

CNMP Engineering Inventory Worksheet

Landowner/Operator:						Date:				
Farm:					Interviewer:					
Township:					County:					
Location:		¼ of		¼ Section		T		R		E W

Provide a separate inventory sheet for the main farm operation and each satellite facility.

Provide an aerial photo of all inventoried areas with a topography map. Show all inventoried facilities with their location ID used in the inventory. Add additional facilities that may not be shown on the aerial photography. Note the year the aerial photography was done.

Note: Biosecurity procedures must be followed upon entry to the farm.

Minimum Requirements for Site Map

	<u>Included</u>	<u>N/A</u>		<u>Included</u>	<u>N/A</u>		<u>Included</u>	<u>N/A</u>
Animal Lots	<input type="checkbox"/>	<input type="checkbox"/>	Manure Pipelines or Flumes	<input type="checkbox"/>	<input type="checkbox"/>	Proposed facilities	<input type="checkbox"/>	<input type="checkbox"/>
Buildings	<input type="checkbox"/>	<input type="checkbox"/>	Manure stacks	<input type="checkbox"/>	<input type="checkbox"/>	Reception tanks	<input type="checkbox"/>	<input type="checkbox"/>
Cattle Lanes	<input type="checkbox"/>	<input type="checkbox"/>	Manure Storage	<input type="checkbox"/>	<input type="checkbox"/>	Septic	<input type="checkbox"/>	<input type="checkbox"/>
Diversions	<input type="checkbox"/>	<input type="checkbox"/>	Milkhouse waste discharge	<input type="checkbox"/>	<input type="checkbox"/>	Silage storage	<input type="checkbox"/>	<input type="checkbox"/>
Electrical cutoff	<input type="checkbox"/>	<input type="checkbox"/>	Mortality storage	<input type="checkbox"/>	<input type="checkbox"/>	Streams, lakes, ponds, wetlands	<input type="checkbox"/>	<input type="checkbox"/>
Fences	<input type="checkbox"/>	<input type="checkbox"/>	Parlor water discharge	<input type="checkbox"/>	<input type="checkbox"/>	Surface water flow direction arrows	<input type="checkbox"/>	<input type="checkbox"/>
Fertilizer storage	<input type="checkbox"/>	<input type="checkbox"/>	Pesticide storage	<input type="checkbox"/>	<input type="checkbox"/>	Vegetated Buffers	<input type="checkbox"/>	<input type="checkbox"/>
Fuel tanks	<input type="checkbox"/>	<input type="checkbox"/>	Property lines	<input type="checkbox"/>	<input type="checkbox"/>	Wells	<input type="checkbox"/>	<input type="checkbox"/>
						Other, as needed	<input type="checkbox"/>	<input type="checkbox"/>

MANURE PRODUCTION												
Rolling Herd Average:		22000	lbs/cow/year									
Animal Location ID (ex. Barn1, Lot 1)	Animal Type ID # (ex. A1, A2, etc.)	Animal Type	Number of Animals	Avg. Weight (lbs/animal)	Bedding Type	Bedding Volume/Day (cubic feet)	No. of Days/Yr. at this location	Storage ID, if any	Transfer ID, if any	Animal Units (1000# basis)	Animal Units (NR 243 basis) (if needed)	Annual Manure Volume ^A (CU. FT.)
Total												-

A. see "Manure Volume" tab for documentation of manure volumes

WASTEWATER PRODUCTION (include milkhouse waste)											
Measured Wastewater Volume Per Day (if available)				gal/day if not available, estimate using the following							
Location	Washing parlor floors, cows, milkers	Cleaning bulk tank and pipelines	Flush water for holding area	Non-flushed holding area	Plate cooler water	Holding Area		Barn Sprinkler		Other	Annual Output
Units	Gal/Day	Gal/Day	Gal/Day	Gal/Day	Gal/Day	# Days Used/Year	Gal/Day	# Days Used/Year	Gal/Day	Gal/Day	Gallons
Volume											-
Transfer ID											-
Storage ID											-
Total:											-

