

## DATA INVENTORY FOR PLANNING LIVESTOCK WASTE MANAGEMENT SYSTEMS

prepared by: \_\_\_\_\_ date: \_\_\_\_\_

### I. BASIC DATA

(See AWMFH Chpt. 2)

#### A. Contacts

Name of Operation.....:	_____	County.....:	_____
Name of Owner/Operator...:	_____	Name of Facility.....:	_____
Principal Contact.....:	_____	Twnshp-Range-Section.....:	_____
Address (RR, PO Box, etc.):	_____	Address (RR, PO Box, etc.):	_____
City, State, Zip.....:	_____	City, State, Zip.....:	_____
Telephone No.....:	_____	Telephone No.....:	_____

#### B. Facility Description\Resource Concerns *(give a brief description of the livestock facilities, note resource concerns, any special problems & management objectives)*

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#### C. Waste Management Data

How many times per year is manure/waste collected ? \_\_\_\_\_ Is waste stored on site before disposal/use? yes no

If yes, describe how, where and how long ? \_\_\_\_\_  
\_\_\_\_\_

Existing Handling Method(s): \_\_\_ Liquid \_\_\_ Slurry \_\_\_ Solid Describe existing waste handling equipment:

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Describe the frequency for cleaning lots, lanes, feed bunk areas, etc., or frequency & volume of flushing holding pits, gutters, parlor & equipment, etc. \_\_\_\_\_

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How is runoff currently handled? \_\_\_\_\_

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Are dead animals currently disposed of on site? yes no If yes, how? \_\_\_\_\_

Are there local zoning or other regulations that will affect waste management at this facility? yes no

If yes, explain: \_\_\_\_\_

**II. WASTE PRODUCTION DATA**

(see AWMFH Chpt.4)

<b>A. Animal Inventory</b>						
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Animal Type(s)	Existing Capacity (# head)	Maximum Capacity (# head)	Working Capacity (# head)	Average Weight (lb.)	Animal Units (no.)	Confinement Period(s) (from ___ to ___)
<b>Confinement</b>						
<b>Open Lot</b>						
				Total AU's in Confinement <sup>(b)</sup>		
				Total AU's in Open Lot <sup>(f)</sup>		
				Total AU's for Animal Type 1:		
				Total AU's for Animal Type 2:		
				Total AU's (of same species) <sup>(h + i)</sup>		

- (a) Describe all animals confined by species, age class (cow vs. calf), management group (lactating vs. dry cow), etc.
- (b) Number of animals on site when inventory was made.
- (c) Estimate the maximum number of animals that could occupy the facility. Use the lot area and/or bunk space as method(s) to determine maximum – contact your area engineer for more information.
- (d) Annual average working capacity to be used for planning and design - include proposed expansion.
- (e) Estimate the average weight of this type of animal during its confinement period.
- (f) Animal Unit definitions: Slaughter and 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 more than 15 lbs but not more than 55 lbs, 0.1; Sheep or Lambs, 0.1; Horses, 2.0; Turkeys, 0.018; Broiler or Layer Chickens, 0.010. Otherwise use the following for animal species not listed previously, multiply the working capacity (b) by the average weight (d) and divide by 1,000 lb.
- (g) Show the usual time period(s) this type of animal is confined in the facility (e.g. January to April, October to December, etc.).

**B. Other Solid Waste Generation**

Source	Current Volume	Units	Proposed Volume	Units	Notes/Explanation
Bedding .....	_____	cu.ft./day	_____	cu.ft./day	_____
Waste Feed .....	_____	cu.ft./day	_____	cu.ft./day	_____
Dead Animal Carcasses:	_____	# head/yr	_____	# head/yr	_____
Other .....	_____	_____	_____	_____	_____

**C. Process Wastewater Generation**

Source	Existing Use	Proposed Use	Notes/Explanation
Milking Parlor .....	_____ gal/day	_____ gal/day	_____
Milkhouse related .....	_____ gal/day	_____ gal/day	_____
Silage Pit Seepage .....	_____ gal/day	_____ gal/day	_____
Flush tanks/gutters/etc. :	_____ gal/day	_____ gal/day	_____
Leaking watering facilities:	_____ gal/day	_____ gal/day	_____
Other .....	_____ gal/day	_____ gal/day	_____

