



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Hardin County Extension News Release

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For Immediate Release – March 18, 2016

WLEB Fertilizer and Manure Restrictions

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Hardin County – Regulations for both fertilizer and manure applications affects both farmers and commercial applicators in the Western Lake Erie Basin. These regulations need to be considered when making fertilizer and manure applications in 2016 and future years. The legislation affects application of manure or granular fertilizers containing nitrogen and phosphorus. Defined watersheds, which include the Western Basin of Lake Erie, need to comply with the regulations or face civil penalties. The civil penalties are effective as of 1/31/2016. The regulatory agency is the Ohio Department of Agriculture.

Who must comply? Anyone who applies granular fertilizer or manure in the Western Basin Lake Erie Watershed. In Hardin County, this mainly includes fields north of State Route 309, which drain into the western basin of Lake Erie. In other areas of the county, these are recommendations that should be followed to protect the other watersheds in the state.

What is the ground condition and weather forecast that prohibits application in the named watersheds? For applications of fertilizer in the western basin, a person may not apply fertilizer, defined as nitrogen or phosphorous on snow-covered or frozen soil; when the top two inches of soil are saturated from precipitation; in a granular form when the local weather forecast for the application area contains greater than a 50% chance of precipitation exceeding one inch in a twelve-hour period, unless the fertilizer is injected into the ground, incorporated within 24 hours of surface application, or applied onto a growing crop.

A person may not surface apply manure in the western basin under any of the following circumstances: on snow-covered or frozen soil; when the top two inches of soil are saturated from precipitation; when the local weather forecast for the application area contains greater than a 50% chance of precipitation exceeding one-half inch in a 24 hour period, unless the manure is injected into the ground, incorporated

within 24 hours of surface application, applied onto a growing crop, or if in the event of an emergency, individuals should contact their local Soil and Water Conservation District office.

What are the civil penalties for non-compliance? Rules from Ohio Department of Agriculture became effective as of 1/31/16 for civil penalties. Minor violations are events of noncompliance with section 905.326 of the Revised Code that occur only when all of the following parameters are met: the nutrient value of the fertilizer application is less than ten thousand pounds of nitrogen or six thousand pounds of phosphorous; the fertilizer application does not pose a significant risk of harm to public health or the environment; and the fertilizer application has not resulted in any discharge of fertilizer that enters the water of the state.

The director may assess a civil penalty for a minor violation of up to two thousand dollars (\$2,000) for each day of noncompliance. Failure to take corrective action as specified by the director or the director's designated representative for any minor violation may be considered a major violation of this rule.

Major violations are events of noncompliance with section 905.326 of the Revised Code that occur only when any of the following parameters are met: the nutrient value of the fertilizer application is equal to or more than ten thousand pounds of nitrogen or six thousand pounds of phosphorous; the fertilizer application poses a significant risk of harm to public health or the environment; or the fertilizer application has resulted in a discharge of fertilizer that enters the water of the state. The director may assess a civil penalty for a major violation of up to ten thousand dollars (\$10,000) for each day of noncompliance. All money paid shall be deposited into the agricultural pollution abatement fund.

How do I comply with the weather forecast requirements? There is no one way defined in the regulation to obtain forecast information. There are at least two sources of weather forecast that meet the criteria. A good source of a printable local forecast can be obtained from NOAA through the website <http://weather.gov>. A zip code location close to the application site can be entered on the website. A detailed hourly forecast graphic can be reviewed and printed off. Rainfall can be totaled from the graphic to obtain the needed 12 or 24 hour predicated rainfall. A short video presentation showing how to obtain the forecast can be found on the OSU Agronomic Crops Team You Tube Channel at <https://www.youtube.com/watch?v=Z7lp8hsl4bA>.

Ohio Nutrient Management Record Keeper (ONMRK) is a computerized recordkeeping system that syncs with your smartphone or tablet to create a simple, easy, and quick way to record all of your fertilizer and manure applications from the field. The free app works on tablets, iPads, and smartphones. It can be downloaded from the Google Play Store for Android devices and the App Store for Apple devices. More information can be found at <http://agcrops.osu.edu/newsletter/corn-newsletter/there%E2%80%99s-app-nutrient-management-record-keeping>.

How will application terms be defined? The following information is working definitions provided by the Ohio Department of Agriculture. Snow covered soil is when soil, or residue lying on the soil, cannot be seen because of snow cover, or soil covered by one-half inch of ice or more.

Frozen soil is ground that is impenetrable because of frozen soil moisture. The restriction is intended to prevent situations where fertilizer or manure is unable to freely infiltrate the soil and therefore would likely run off to surface water. Generally, frozen soil will not be easily penetrated by a metal object (such as a knife, screwdriver, or shovel), not deform to show a visible imprint under downward pressure, and have a temperature below 32° F.

Saturated soil occurs when all the pore spaces in the soil are filled with water. A soil that has an available water capacity above field capacity will be considered to be saturated. According to the Natural Resource Conservation Service Standard 590 for Ohio, when the available water capacity of a soil is above field capacity, then free water will appear on the surface of the soil when the soil is bounced, kneaded, or squeezed. For a fertilizer or manure application to be considered a violation of the law, the top two inches of the soil would need to be saturated and the application would have been made without incorporation, injection or a growing crop.

Growing crops will vary by season. In the summer, a growing crop is any green plant that will be harvested or that was planted as a cover crop. In the winter, a growing crop is any plant that will be harvested or that was planted as a cover crop and 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. For practical purposes, a growing crop has emerged from the ground and provides reasonable ground cover.

Injection means placing the fertilizer or manure beneath the soil surface. The applied material is retained by the soil and does not concentrate or pool at or below the soil surface. If fertilizer or manure is injected, then the application is not a violation of the WLEB restrictions.

Incorporation is tillage that mixes the fertilizer or manure into the soil to an average minimum depth of four inches and mixes the fertilizer or manure with surface soil so that at least 80% of applied material is covered with soil. If surface applied fertilizer or manure is incorporated within 24 hours of application, then the application is not a violation of the WLEB restrictions.

This article summarizes important provisions but does not substitute for the legislative text which is found in Ohio revised code sections 6109.10, 903.40, 905.326, 905.327, 1511.10, 1511.11, 3745.50 and 6111.32 plus subsequent rule making by the state agencies.