



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Solid Manure Staging

www.idem.IN.gov

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Description:

- Manure staging is the temporary placement of manure in a pile at a site where the manure will be land applied. Requirements for the staging of manure are found in the Indiana Administrative Code (327 IAC 16-10-3).
- As described in this fact sheet, solid manure staging is most commonly related to poultry animal waste, although it may apply to other species of animal wastes that are not liquid.
- Staging requirements apply to confined feeding operations (CFOs)* that confine at least 300 cattle, 600 swine or sheep, or 30,000 fowl.
- Even farms that are not large enough to qualify as a CFO must manage their manure so it does not cause a discharge to surface waters in violation of state statute (IC 13-30-2-1). It is recommended that small farms and row crop farms also follow the manure staging requirements.
- The Office of Indiana State Chemist is currently working to develop rules for the distribution, staging and use of fertilizer materials, including manure. These rules will also apply to manure generated at CFOs or animal feeding operations in Indiana, as well as any operations that are storing or applying any kind of chemical or natural fertilizer (i.e. manure), regardless of its origin.

The manure staging requirements stated in this Fact Sheet do not apply to animal feeding operations that are not regulated by Indiana's confined feeding control statute (IC 13-18-10), nor to manure which is marketed and distributed from a CFO. It is, however, recommended that staging of manure by any entity follow the Best Management Practices identified.

Environmental Impacts:

- Statutes and rules for manure storage and application are designed to protect water quality.
- Properly storing and staging manure is protective of water quality. Following the staging requirements and best management practices will limit environmental impacts to water.

Best Management Practices:

IDEM has developed staging requirements for CFOs that must be followed when the manure is being staged. The agency also recommends that anyone staging and land applying manure follow these best management practices.

- Manure that is staged must be placed in an area:
 - With a slope less than six percent.
 - That does not have standing water or a waterway.
 - That is not within 300 feet of surface waters of the state (including water in intermittent waterways), drainage inlets, or water wells.
- Manure staged for more than 72 hours must be:
 - Effectively covered or bermed to prevent run-on and run-off.
 - Land applied to the site within 90 days of staging.
- CFO regulations require the following best management practices for land application:
 - Manure must be applied to the land at an agronomic rate for the existing or planned crop.
 - Manure should be land applied when the crops can best use the nutrients.
 - Weather forecasts should be checked prior to applying manure: avoid applying prior to forecasted rainfall events; this will help prevent runoff.
 - The use of insecticide may be beneficial to help control vectors such as flies and beetles at staged manure sites in populated areas.

**Under Indiana law, operations that are defined as a concentrated animal feeding operation (CAFO) under federal law are also CFOs under IC 13-18-10, thus CAFOs are also required to meet the manure staging requirements.*

IDEM's Role:

- IDEM is responsible for protecting Hoosiers and our environment while providing for safe industrial, agricultural, commercial and government activities vital to a prosperous economy.
- IDEM's Office of Land Quality regulates the staging of manure by CFOs in the State of Indiana through compliance monitoring and complaint inspections.

Citizen's Role:

- The landowners and citizens of Indiana play an important role in the protection of water quality through proactive measures designed to prevent impacts.
- Current rules do not give IDEM direct authority to regulate odor from staged manure. However, individuals who stage manure should give consideration to nearby homes; manure should be stored in a location and manner to minimize any nuisance conditions.
- Citizens who have concerns about improperly staged manure or water quality violations from staged manure should contact IDEM at (800) 451-6027. Citizens also should report leaky loads to the appropriate policing authority for the city, county or state roadway.

More Information:

- For more information and technical assistance, owners and operators of CFOs, row crop farms and unregulated animal feeding operations should please contact IDEM's Agricultural Liaison at (317) 232-8587 or IDEM's Agriculture and Solid Waste Compliance Section Chief at (317) 234-6965.
- Additional information about confined feeding operations can be found on these websites:

IDEM Home Page: www.idem.IN.gov

Confined Feeding Rule: www.IN.gov/legislative/iac/T03270/A00160.PDF

Prohibited Acts Statute: www.IN.gov/legislative/ic/code/title13/ar30/ch2.html

Leaky Load Law: www.IN.gov/legislative/ic/code/title9/ar21/ch8.html

Control of Poultry Pests: www.extension.entm.purdue.edu/publications/E-3.pdf