**D. Storm Runoff Producing Areas**

Source	Existing Area	Units (circle one)	Proposed Area	Units (circle one)	Notes/Explanation
Roofs or Covered Lots .....	_____	Sq. Ft. or Ac.	_____	Sq. Ft. or Ac.	_____
Paved open lots .....	_____	Sq. Ft. or Ac.	_____	Sq. Ft. or Ac.	_____
Unpaved open lots .....	_____	Sq. Ft. or Ac.	_____	Sq. Ft. or Ac.	_____
Contributing Drainage Area :	_____	Sq. Ft. or Ac.	_____	Sq. Ft. or Ac.	_____
Drainage Area to be diverted:	_____	Sq. Ft. or Ac.	_____	Sq. Ft. or Ac.	_____

**E. Dust and Odors**

Describe any current or anticipated problems resulting from dust or odors produced at the site. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**III. SITE INVENTORY** (See AWMFH Chpt. 2 & 8)

**A. Legal Description** Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, \_\_\_\_\_ P.M., \_\_\_\_\_ County  
 This site is approximately \_\_\_\_\_ from \_\_\_\_\_  
 (distance & direction) (nearest town)

To determine if separation distances are adequate for existing and planned structures visit the Iowa Department of Natural Resources Animal Feeding Operations website (For details and exceptions to rules see: [IDNR website](#)).

**B. Location Map (attach map)**  
 Show all of the following within a two mile radius of the facility (note separation distances if possible):

- Location of the facility, public roads and fields receiving waste from the facility;
- Location of public, commercial & residential developments;
- Wells, streams, canals, lakes, wetlands, general direction of land slopes, and drainage areas affecting the facility, and the general direction of prevailing winds.

**C. Current and Proposed Facility Map (attach map)**  
 Show pertinent on-site features, such as:

- Location and dimensions of existing or proposed lots, alleys, buildings, ponds, etc.;
- Location of all utilities, dwellings, wells & surface water courses at the site; and

**IV. SOILS DATA**

(see AWMFH Chpt. 5, 7, & Appendix 10D)

**A. Soil Survey Information**

Survey Name:		Date:		Map Sheet #:	
Dominant Soil Series'	% Slope	Texture/Classification USDA      USCS	% of Site	Depth to Water, (ft)	Describe any limitations or restrictions
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**B. Well Logs**

Attach completion reports, logs, & any other information available for wells at or adjacent to the site. Information may also be available at the Iowa Geologic Survey well database located at: <http://gsbdata.igsb.uiowa.edu/geosam/>

**C. General Remarks & Interpretations** (describe in general any concerns or restrictions that should be considered in the facility plan)

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**V. WASTE UTILIZATION/DISPOSAL DATA**

(see AWMFH Chpt. 6 & 11)

Is waste applied on cropland managed by the operation?    *yes*      *no*  
 If no, describe disposal methods for manure and other organic by-products of the operation. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

If yes:    (a)      Describe methods used for waste transport and application: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(b)      When is waste spread on the fields?    *spring*    *summer*    *fall*    *winter*

(c)      Estimate the average annual application rate per field    \_\_\_\_ (*tons/acre*) (*1000gal/acre*) (*acre-in.*)

(d)      Is the waste sampled and tested for nutrient content before/during application?    *yes*      *no*  
 If yes, list typical test results for or attach past test results:

Total N	_____	NH <sub>4</sub> <sup>+</sup>	_____
NO <sub>3</sub> <sup>-</sup>	_____	Total P	_____
Total K	_____	Total Salts	_____

(e) Are the nutrients in the waste used to replace some or all of the commercial fertilizer that would otherwise be applied to the crop? *yes no*

**(A) Available Utilization/Disposal Areas**

Field No.	Area (acres)	Transport Distance	Soil Type(s)	Slope (%)	Rotation Year	Crop	Yield	List any restrictions on land use

**(B) Current and Proposed Application Field Map (attach map)**

Are there soil test available for these fields? *yes no*  
 Attach soil tests if available.

- Show pertinent on-site features and separation distances for:
- Location of sensitive areas such as water courses, sinkholes, ponds, intakes, etc.;
  - Location of all residences, businesses, public use areas, etc; and
  - Location of all terraces, waterways, filter/buffer strips, etc.

Visit the Iowa Department of Natural Resources Animal Feeding Operations website to determine adequate separation distances for field application (For more details and exceptions to rules see: [IDNR website](#)).