not be attempted during a precipitation event and should be avoided when precipitation is imminent.

Wind direction, wind speed and temperature should be considered during dewatering. These weather conditions likely will affect drift and odor for adjacent landowners or neighbors. This is especially true for sprinkler or surface spread liquids. Also refer to your individual State Permit Application, which may restrict land application under certain conditions due to odor issues.

Refer to Best Management Practices (BMP's) in Title 130, *“Rules and Regulations Pertaining to Livestock Waste Control,”* Chapter 11, for other required land application practices.

Questions? Contact: Nebraska Department of Environmental Quality, Agriculture Section, P.O. Box 98922, Lincoln, NE 68509-8922; phone (402) 471-4239. To view this, and other information related to our agency, visit our web site at www.ndeq.state.ne.us.