Total Annual Manure and Wastewater (Gallons):	-
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WASTE TRANSFER FACILITIES

													Depth to (ft.)		Distance to (ft.)
ID #	Year Constructed	Was system designed to NRCS standards at the time of construction?	Designed by?	Type (PVC pipe, concrete tank, etc.)	Pump or Gravity Transfer?	Dimensions & Volume	Any defects or leakage? ¹	List Safety Features in Place (safety bars, fence, MOL,etc.)	soil borings done for CNMP? ²	Is O&M Current?	Will it be connected to a proposed storage facility?	Storage ID	Bedrock	Sub-surface Saturation	Well, spring, reservoir

- 1. Transfer facility needs to be EMPTY
- 2. Soil borings are needed if as-built is not available

1. List any safety issues associated with transfer (ex. confined space, no warning signs, etc.):

2. Any evidence of overflow?

3. What records are maintained for the facility?

4. Other:

WASTE STORAGE FACILITIES

													Depth to (ft.)		Distance to (ft.)	
ID #	Year Constructed	Was system designed to NRCS standards at the time of construction?	Designed by?	Type of Liner (concrete, clay, etc.)	Condition & Thickness of Liner	Dimensions & Volume	Any defects or leakage? ¹	List Safety Features in Place (safety bars, fence, MOL,etc.)	soil borings done for CNMP? ²	Is O&M Current?	Emptying Method & Frequency	Transfer ID	Bedrock	Sub-surface Saturation	Well	Sinkhole

- 1. Storage facility needs to be EMPTY
- 2. Soil borings are needed if as-built is not available

1. List any safety issues associated with storage (ex. confined space, no safety fence, no warning signs, no stop bar on push-off, etc.):

2. Any evidence of overflow?

3. Manure samples taken (Y / N)? If yes, results:

4. What records are maintained for the facility?

5. OTHER:

FEED STORAGE FACILITIES

Bunker Silos

Feedstock	Dimensions (ft.)	leachate evident?	Covered to exclude rainfall ¹	any first flush captured? If yes, amount in inches	Discharge location (i.e. multiple, single)	Distance to concentrated flow (ft)	Is loose feed uncovered and stacked on storage area?	Wall Condition		Floor Condition		Soil Borings Done? ²	Well Separation Distance (ft.)	Depth to:		Distance to blue line on USGS Topo Map (ft)	Soil Map Unit Name & Symbol below floor
								Type (earthen, poured in place, pre-fabricated)	If concrete, any cracks?	Floor Type (earthen, rock, concrete)	If concrete, Floor Cracks (none, some, many)			Bedrock	RWHT ²		

Silage Bags

Feedstock	leachate evident?	If leachate evident, soil type beneath bags?	Distance to concentrated flow (ft)	Disposal Method	Surface type (rock, soil, concrete)	Well Separation Distance (ft.)

Vertical Silos

Feedstock	leachate evident?	If leachate evident, soil type around silo?	Distance to concentrated flow (ft)	Well Separation Distance (ft.)

- 1. Plastic on bunkers must extend over the walls to exclude rainfall
- 2. Soil borings are needed if possible resource concern

AIR QUALITY				
Excessive Dust from Operation?	Is Odor Strong, Mild, non-existent	Excessive Noise from Operation?	Any neighbor complaints on air	Nearest Neighbor

SURFACE WATER	
Identify any areas where livestock have unlimited access to surface water and where streambanks are not sod covered	
<i>Location ID</i>	<i>Describe site condition</i>

WELLS						
WELL ID	Type of Construction	Cap and visible casing condition?	Surface Water Running to or Ponding at Well?	Any Contaminati on Sources Nearby?	Protected from traffic?	Bacteria/Nitrate Contamination? (if recent well test available)

1. Does landowner have an interest or need for non-traditional collection, transfer, storage, and utilization of manure?

2. Any other potential resource concerns not inventoried above?

3. Do you have copies of all existing Operation & Maintenance Plans for waste related facilities.

4. Does this farm have any permits that relate to operation and maintenance of the livestock facility? If so, list the permits:

5. Additional comments: