

# **IOWA COUNTY OFFICE OF PLANNING & DEVELOPMENT**

Courthouse - 222 N. Iowa St. - Dodgeville, WI 53533  
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## **Informational Packet** for Iowa County Animal Waste and Nutrient Utilization Ordinance

### **Packet Includes:**

1. Application process checklist
2. Engineer checklist
3. Standard 313 summary sheet
4. Standard 590 summary sheet
5. Animal waste characteristics
6. Application

**The purpose of this packet** is to assist anyone interested in constructing or modifying a manure storage facility, which requires a permit under the county's ordinance. Please take the time to review the entire packet and don't hesitate to contact the Iowa County Office of Planning and Development at (608) 935-0398 with any questions.

## Checklist for Iowa County Manure Storage Unit Application

- $\pi$  Contact the **Iowa County Office of Planning and Development** at the Courthouse (935-0398) for an application and information packet.

Date of contact: \_\_\_\_\_

- $\pi$  Before completing the application form, contact the **Iowa County Land Conservation Department** at 138 S Iowa St., Dodgeville 53533 (935-2791 ext. 3) for preliminary site determination and soils evaluation.

Date of contact: \_\_\_\_\_

- $\pi$  Contact an engineering firm. Call the Land Conservation Department for a list of engineering firms that work with construction of manure storage units.

Date of contact: \_\_\_\_\_

- $\pi$  Complete and submit application to the Iowa County Office of Planning and Development. Please read the materials provided to you. Incomplete applications will not be accepted. Applications must also include the \$500 non-refundable fee (check payable to **Office of Planning and Development**).

Date application was submitted: \_\_\_\_\_

Please contact the Iowa County Office of Planning and Development at (608) 935-0398 for any questions about the application procedure.

## Animal Waste Storage Facility Engineering Checklist

This checklist is meant to be used by plan preparers/engineers to assure all the necessary information has been provided as a part of the plan. The County Land Conservation Department is allowed 30 days to review the plan for adequacy and compliance with the Standards. If a plan is submitted that does not contain the required information the county will require it to be submitted before the thirty-day review period begins.

Each application for a permit is required to include an animal waste storage facility plan and a nutrient management plan. The plan should include the following as well as all the information requested under Section 5.04 of the Iowa County Animal Waste Storage and Nutrient Utilization Ordinance:

- A plan or plans showing the facility location and site information.
- The plan shall be drawn to scale, with a scale no smaller than 1 inch to 100 feet.
- All structures within 500 feet.
- Homes within 1000 feet.
- The North arrow.
- Scale of the drawing and map legend wells within 1000 feet.
- All waters within 1000 feet.
- Temporary benchmark and its elevation.
- Soil test pit locations and the elevations of test pits.
- Legal description of the proposed facility.
- The number and kinds of animals for which storage is provided.
- The duration for which storage is to be provided.
- The Type of manure to be stored (solid, semisolid, or liquid).
- The soil test pit soil descriptions to a depth of 5 ft. below the planned bottom of the facility.
- The elevation of groundwater or bedrock if encountered in the soil profile and the date of any such determinations.
- Provisions for adequate drainage and control of runoff to prevent pollution of surface water and groundwater.
- A time schedule for construction of the facility.
- The details and plans for the method and structures used in transferring animal waste into and from the facility.
- The structural details of the constructed facility, including, but not limited to:
  - Dimensions
  - Cross-sections
  - Concrete thickness
  - Reinforcing steel locations
  - Design loading details when other than Natural Resource Conservation Service prequalified designs and drawings are used.
- The construction and material specifications, including, but not limited to applicable specifications for:
  - Earthen fill
  - Excavation
  - Concrete
  - Reinforcing steel
  - Timber
  - Pipes
  - Rock
  - Clearing
  - Fencing
- Fertilizer, seeding, mulching.
- A nutrient management plan for utilization of the animal waste, including:
  - The amount of land available for waste application.
  - Identification of the areas where the waste will be used, method and schedule. Soil types.
  - Any limitations on waste application, due to soil limitations or crop rotations. Type and proximity of bedrock or water table.
  - Slope of land.
  - Proximity to surface water.
  - Crops to be grown.
  - Written approval from the Iowa County Office of Planning and Development.

# 313 Waste Storage Facility Summary Sheet

## 1. Definition

A waste storage impoundment made by constructing an embankment and/or excavating a pit or dugout, or by fabricating a structure.

## 2. Purpose

To temporarily store wastes such as manure, waste water, and contaminated runoff in a manner which safeguards the environment.

## 3. Conditions Where Practice Applies

This standard applies to:

- construction of a storage facility in areas where the soils, geography, and topography are suitable and where the construction, operation, and maintenance will protect the soil and water resources;
- areas that are part of a planned agriculture waste management system intended to reduce contaminated runoff and meet the facility management goals, regulatory requirements, or nutrient management plans by providing storage of wastes;
- waste storage facilities utilizing embankments with a maximum effective height of 25 feet and where damage resulting from failure would be limited;
- temporary unconfined manure stacks; and
- waste storage facility closure.

This standard does not apply to:

- facilities in which greater than 10% of the design storage volume or greater than 25,000 gallons is occupied by any combination of domestic waste, industrial wastewater, or sludge. These types of facilities are defined and regulated under various codes administered by the Wisconsin Department of Natural Resources (WDNR).

## 4. Federal, State and Local Laws

Waste storage facilities shall comply with all federal, state, and local laws, rules or regulations. The operator is responsible for securing required permits. This standard does not contain the text of the federal, state or local laws governing waste storage facilities.

## 5. Criteria

Establishes minimum allowable limits for design parameters, acceptable installation processes, or performance requirements.

For a complete copy of Code 313, contact the Iowa County Land Conservation Department at (608) 935-2791.

# 590 NUTRIENT MANAGEMENT PLAN SUMMARY

(A Required Component of the Manure Storage Ordinance of Iowa County)

1. **Farm Aerial Photographs or Maps**
  - a. Photos indicate field boundaries and field ID numbers?
  - b. Fields with manure spreading restrictions are identified?
2. **Soil Survey Maps**
  - a. Area soil series and slope consistent with the plan?
3. **Soil Test Reports (conservation staff require hard copy with Nutrient Management Plan)**
  - a. Are all the soil test reports from an approved lab?
  - b. Have all fields been tested within the last four years?
  - c. Is soil sample size 5 acres or less per sample?
  - d. Does the soil test field ID correspond with the Nutrient Management plan field ID?
  - e. Are yield goals identified (for P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O recommendations)?
  - f. Have the predominant soil series for each field been identified?
4. **Written Plan Components for individual field nutrient recommendations**
  - a. Crop to be grown and previous crop grown are indicated?
  - b. Fertilizer recommendations are indicated?
  - c. Legume and manure credits are indicated?
  - d. Manure application rates and spreading sites are indicated?
  - e. Additional fertilizer needs are indicated?
5. **Are fields receiving manure or organic by-products less than or equal to "T"?**
6. **Farm Information Sheet items for manure quantity and spreader capacity**
  - a. Animal numbers, average weight, confinement, consistency
  - b. Estimated annual manure production and amount collected
  - c. Type of manure spreading equipment

For a complete copy of Code 590, contact the Iowa County Land Conservation Department at (608) 935-2791.

# Animal Waste Characteristics

The quantity and composition of wastes produced influence livestock waste facility design. The properties of manure depend on several factors: animal species; ration digestibility, protein and fiber content; and animal age, environment, and productivity. The waste system also handles added bedding, soil, water, hair, etc.

Waste with 20-25% solids content (75-80% moisture content) can usually be handled as a solid, i.e. it can be stacked and can be picked up with a fork loader. Liquids need to be drained and the waste dried or bedding added to get solid waste. In the 10-20% solids content range, handling characteristics vary depending on the type of solids present. In this range, the percent solids content does not necessarily define handling characteristics.

