

## **Stockpiling Manure**

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*Author's Note: These rules are a major source of confusion for many livestock producers and commercial manure applicators. Every attempt is made to fact-check the rules, but please be advised if you have specific questions you should contact your local DNR field office or the Iowa Department of Agriculture and Land Stewardship.*

As a livestock producer, or as someone who uses manure as a nutrient source, it is important that you know the differences in the rules and how they apply to you if you stockpile manure to be land-applied at a later time.

There are four different sets of rules governing stockpiling manure in Iowa. These rules differ by source of manure and whether the manure is regulated by the Iowa Department of Agriculture and Land Stewardship (IDALS) or the Iowa Department of Natural Resources (IDNR).

Here are the categories of manure as defined by stockpiling rules: 1) dry bulk animal nutrient product; 2) dry-bedded manure; 3) dry confinement manure; and 4) open feedlot solids. Each of these categories will be briefly discussed below, but one condition applies to all four categories. All stockpiled materials must meet the definition of dry manure.

Dry manure is defined as 1) the manure does not flow perceptibly under pressure; 2) manure is not capable of being transported through a mechanical pumping device designed to move a liquid; and 3) constituent molecules of the manure do not flow freely among themselves but may show tendency to separate under stress.

### **Dry Bulk Animal Nutrient Product**

This manure source is typically poultry manure, but in some cases is also cattle manure. This manure is un-manipulated animal manure delivered in bulk form and is sold under Chapter 200A administered by the IDALS. The following rules apply:

- Can't store manure in a manner which pollutes Iowa's water;
- Can't be stockpiled in a grassed waterway or on ground with a slope of greater than a "B" slope class (please note "B" slope class can be different by county);
- Manure must be stockpiled 500 ft. from surface intakes, wellheads, or cisterns of ag drainage wells, known sinkholes or major water sources;
- Manure must be stockpiled 200 ft. from shallow private water well supply or 100 ft. from a deep water well supply;
- Manure must be stockpiled 200 ft. from a watercourse other than a major water course.

### **Dry-Bedded Manure**

In addition to the meeting the required definitions of dry manure stated above, dry-bedded manure must come from cattle or swine operations, must contain bedding, must be applied within 6 months of initiating stockpiling and must meet compliance with the federal National Pollutant Discharge Elimination System (NPDES) permit, if required. Stockpiles located within 1,250 ft. of each other are considered the same stockpile. The following rules apply to dry bedded manure:

- Can't be stockpiled in a grassed waterway;
- Can't be stockpiled where water pools on the surface;
- Can't be stockpiled anywhere the water will enter the stockpile;
- Can't be stockpiled on slopes of more than 3%, unless practices to reduce runoff are used;
- Must have at least 5 ft. of separation above the limestone or sand and gravel substrata or be stockpiled on reinforced concrete at least 5 in. thick that meets concrete standards in the Iowa Administrative Code.

This category of stockpiled manure also has air quality and water quality separation distances. For air quality the stockpile structure must be 1,250 ft. from a residence, church, school, business or public use area. The air quality setback does not apply if the neighboring landowner signs a waiver. For water quality this category of manure must be

- stockpiled 200 ft. from a surface tile inlet or a terrace tile inlet, unless method, structures or practices are used to contain the manure;
- 400 ft. from a designated areas such as known sinkhole, abandoned well, ag drainage well cistern, unplugged ag drainage well, ag drainage well surface inlet, drinking water well, designated wetland or water source);
- 800 ft. from a high quality water source.

### **Dry Confinement Manure**

This category of manure can apply to all species, may or may not contain bedding or litter, but most frequently these rules apply to poultry confinements that don't sell manure under Chapter 200A through IDALS. Manure in this category must be land-applied within 6 months of stockpiling, must be stockpiled in accordance to NPDES permit (if applicable), can't be stockpiled in a grassed waterway, and can't be stockpiled on a slope of more than 3% unless methods or practices are employed to prevent runoff. It should be noted that storage requirements and water quality setbacks do not apply if the confinement was constructed before 2006, and never expanded. Stockpiles within 1,250 feet of each other are considered the same stockpile.

If you stockpile manure from this category for more than 15 days you must use a qualified stockpile structure or an impermeable cover, or you must file a stockpile inspection report with DNR by the 15<sup>th</sup> of each month.

If you stockpile for more than 6 months, the stockpile must be located on an impervious base designed to meet certain requirements.

If you stockpile this manure source in karst topography you must have 5 ft. separation between the top of the limestone and the stockpile, if you stockpile for more than 15 days in karst topography you must use a qualified building, structure or impermeable cover. If you stockpile for more than 6 months in karst topography a cover can only be used if the stockpile is located on reinforced concrete that is at least 5 in. thick.

The air quality separation distances are the same as dry bedded manure, your stockpile or stockpile structure must be 1,250 ft. from a residence, church, school, business, or public use area. In addition, the following water quality separation distances apply:

- 200 ft. from a surface inlet where the tile drains to a water of the state;
- 400 ft. from cisterns, abandoned wells, ag drainage wells surface intakes, drinking water wells, designated wetlands or water sources;
- 800 ft. from an ag drainage well, known sinkhole, and high quality water source.

### **Open Feedlot Stockpiling**

In addition to meeting the definitions of dry manure described earlier, open lot stockpiling only applies to separated or settable solids from a feedlot, it must be land-applied within 6 months of initiating the stockpile, can't be stockpiled in a grassed waterway, where water ponds or has concentrated flow, or on slopes greater than 3% unless practices or structure are put in place to prevent runoff. Open lot stockpiles must be:

- 200 ft. from tile inlet, terrace tile inlet or sinkhole, unless stockpile is situated such as runoff will not reach the inlet or sinkhole;
- 400 ft. from designated area including a cistern, abandoned well, lake, unplugged ag drainage well, ag drainage well surface tile inlet, drinking water well, designated wetland, or water source;
- 800 ft. from high quality water sources.

### **Additional Resources:**

The following links to IDNR fact sheets describing their stockpiling rules and definitions for water sources may provide additional information.

[Dry-Bedded Manure Stockpiling Regulations- For Cattle and Swine Confinements](#)

[Confinement Dry Manure Stockpiling Regulations](#)

[Open Feedlot Manure Stockpiling Regulations](#)

[Major Water Sources-Rivers and Streams](#)

[Major Water Sources- Lakes](#)

[High Quality Water Resources](#)