Dry-Bedded Manure Stockpiling Regulations

For Cattle and Swine Confinement Feeding Operations

Hoop confinement building

Hoop and monoslope buildings reduce runoff and can aid livestock producers to meet water quality requirements. They also improve animal comfort and rate of gain.

Recent state regulations allow stockpiling of dry-bedded manure when land application must be postponed, but it must be managed properly.

Stockpiling Regulations

Dry-bedded manure stockpiles are prohibited on grassed waterways where water pools on the surface or in any location where surface water will enter the stockpile.

They are also prohibited on land with slopes greater than 3 percent unless methods, structures or practices contain the stockpiled manure — such as hay bales, silt fences or temporary earthen berms — to prevent runoff.

Stockpiles must be separated from sensitve areas by the distances in Table 1.

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Table 1
Required Separation Distances for Dry-bedded Manure Stockpiles

Terrace tile inlet or surface tile inlet — unless methods, structures or practices are used to contain the stockpiled manure	200 feet
Designated area other than a high quality water resource: ■ Known sinkhole ■ abandoned well ■ ag drainage well cistern ■ unplugged ag drainage well ■ ag drainage well surface tile inlet ■ drinking water well ■ designated wetland ■ water source	400 feet
High quality water resource (see definition)	800 feet
Residence, business, church, school or public use area setback requirement is for air quality purposes *(Does not apply to stockpiles from small animal feeding operations — confinements of 500 animal units or less. See Table 2 Animal Unit Equivalency Factors on the back side.)*	1,250 feet

Definitions

Ag drainage well is a vertical opening to an aquifer or permeable substratum which is constructed by any means including but not limited to drilling, driving, digging, boring, augering, jetting, washing or coring and which is capable of intercepting or receiving surface or subsurface drainage water from land directly or by a drainage system.

Alluvial aquifer is an area underlaid by sand or gravel aquifers situated beneath flood plains along stream valleys and includes alluvial deposits associated with stream terraces and benches, contiguous wind-blown sand deposits and glacial outwash deposits.

Confinement feeding operation is an animal feeding operation in which animals are confined to areas which are totally roofed and includes every animal feeding operation that is not an "open feedlot operation."

Dry-bedded manure is manure from cattle or swine that:

- does not flow under pressure
- cannot be transported through a liquid pump
- contains bedding.

Dry-bedded confinement feeding operation is a confinement feeding operation in which cattle or swine are confined to totally roofed areas and in which all manure is stored as dry-bedded manure. Unless specifically stated otherwise, all requirements in Division I of 567 – Chapter 65 apply to dry-bedded confinement feeding operations.

Dry-bedded confinement feeding operation structure refers to both a dry-bedded confinement feeding operation building or a dry-bedded manure storage structure.

Dry-bedded manure confinement feeding operation building is a building used in conjunction with a confinement feeding operation to house cattle or swine and in which manure from the animals is stored as dry-bedded manure.

Dry-bedded manure storage structure is a covered or uncovered structure, other than a building, used to store dry-bedded manure.

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Stockpiling Regulations *continued*

Producer must stockpile in compliance with national pollutant discharge elimination system requirements.

The manure must be land applied within six months of stockpiling in accordance with 567 Iowa Administrative Code (IAC) 65.3 (459, 459B).

No grandfather exception applies to stockpiling dry-bedded manure as there is for dry confinement manure.

Dry-bedded manure cannot be stockpiled on karst terrain or over an alluvial aquifer unless the manure is stockpiled:

- at least 5 feet above the limestone in karst terrain or the sand and gravel in an alluvial aquifer (professional engineer to submit soils report) and
- on reinforced concrete at least 5 inches thick that meets concrete standards in 567 IAC 65.15 (14) "a"(2) paragraphs 1, 3, 4, 6 and 8.

Stockpiles within 1,250 feet of each other are considered part of the same stockpile.

The air quality setback of 1,250 feet does not apply if the neighboring landowner signs a waiver.

If more than one type of housing for feeding operations is at a site, please contact the DNR field office for manure stockpiling requirements.

Definitions, *continued*

High quality water resource is the part of a water source or wetland that the DNR has designated as any of the following:

- A high-quality water (Class "HQ") or a high-quality resource water (Class "HQR") according to 567 IAC ch. 61, in effect Jan. 1, 2001.
- A protected water area system, according to a state plan adopted by the DNR in effect Jan. 1, 2001.

Karst terrain is land having karst formations that exhibit surface and subterranean features of a type produced by the dissolution of limestone, dolomite or other soluble rock and characterized by closed depressions, sinkholes or caves. If a 25-foot vertical separation distance can be maintained between the bottom of an unformed manure storage structure and limestone, dolomite or other soluble rock, then the structure is not considered to be in karst terrain.

Stockpile is dry manure or dry-bedded manure originating from a confinement feeding operation that is stored at a particular location outside a confinement feeding operation building or a manure storage structure.

This document is only a summary of administrative rules contained in IAC Chapter 65. It is a guidance document and should not be used to replace the administrative rules. While every effort has been made to asssure the accuracy of this information, the administrative rules will prevail in the event of a conflict between this document and the administrative rules.

Dry-bedded confinement

Table 2. Animal Unit Equivalency Factors

Slaughter or feeder cattle	1.0
Immature dairy cattle	1.0
Mature dairy cattle	1.4
Butcher or breeding swine weighing more than 55 lbs	0.4
Swine weighing 15 lbs or more but not more than 55 lbs	0.1

An animal unit is defined as a measurement based upon the product of multiplying the number of animals of each category by a special equivalency factor as listed above. As an example, 3,000 finishing hogs x 0.4 = 1,200 animal units.

Contacts and Links

DNR Field Offices

Manchester	563-927-2640
Mason City	641-424-4073
Spencer	712-262-4177
Atlantic	712-243-1934
Des Moines	515-725-0268
Washington	319-653-2135

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www.iowadnr.gov

Separation Distances for Land Application of Manure

High Quality Water Resources

Open Feedlot Manure Stockpiling Regulations

Confinement Dry Manure Stockpiling Regulations

IAC 567 Chapter 65 — Animal Feeding Operations