Waste with 4-10% solids content can usually be handled as a liquid, but may need special pumps. Waste with 0-4% solids content is handled as a liquid with irrigation or flushing consistency. Liquids which have had the larger solids settled or filtered out or wastes with dilution water added may have 4% or less solids.

This table lists the estimate of manure produced daily by specific animal units per weight.

Values are approximate. The actual characteristics of a manure can easily have values 20% or more above or below the table values. The volume of waste that a waste handling system has to handle can be much larger than the table values due to the addition of water, bedding, etc. For example, liquid waste systems for swine farrowing and gestation units may have to handle twice as much waste volume as indicated; swine nurseries 3 to 4 times as much, because of large amounts of wash and wasted water.

Animal	Size lb	Total Manure Production			Water %
		lb/day	ft <sup>3</sup> /day	gal/day	
Dairy Cattle	150	12	0.19	1.5	87.3
	250	20	0.32	2.4	87.3
	500	41	0.66	5.0	87.3
	1,000	82	1.32	9.9	87.3
	1,400	115	1.85	13.9	87.3
Beef Cattle	500	30	0.50	3.8	88.4
	750	45	0.75	5.6	88.4
	1,000	60	1.00	7.5	88.4
	1,250	75	1.20	9.4	88.4
Cow		63	1.05	7.9	88.4
Swine					
Nursery pig	35	2.3	0.038	0.27	90.8
Growing pig	65	4.2	0.070	0.48	90.8
Finishing pig	150	9.8	0.16	1.13	90.8
	200	13.0	0.22	1.5	90.8
Gestating sow	275	8.9	0.15	1.1	90.8
Sow and litter	375	33.0	0.54	4.0	90.8
Boar	350	11.0	0.19	1.4	90.8
Sheep	100	4.0	0.062	0.46	75.0
Poultry					
Layers	4	0.21	0.0035	0.027	74.8
Broilers	2	0.14	0.0024	0.018	74.8
Horse	1,000	45	0.75	5.63	79.5

**Animal Waste Storage Facility Permit Application  
Iowa County Office of Planning and Development**

Applicant Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email \_\_\_\_\_

FEE: \$500.00  
Payable to **Office of Planning & Development**  
(must be submitted with application)

Legal Description Of Storage Facility:

Site address: \_\_\_\_\_ Landowner name: \_\_\_\_\_

Town of \_\_\_\_\_ Sec. \_\_\_ T \_\_\_ N, R \_\_\_ E \_\_\_ 1/4 \_\_\_ 1/4,

Distance To Nearest:

Well \_\_\_\_\_ ft.  
Building \_\_\_\_\_ ft.  
House \_\_\_\_\_ ft.  
River, Lake, Stream \_\_\_\_\_ ft.  
Lot Line \_\_\_\_\_ ft.  
Road \_\_\_\_\_ ft.  
Utility \_\_\_\_\_ ft.

Storage Unit Designed For:

Dairy:	Number _____	Wt. _____
Beef:	Number _____	Wt. _____
Hogs:	Number _____	Wt. _____
Chickens	Number _____	Wt. _____
Other _____	Number _____	Wt. _____

Planned Storage \_\_\_\_\_ Days \_\_\_\_\_ Cubic Ft

I hereby certify the information provided is correct.

Signature of Applicant \_\_\_\_\_ Date \_\_\_\_\_

Signature of Owner if different than Applicant \_\_\_\_\_

Date \_\_\_\_\_

**FOR COUNTY USE ONLY**

Application and Plans Received, Date \_\_\_\_\_

Application Received by \_\_\_\_\_

Additional Information Needed: \_\_\_ No \_\_\_ Yes \_\_\_\_\_

Additional Information Received, Date \_\_\_\_\_

Reviewed by \_\_\_\_\_

Fee Received: Amount \_\_\_\_\_ Date \_\_\_\_\_

Receipt Number \_\_\_\_\_ Paid by: Check o Cash o

Permit Issued \_\_\_\_\_

Additional Information Request \_\_\_\_\_

Received From \_\_\_\_\_