Senate Bill 1 - Frequently Asked Questions about Manure Applications Restrictions in the WLEB

Before discussing Senate Bill 1, it is important to know that Ohio has had rules restricting manure application for years. Specifically, Ohio Administrative Code 1501:15-5-05, states:

Each owner, operator, animal manure applicator, or person responsible for land application of manure from an animal feeding operation shall minimize pollution from occurring on land application areas...

This existing pollution abatement rule is still in effect statewide.

Senate Bill 1, which became effective July 3, 2015, clarifies and enhances the restrictions on manure application within the Western Lake Erie Basin (WLEB). The specific provisions of the new restrictions on manure application contained in Senate Bill 1 are listed below in **bold**, followed by frequently asked question in *italics*:

No person in the WLEB shall surface apply manure under any of the following circumstances:
1. On snow-covered or frozen soil;
2. When the top two inches of soil are saturated from precipitation;
3. When the local weather forecast for the application area contains a greater than fifty per cent chance of precipitation exceeding one-half inch in a twenty-four-hour period.

*Where is the western basin?*

The western basin is defined in the law as the eleven United States Geologic Survey hydrologic units that drain to the WLEB and the Sandusky Bay. Detailed maps of the border are available at the local Soil and Water Conservation District (SWCD) office.

*What is snow-covered soil?*

The law does not define snow-covered soil. In practice, snow-covered soil will be considered to be one inch of snow or more, or one-half inch of ice or more on the soil surface.

*What is frozen soil?*

The law does not define frozen soil. The restriction is intended to prevent situations where liquid manure or precipitation polluted by manure is unable to infiltrate the soil and therefore would likely run off to surface water. In practice, frozen soil is ground that is impenetrable because of frozen soil moisture.

*What is saturated soil?*

The law does not define saturated soil. In practice, a soil is saturated when all the pore space in the soil is filled with water. If a ball of saturated soil is bounced, kneaded, or squeezed, then free water appears on the surface of the soil.

*What is the best way to check the weather prediction?*

A weather prediction can be obtained from the National Weather Service at the website [http://weather.gov](http://weather.gov). A local forecast can be found by entering the ZIP code for the area where the manure application will occur. Then, the Hourly Weather Graph for the area will show the expected precipitation amounts for the next 48 hour period. A step-by-step video of how to obtain this forecast has been put together by Ohio State University Extension at [https://www.youtube.com/watch?v=Z7lp8hsL4bA](https://www.youtube.com/watch?v=Z7lp8hsL4bA). Before applying manure, an applicator should check this weather forecast and print a copy to keep with his or her records.

*What if the weather prediction changes during the day of the manure application?*

The weather forecast can change hourly. However, it may not be practical to check and print the weather forecast immediately before manure application. Therefore, any weather forecast from the same calendar day as the date of the manure application will be accepted as evidence that the applicator checked the forecast before application.
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The restrictions on the surface application of manure do not apply under any of the following circumstances:

1. The manure is injected into the ground.
2. The manure is incorporated within twenty-four hours of surface application.
3. The manure is applied onto a growing crop.
4. In the event of an emergency, the chief of the division of soil and water resources or the chief’s designee provides written consent and the manure application is made in accordance with procedures established in the United States department of agriculture natural resources conservation service practice standard code 590 prepared for this state.

What is injection?
Injection is placing all of the applied manure below the soil surface.

What is incorporation?
Incorporation is tillage that mixes manure into the soil to a minimum depth of four inches.

What is a growing crop?
In the summer, a growing crop is any green plant. In the winter, a growing crop is any plants that will not winter-kill. Plants in dormancy will be considered growing crops, as long as the plant species typically “greens up” and continues to grow in the spring.

How tall does the growing crop need to be? What percentage ground cover is required?
For practical purposes, a growing crop has emerged from the ground and provides reasonable ground cover.

Is it ok to apply manure to a cover crop covered with snow?
Manure application to snow is discouraged. As snow cover increases, the likelihood of a discharge of pollution also increases. Manure application on snow that leads to a discharge of pollution to waters of the state or is considered an imminent discharge is a violation of the existing statewide rules within Ohio Administrative Code.

The law allows for a manure application in the event of an emergency with written consent of the chief of the Division of Soil and Water Resources. What is an emergency?
An emergency would be lack of manure storage due to events out of the producer’s control.

In the event of an emergency and written consent of the Chief, what are the procedures established in the USDA NRCS practice standard code 590 prepared for this state?
Requirements for application rates and setbacks from sensitive features can be found in the standards at http://efotg.sc.egov.usda.gov/references/public/OH/11-01-2012_Ohio_590_Standard.pdf.

Is technical or financial assistance available to achieve compliance with these new restrictions?
Technical assistance is available at the local SWCD office. Financial assistance may be available. The local SWCD office is familiar with financial assistance programs that may are available in your area.
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The owner or operator of a small agricultural operation or medium agricultural operation may apply to the chief for an exemption from the prohibition. If the chief or the chief's designee deems that it is appropriate, the chief or the chief's designee may issue such an exemption as follows:

a) For a medium agricultural operation, for a period ending not later than July 3, 2016.
b) For a small agricultural operation, for a period ending not later than July 3, 2017.

The applicant must be in compliance with procedures established in the United States department of agriculture natural resources conservation service practice standard code 590 prepared for this state.

What is a small agricultural operation? What is a medium agricultural operation?
The definitions of small and medium operations are defined in the law.

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<tr>
<th></th>
<th>SMALL</th>
<th>MEDIUM</th>
<th>LARGE</th>
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<tbody>
<tr>
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How does one apply for an exemption?
The exemption application form will be available online and at SWCD offices. The application will need to be submitted to the Division of Soil and Water Resources for approval.

What are the procedures established in the United States department of agriculture natural resources conservation service practice standard code 590 prepared for this state?

1. The applications rates in Table 3, which state that on frozen or snow cover the maximum application rates are:
   - 5000 gallons per acre for liquid manure
   - 10 wet tons per acre for solid manure with < 50% solids
   - 5 wet tons per acre for solid manure with > 50% solids
2. The minimum setback distances in Table 4.