Confinement Dry Manure Stockpiling Regulations

**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.

Confinement feeding operation means 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 manure means manure that:
- does not flow under pressure.
- cannot be transported through a liquid pump
- the molecules do not flow freely among themselves but may show a tendency to separate under stress.

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 on Jan. 1, 2001.
- A protected water area system, according to a state plan adopted by the DNR in effect on 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.

Long-term stockpile location is an area where a person stockpiles manure for more than a total of six months in any two-year period.

Qualified stockpile structure means a building or roofed structure that is impermeable to precipitation, constructed using wood, steel, aluminum, vinyl, plastic or...
■ Inspect the stockpile every month for runoff and deliver an inspection statement to the DNR, or
■ Use a building or an impermeable cover.

**Long-term Stockpiling.** Where dry confinement manure is stored for more than six months, it must be placed on a constructed impervious base that can support the load of equipment used under all weather conditions. The coefficient of permeability of the base shall be less than $1 \times 10^{-7}$ cm (0.00028 feet/day).

**On Karst Terrain/Drains to Known Sinkhole**
If dry manure is stockpiled on karst terrain, the bottom of the stockpile must be at least 5 feet above the limestone, dolomite or other soluble rock. A professional engineer must submit a soils report to the DNR.

To stockpile for more than 15 days, a qualified building, qualified structure or impermeable cover must be used.

**Long-term Stockpiling.** On karst terrain, a cover can only be used for long-term stockpiling if the pile is located on reinforced concrete at least 5 inches thick.

**Exemptions**
A grandfather clause dismisses confinement feeding operations constructed before Jan. 1, 2006, from storage requirements and water quality setbacks unless the operation was expanded after that date or runoff from the stockpile has drained off the property.

Dry manure delivered to a purchaser as bulk dry animal nutrient product under Chapter 200A is regulated by the Iowa Department of Agriculture and Land Stewardship, unless a water quality violation occurs.

Air quality setbacks (see Table 1) do not apply if the neighboring landowner signs a waiver.

**Table 2. Animal Unit Equivalency Factors**

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slaughter or feeder cattle</td>
<td>1.0 Units</td>
</tr>
<tr>
<td>Immature dairy cattle</td>
<td>1.0 Units</td>
</tr>
<tr>
<td>Mature dairy cattle</td>
<td>1.4 Units</td>
</tr>
<tr>
<td>Butcher or breeding swine weighing more than 55 lbs</td>
<td>0.4 Units</td>
</tr>
<tr>
<td>Swine weighing 15 lbs or more but not more than 55 lbs</td>
<td>0.1 Units</td>
</tr>
<tr>
<td>Sheep or lambs</td>
<td>0.1 Units</td>
</tr>
<tr>
<td>Horses</td>
<td>2.0 Units</td>
</tr>
<tr>
<td>Turkeys 7 lbs or more</td>
<td>0.018 Units</td>
</tr>
<tr>
<td>Turkeys less than 7 lbs</td>
<td>0.0085 Units</td>
</tr>
<tr>
<td>Broiler or layer chickens 3 lbs or more</td>
<td>0.01 Units</td>
</tr>
<tr>
<td>Broiler/Layer chickens less than 3 lbs</td>
<td>0.0025 Units</td>
</tr>
</tbody>
</table>

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.

**Definitions, continued**

similar materials and is constructed with walls or other means to prevent precipitation-induced surface runoff from contacting the stockpile.

Qualified stockpile cover is a barrier impermeable to precipitation that is used to protect a stockpile from precipitation.

Stockpile refers to 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.

**Other Requirements**
Stockpiles within 1,250 ft. of each other are considered part of the same stockpile.

Producers that need national pollutant discharge elimination system (NPDES) permits must stockpile in compliance with requirements.

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

**Links and Contacts**

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

Gene Tinker, Coordinator, Animal Feeding Operations, 563-927-2640, Gene.Tinker@dnr.iowa.gov

**www.iowadnr.gov**

**Separation Distances for Land Application of Manure**

**High Quality Water Resources**

**Dry-Bedded Manure Stockpiling Regulations**

**Open Feedlot Manure Stockpiling Regulations**

**IAC 567 Chapter 65 — Animal Feeding Operations**

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This document is not a complete interpretation of Iowa Administrative Code 567 Chapter 65 — Animal Feeding Operations. It is guidance and should not be used to replace administrative rules. While every effort has been made to assure the accuracy of this information, the administrative rules will prevail in the event of a conflict between this document and the administrative rules.